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Analyses of Natural Gases, 1917-80

By B. J. Moore

UNITED STATES DEPARTMENT OF THE INTERIOR

(United States. Bureau of Mines)

Information Circular 8870

Analyses of Natural Gases, 1917-80

By B. J. Moore

UNITED STATES DEPARTMENT OF THE INTERIOR
James G. Watt, Secretary

BUREAU OF MINES
Robert C. Horton, Director

TN295
.U4
no. 8870

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

This publication has been cataloged as follows:

Moore, B. J. (Billy J.)
Analyses of natural gases, 1917-80.

(Information circular ; 8870)

Supt. of Docs. no.: I 28.27:8870.

1. Gas, Natural—Analysis. I. Title. II. Series: Information circular (United States. Bureau of Mines) ; 8870.

TN295.U4 [TP754] 622s [665.7] 81-607556 AACR2

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

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ANALYSES OF NATURAL GASES, 1917-80

By B. J. Moore[1]

ABSTRACT

This publication contains 12,554 analyses of gas samples from oil and gas wells and natural gas pipelines in 39 States and 24 foreign countries. These gas samples were collected in the period 1917-80 as part of the Bureau of Mines survey for helium occurrences. The gas analyses contained herein were made by several methods over the period covered. Analytical work on samples collected early in the period was done on the Orsat apparatus. The one-cut apparatus and four-cut fractional distillation equipment were added later. In 1949, a mass spectrometer was acquired and used for all gas analyses made after that time. Helium analyses throughout the period covered were made on special helium analytical equipment designed and built by the Bureau of Mines' Helium Operations Laboratory.

INTRODUCTION

Since 1917, gas samples from oil and gas wells and natural gas pipelines throughout the United States and other countries with free market economies have been collected by the Bureau of Mines in a continuing search for helium occurrences. Analyses of 12,554 of the samples, which were collected in 39 States and 24 foreign countries, are given in tables 1-4.

The Bureau is charged with the responsibility for insuring a continuing supply of helium to meet essential Government needs, and this survey of the world's natural gasfields is made in connection with this responsibility.

A previous publication[2] presented the analyses made through 1974.

That book contained 10,562 analyses, and this publication is an update of that compilation.

Most of these analyses have also been published in other Bureau publications. The first of this series of publications, Bulletin 486,[3] was published in 1951. This was followed by two more bulletins, 576[4] and 617,[5] published in 1958 and 1963, respectively. These three publications contained data on analyses of 5,218 gas samples collected from the beginning of the survey through 1960. Beginning in 1961, data on gas analyses have been published on an annual basis, and 19 Information Circulars[6] have presented the analyses of 6,934 gas samples collected through 1979.

The present compilation of gas analysis data was prepared to make available from one source information on composition of natural gases throughout the United States and in many other areas of the world. A magnetic tape, which contains duplicate data of that presented in tables 1-4, is also available.[7]

[1]Chief, Section of Helium Resources Evaluation, Branch of Helium Resources, Helium Field Operations, Bureau of Mines, Amarillo, Tex.

[2]Moore, B. J. Analyses of Natural Gases 1917-74. Bureau of Mines Computer Printout 1-76. U.S. Department of Commerce, National Technical Information Service PB 251 202/AS, March 1976, 889 pp.

[3]Anderson, C.C., and H.H. Hinson. Helium-Bearing Natural Gases of the United States. Analyses and Analytical Methods. BuMines Bull. 486, 151, 141 pp.

[4]Boone, W.J., Jr. Helium-Bearing Natural Gases of the United States. Analyses and Analytical Methods. Supplement to Bulletin 486. BuMines Bull. 576, 1958, 117 pp.

[5]Munnerlyn, R.D., and R.D. Miller. Helium-Bearing Natural Gases of the United States: Analyses. Second Supplement to Bulletin 486. BuMines Bull. 617, 1963, 93 pp.

[6]Miller, R.D. and G.P. Norrell, Analyses of Natural Gases of the United States, 1961, BuMines IC 8221, 1964, 148 pp.
_____, Analyses of Natural Gases of the United States, 1962, BuMines IC 8239, 1964, 121 pp.
_____, Analysis of Natural Gases of the United States, 1963, BuMines IC 8241, 1965, 102 pp.
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Moore, B.J., Analyses of Natural Gases, 1973, BuMines IC 8658, 1974, 96 pp.
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_____, Analyses of Natural Gases, 1975, BuMines IC 8717, 1976, 82 pp.
_____, Analyses of Natural Gases, 1976, BuMines IC 8749, 1977, 94 pp.
_____, Analyses of Natural Gases, 1977, BuMines IC 8780, 1978, 95 pp.
_____, Analyses of Natural Gases, 1978, BuMines IC 8810, 1979, 113 pp.
_____, Analyses of Natural Gases, 1979, BuMines IC 8833, 1980, 100 pp.

[7]Bureau of Mines. Analyses of Natural Gases. Tape available from National Technical Information Service, Springfield, Va., PB 300 996/AS, $125.

HISTORICAL BACKGROUND

The survey to locate helium occurrences throughout the United States has been carried on since the inception of the Government's helium program in 1917. A major goal of this program has been to conserve helium that would otherwise be wasted. Through 1980, over 16,000 gas samples have been collected and analyzed as a part of this survey. In addition to collecting samples from domestic gasfields, the search was expanded in 1965 to include foreign gasfields. Although several foreign samples had been analyzed prior to 1965, no active solicitation of samples had been made.

The results of some of the analyses made in connection with this program are not included in this compilation. Some reasons for exclusion of analyses are air contamination above permissible levels, incomplete analyses, and maintaining the confidentiality of data that were not released by the company supplying the gas sample. This confidentiality is promised to each company when contacted for a gas sample; however, most data are subsequently released for publication or public presentation by the supplier.

World War I caused a flurry of activity and interest in helium production. As a result of this interest, the Government's first helium extraction plant was constructed in Fort Worth, Tex., by the Department of the Navy, to process gas from the Petrolia Field in Clay County, Tex. Many of the samples collected for the helium survey in this 1917–19 period were analyzed for helium content only.

A second phase of the helium survey was begun in 1919 and continued until 1933. Samples collected during this period were analyzed by the Orsat combustion method and by a special helium apparatus. One result of this phase of the survey was the discovery of helium-rich gas at Cliffside Field in Potter County, Tex. The Government acquired the gas rights in fee in Cliffside Field and subsequently built a second Government-owned helium extraction plant near Amarillo, Tex., to process this gas. This plant was built by the Bureau of Mines in 1928–29, after the supply of gas to the plant at Fort Worth was nearly depleted.

The helium survey was relatively inactive from July 1933 to April 1941, when World War II began to create an increased demand for helium. The survey was intensified during the war and resulted in the location of sites for four new helium plants in Kansas, New Mexico, and Texas, and the plants were built in 1943–44. After World War II, production capacity of the five plants was greater than postwar demand. Because of the excess capacity and a dwindling helium-rich gas supply, the Cunningham, Kans., plant was dismantled. The Otis, Kans., and Shiprock, N. Mex., plants were placed on standby. The Amarillo, Tex., plant operated intermittently from 1945 through 1951, and the Exell, Tex., plant operated continuously.

In 1951, an increasing helium demand made it necessary to put the Otis, Kans., plant back into production. The Shiprock, N. Mex., plant resumed operations in 1953. Both of these plants were operated continously until 1968, except for a shutdown of almost a year at Shiprock because of gas supply problems. In 1968, when Bureau of Mines sales of helium decreased markedly, both plants were shut down permanently. The Otis, Kans., plant was sold and the Shiprock, N. Mex., plant was deeded to the Bureau of Indian Affairs, which turned the plant over to the Navajo Indian Tribe.

In the 1940's and 1950's, a major helium-rich gas source was being developed in the Oklahoma Panhandle. The Keyes Field was discovered in 1943 and gas samples from wells in the field contained an average of about 2 percent helium. In 1958, the Bureau obtained the exclusive helium processing rights to most of the gas for the life of the field. An extraction plant was built near Keyes, Okla., to process Keyes Field gas. The plant has operated continuously since completion in 1959 but is expected to cease helium extraction operations during 1981 because of declining gas supplies and excessive cost of operations. The Amarillo plant ceased gas processing operations in April 1970. In September 1971, the Exell plant stopped processing West Panhandle Field gas, its source of supply since it began operation. Equipment has been installed at the Exell plant to process and purify the helium that was purchased by the Government and is in storage in Cliffside Field.

In the early 1960's, demand for helium for Government programs continued the growth that started in 1950, while the helium-rich gas resources declined. Because of this decline, Congress passed legislation in 1960 authorizing a helium conservation program. The objective of this program was to save for future use about 52 billion cubic feet of helium that would have otherwise been lost as the gas was used for fuel. To implement this program, four long-term contracts were negotiated with private firms for the Government's purchase of helium; these contracts obligated the Government for up to $47.5 million per year. Five extraction plants were built adjacent to large natural gas transmission lines in Texas and Kansas. Most of the gas processed was produced from the West Panhandle Field of Texas and the Hugoton Field in Texas, Oklahoma, and Kansas. These two fields contained the largest known helium reserves in the world. Previous helium resource evaluation work by the Bureau had established that this area was the most promising source for the recovery of helium. Minor volumes of gas were produced from smaller fields in the same area. The extracted helium was stored in the Government-owned Cliffside Field in Potter County, Tex. When this helium is required to meet demand, it will be withdrawn, purified, and sold.

Through November 1973 when acceptance of helium under these contracts ceased, 34.2 billion cubic feet of helium had been stored. As of January 1, 1981, helium stored in Cliffside Field totaled 40.4 billion cubic feet. This consisted of the 34.2 billion cubic feet of helium purchased, 3.6 billion cubic feet of excess production from Bureau plants, and 2.6 billion cubic feet that was stored for private companies under separate contracts. In addition to the stored helium, the remaining native gas in Cliffside contains about 4.1 billion cubic feet of helium. Helium is measured at a pressure and temperature base of 14.7 psia and 70 °F.

HELIUM RESOURCES EVALUATION

Even though helium resources are more than adequate to supply Government needs at present and for some time in the future, the helium resources evaluation program is continued so that resources can be located that may be required to supply future demands. Experience shows that it takes about 15 years from the time of discovery to the time of explcitation of a helium resource. Of particular interest are reserves of helium found in gases with low heating values. This gas is not as likely as higher heating value gases to be produced for fuel, so the helium is effectively "stored" and will be available for extraction at a later date when the need arises. These resources are classified as "nondepleting helium reserves" and serve as a backup to the helium stored in the Cliffside Field.

Much of these nondepleting helium reserves are located on Federal lands, and under the standard Government oil and gas lease, helium ownership is reserved to the Federal Government. These reserves are, therefore, under Federal control, and although a lessee may produce the gas with which the helium is associated, the Government has an option to extract, or have extracted, the helium contained in the gas.

In 1965, the helium resource evaluation was expanded to include foreign gasfields. Although several samples from foreign fields had been analyzed prior to that time, no active solicitation of gas samples had been carried on. It was believed that with the growing importance and use of helium, it was necessary to acquire reasonably detailed and documented knowledge of the helium resources outside the United States. Samples from 24 foreign countries have been received. Most of these analyses appear in tables 3-4.

The helium resource evaluation program has been carried on in varying degrees of intensity for over 60 years. Gas samples from most natural gasfields in the United States and from a few fields in foreign countries have been analyzed. Most of these analyses are presented in tables 1-4. While many of the fields in the gulf coast area have not been sampled for the survey, all major transmission lines carrying gas from that area have been sampled. The helium resource evaluation has accomplished its purpose in that it has identified the helium reserves and resources from which demand has been fully supplied. The evaluation is a continuing Bureau program with the objective of locating adequate supplies to meet future demands.

METHODS OF ANALYSES

The samples collected in the earlier years of the helium survey program were analyzed by the Orsat apparatus with the helium content being determined by an apparatus developed by H. P. Cady and D. F. McFarland, early researchers on helium occurrences in natural gases, and improved by Bureau of Mines personnel. In using the Orsat method, the hydrocarbons occurring in natural gases were calculated and reported as methane and ethane; thus, the true distribution of the hydrocarbon components is not known if the gas contained hydrocarbons other than methane and ethane. Because of this, the calculated heating value and specific gravity for samples analyzed before April 1949 are not considered as reliable as those calculated from other methods of analysis. Both the helium apparatus and the Orsat apparatus are described in detail in Bulletin 486.[8]

The one-cut apparatus and the four-cut fractional-distillation analytical equipment were used to analyze a few helium survey samples during the period when the Orsat apparatus was in general use. The one-cut apparatus, also described in Bulletin 486,[9] has all of the units normally found on an Orsat apparatus and, in addition, equipment for separating methane from ethane and the heavier hydrocarbons. An exact methane content is available but all other hydrocarbons are reported together. The four-cut fractional-distillation apparatus has been described by Shepard and Porter.[10]

The previously mentioned helium apparatus developed by Cady and McFarland was replaced by a device, again described in Bulletin 486,[11] that depends on pressure measurement at a constant volume rather than volume measurements at a constant pressure as did the first apparatus.

The mass spectrometer replaced the Orsat apparatus in the helium survey analytical work in 1949. With the mass spectrometer, 15 components plus the helium content were reported. Helium content is calculated from data from the mass spectrometer, but it is also determined on the helium apparatus. The helium apparatus is essentially the same as that described in Bulletin 486[12] with a few modifications. Both the mass spectrometer and the modified helium apparatus are described in Bulletin 576,[13] a supplement to Bulletin 486.[14] The present helium apparatus has been changed slightly from the described equipment.

The components in the analyses are reported to the nearest 0.1 percent, except helium, which is reported to the nearest 0.01 percent. The word "trace" is used to denote quantities of helium of less than 0.005 percent and quantities of other components of less than 0.05 percent. The percentage of hydrogen sulfide reported in each sample may not be completely reliable because of the transfer of the sample over water in the laboratory. Most samples submitted are taken by water displacement, and hydrogen sulfide is highly soluble in water.

[8]Work cited in footnote 3.
[9]Work cited in footnote 3.
[10]Shepard, M., and F. Porter. An Improved Method for the Separation of Gas Mixtures by Fractional Distillation at Low Temperatures and Pressures. Ind. and Eng. Chem. v. 15. 1923, pp. 1143-1146.

[11]Work cited in footnote 3.
[12]Work cited in footnote 3.
[13]Work cited in footnote 4.
[14]Work cited in footnote 3.



FIGURE 1.—Geologic provinces of the United States.

Code	Province
100	New England Province
110	Adirondack Uplift
120	Atlantic Coast Basin
130	South Georgia-North Florida Sedimentary Province
140	South Florida Province
150	Piedmont-Blue Ridge Province
160	Appalachian Basin
200	Warrior Basin
210	Mid-Gulf Coast Basin
220	Gulf Coast Basin
230	Arkla Basin
240	Desha Basin
250	Upper Mississippi Embayment
260	East Texas Basin
300	Cincinnati Arch
305	Michigan Basin
310	Wisconsin Arch
315	Illinois Basin
320	Sioux Uplift
325	Iowa Shelf
330	Lincoln Anticline
335	Forest City Basin
340	Ozark Uplift
345	Arkoma Basin
350	South Oklahoma Folded Belt Province
355	Chautauqua Platform
360	Anadarko Basin
365	Cherokee Basin
370	Nemaha Anticline
375	Sedgwick Basin
380	Salina Basin
385	Central Kansas Uplift
390	Chadron Arch
395	Williston Basin
400	Ouachita Tectonic Belt Province
405	Kerr Basin
410	Llano Uplift
415	Strawn Basin
420	Fort Worth Syncline
425	Bend Arch
430	Permian Basin
435	Palo Duro Basin
440	Amarillo Arch
445	Sierra Grande Uplift
450	Las Animas Arch
455	Las Vegas-Raton Basin
460	Estancia Basin
465	Orogrande Basin
470	Pedregosa Basin
475	Basin-and-Range Province

Code	Province
500	Sweetgrass Arch
505	Montana Folded Belt Province
510	Central Montana Uplift
515	Powder River Basin
520	Big Horn Basin
525	Yellowstone Province
530	Wind River Basin
535	Green River Basin
540	Denver Basin
545	North Park Basin
550	South Park Basin
555	Eagle Basin
560	San Luis Basin
565	San Juan Mountain Province
570	Uinta Uplift
575	Uinta Basin
580	San Juan Basin
585	Paradox Basin
590	Black Mesa Basin
595	Piceance Basin
600	Northern Cascade Range—Okanagan Province
605	Eastern Columbia Basin
610	Idaho Mountains Province
615	Snake River Basin
620	Southern Oregon Basin
625	Great Basin Province
630	Wasatch Uplift
635	Plateau Sedimentary Province
640	Mojave Basin
645	Salton Basin
650	Sierra Nevada Province
700	Bellingham Basin
705	Puget Sound Province
710	Western Columbia Basin
715	Klamath Mountains Province
720	Eel River Basin
725	Northern Coast Range Province
730	Sacramento Basin
735	Santa Cruz Basin
740	Coastal Basins
745	San Joaquin Basin
750	Santa Maria Basin
755	Ventura Basin
760	Los Angeles Basin
765	Capistrano Basin
800	Heceta Island Area
805	Keku Islands Area
810	Gulf of Alaska Basin
815	Copper River Basin
820	Cook Inlet Basin
830	Kandik Province

Code	Province
835	Kobuk Province
840	Koyukuk Province
845	Bristol Bay Basin
850	Bethel Basin
855	Norton Basin
860	Selawik Basin
863	Yukon Flats Basin
865	Lower Tanana Basin
867	Middle Tanana Basin
870	Upper Tanana Basin
873	Galena Basin
875	Innoko Basin
877	Minchumina Basin
880	Holitna Basin
885	Artic Foothills Province
890	Artic Slope Basin
900	Maine Atlantic Offshore—general
901	Maine Atlantic Offshore—State
902	Maine Atlantic Offshore—Federal
903	New Hampshire Atlantic Offshore—general
904	New Hampshire Atlantic Offshore—State
905	New Hampshire Atlantic Offshore—Federal
906	Massachusetts Atlantic Offshore—general
907	Massachusetts Atlantic Offshore—State
908	Massachusetts Atlantic Offshore—Federal
909	Rhode Island Atlantic Offshore—general
910	Rhode Island Atlantic Offshore—State
911	Rhode Island Atlantic Offshore—Federal
912	Connecticut Atlantic Offshore—general
913	Connecticut Atlantic Offshore—State
914	Connecticut Atlantic Offshore—Federal
915	New York Atlantic Offshore—general
916	New York Atlantic Offshore—State
917	New York Atlantic Offshore—Federal
918	New Jersey Atlantic Offshore—general
919	New Jersey Atlantic Offshore—State
920	New Jersey Atlantic Offshore—Federal
921	Delaware Atlantic Offshore—general
922	Delaware Atlantic Offshore—State
923	Delaware Atlantic Offshore—Federal
924	Maryland Atlantic Offshore—general
925	Maryland Atlantic Offshore—State
926	Maryland Atlantic Offshore—Federal
927	Virginia Atlantic Offshore—general
928	Virginia Atlantic Offshore—State
929	Virginia Atlantic Offshore—Federal
930	North Carolina Atlantic Offshore—general
931	North Carolina Atlantic Offshore—State
932	North Carolina Atlantic Offshore—Federal
933	South Carolina Atlantic Offshore—general
934	South Carolina Atlantic Offshore—State
935	South Carolina Atlantic Offshore—Federal
936	Georgia Atlantic Offshore—general
937	Georgia Atlantic Offshore—State

Code	Province
938	Georgia Atlantic Offshore—Federal
939	Florida Atlantic Offshore—general
940	Florida Atlantic Offshore—State
941	Florida Atlantic Offshore—Federal
942	Florida Gulf of Mexico Offshore—general
943	Florida Gulf of Mexico Offshore—State
944	Florida Gulf of Mexico Offshore—Federal
945	Alabama Gulf of Mexico Offshore—general
946	Alabama Gulf of Mexico Offshore—State
947	Alabama Gulf of Mexico Offshore—Federal
948	Mississippi Gulf of Mexico Offshore—general
949	Mississippi Gulf of Mexico Offshore—State
950	Mississippi Gulf of Mexico Offshore—Federal
951	Louisiana Gulf of Mexico Offshore—general
952	Louisiana Gulf of Mexico Offshore—State
953	Louisiana Gulf of Mexico Offshore—Federal
954	Texas Gulf of Mexico Offshore—general
955	Texas Gulf of Mexico Offshore—State
956	Texas Gulf of Mexico Offshore—Federal
957	California Pacific Offshore—general
958	California Pacific Offshore—State
959	California Pacific Offshore—Federal
960	Oregon Pacific Offshore—general
961	Oregon Pacific Offshore—State
962	Oregon Pacific Offshore—Federal
963	Washington Pacific Offshore—general
964	Washington Pacific Offshore—State
965	Washington Pacific Offshore—Federal
972	Alaska Arctic Offshore—general
973	Alaska Arctic Offshore—State
974	Alaska Arctic Offshore—Federal
975	Alaska Bering Sea Offshore—general
976	Alaska Bering Sea Offshore—State
977	Alaska Bering Sea Offshore—Federal
978	Alaska Pacific Offshore—general
979	Alaska Pacific Offshore—State
980	Alaska Pacific Offshore—Federal
987	Minnesota Lake Superior Offshore
988	Wisconsin Lake Superior Offshore
989	Michigan Lake Superior Offshore
990	Indiana Lake Michigan Offshore
991	Illinois Lake Michigan Offshore
992	Wisconsin Lake Michigan Offshore
993	Michigan Lake Michigan Offshore
994	Michigan Lake Huron Offshore
995	Michigan Lake Erie Offshore
996	Ohio Lake Erie Offshore
997	Pennsylvania Lake Erie Offshore
998	New York Lake Erie Offshore
999	New York Lake Ontario Offshore

GEOLOGICAL PROVINCES OF THE UNITED STATES

The tables include geologic province codes so that each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists.[15] This information was added in Information Circular 8749[16] and is included with all analyses in the publication. These provinces, which are shown in figure 1 and the accompanying list are delineated by political boundaries for convenience and for accommodation of data processing equipment. The list and figure 1 are taken from the article cited in footnote 15. Not all of the provinces shown are gas-producing areas, so many of the codes are not used in this publication. In offshore areas, only one code is used for each State since State or Federal ownership is not always known. Only one code, 972, is used for all wells in Alaska, both onshore and offshore, because of the lack of information on the location of wells in that State.

[15]Meyer, R. F. Geologic Provinces Code Map for Computer Use. AAPG Bull., v. 54/7, July 1970, pp. 1301–1305.
[16]Work cited in footnote 6.

COMPOSITION OF NATURAL GASES AND THEIR HELIUM CONTENT

The tables included in this section give the results of analyses and related source data on 12,554 gas samples. Tables 1 and 2 show data on samples from the United States, and tables 3 and 4 show samples from foreign countries. The samples are further broken down as to their sources with tables 1 and 3 from individual gas or oil wells and tables 2 and 4 from pipeline or multiple-well sources. Some miscellaneous sources, such as water wells or gas seeps, are included with the individual well tables.

The following list indicates the sources of the samples listed in the tables:

Source	Number of samples	Tables
UNITED STATES:		
Alabama	31	1,2
Alaska	70	1
Arizona	89	1,2
Arkansas	197	1,2
California	253	1,2
Colorado	497	1,2
Florida	4	1
Georgia	4	1,2
Idaho	21	1
Illinois	18	1
Indiana	30	1,2
Iowa	4	1
Kansas	1,543	1,2
Kentucky	89	1,2
Louisiana	435	1,2
Maryland	9	1
Michigan	147	1,2
Minnesota	2	1
Mississippi	84	1,2
Montana	204	1,2
Nebraska	25	1
Nevada	7	1
New Jersey	1	1
New Mexico	735	1,2
New York	95	1,2
North Carolina	2	1
North Dakota	33	1,2
Ohio	207	1,2
Oklahoma	2,057	1,2
Oregon	3	1
Pennsylvania	185	1,2
South Dakota	1	2
Tennessee	5	2
Texas	3,924	1,2
Utah	326	1,2
Virginia	19	1,2
Washington	15	1,2
West Virginia	418	1,2
Wyoming	538	1,2
FOREIGN:		
Argentina	14	3,4
Australia	24	3
Austria	1	3
Bangladesh	1	4
Bolivia	13	3
Canada	81	3,4
Colombia	3	4
Ethiopia	1	3
Germany, Federal Republic of	3	3
Indonesia	4	4
Iran	1	3
Iraq	3	3
Italy	3	3
Mexico	31	3,4
Netherlands	10	3,4
Norway	1	4
Pakistan	6	3,4
Peru	1	3
Qatar	3	3
Saudi Arabia	2	4
South Africa, Republic of	1	3
Taiwan	12	3
Thailand	4	3
United Kingdom	4	3,4

ACKNOWLEDGMENTS

The helium survey program is conducted by soliciting natural gas samples throughout the United States and other countries with free market economies. Without the assistance of the oil and gas industry, State and national agencies, and many individuals engaged in oil and gas exploration and production, the helium survey with its present scope would be impossible.

The analyses listed in the tables were made by the Section of Research and Analytical Services of the Branch of Engineering, Division of Helium Operations, Bureau of Mines, Amarillo, Tex. The list of analyses was produced through use of a computer by the Section of Automatic Data Processing, Branch of Administration, Division of Helium Operations, Bureau of Mines, Amarillo, Tex.

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1 SAMPLE 12098	INDEX 2 SAMPLE 15611	INDEX 3 SAMPLE 15925
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	ESCAMBIA	FAYETTE	FAYETTE
FIELD	FLOMATON	MCCRACKEN	MUSGROVE CREEK
WELL NAME	E. L. GODWIN NO. 1	G. O. GRAY NO. 1	SMITH NO. 32-14
LOCATION	SEC. 18, T1N, R9E	SEC. 21, T16S, R12W	SEC. 32, T14S, R12W
OWNER	HUMBLE OIL & REFINING CO.	TERRA RESOURCES, INC.	GRACE PETROLEUM CORP.
COMPLETED	05/23/69	NOT GIVEN	08/28/79
SAMPLED	10/30/69	04/26/79	03/20/80
FORMATION	JURA-NORPHLET	NOT GIVEN	MISS-CARTER
GEOLOGIC PROVINCE CODE	210	200	200
DEPTH, FEET	15430	2313	2950
WELLHEAD PRESSURE, PSIG	3985	NOT GIVEN	1099
OPEN FLOW, MCFD	NOT GIVEN	11000	4739
COMPONENT, MOLE PCT			
METHANE	35.2	92.3	97.5
ETHANE	5.2	4.6	0.9
PROPANE	3.2	0.8	0.1
N-BUTANE	1.3	0.2	0.1
ISOBUTANE	1.0	0.1	0.0
N-PENTANE	0.6	TRACE	TRACE
ISOPENTANE	0.4	TRACE	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	TRACE
NITROGEN	3.0	1.3	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	4.6	0.0	0.0
CARBON DIOXIDE	44.9	0.4	TRACE
HELIUM	0.02	0.09	0.08
HEATING VALUE*	716	1057	1010
SPECIFIC GRAVITY	1.162	0.604	0.564

	INDEX 4 SAMPLE 14966	INDEX 5 SAMPLE 14747	INDEX 6 SAMPLE 14867
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	NOT GIVEN	WILDCAT	WILDCAT
WELL NAME	CANNON NO. 33-15	H. D. HUBBERT NO. 1	A. M. GRIMSLEY NO. 1
LOCATION	SEC. 33, T14S, R11W	SEC. 28, T15S, R13W	SEC. 31, T14S, R13W
OWNER	CLEARY PETROLEUM CORP.	TERRA RESOURCES, INC.	TERRA RESOURCES, INC.
COMPLETED	NOT GIVEN	03/11/75	08/21/76
SAMPLED	04/-/76	08/-/76	11/17/76
FORMATION	MISS-CARTER	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2366	2712	2696
WELLHEAD PRESSURE, PSIG	550	1100	1180
OPEN FLOW, MCFD	2600	2000	3340
COMPONENT, MOLE PCT			
METHANE	93.7	98.0	96.3
ETHANE	1.6	0.8	2.2
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	1.2	1.0	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.2	TRACE	0.1
HELIUM	0.10	0.08	0.05
HEATING VALUE*	980	1010	1032
SPECIFIC GRAVITY	0.598	0.563	0.574

	INDEX 7 SAMPLE 15052	INDEX 8 SAMPLE 15251	INDEX 9 SAMPLE 14817
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	LAMAR	LAMAR
FIELD	WILDCAT	BLOOMING GROVE	FAIRVIEW
WELL NAME	J. C. RANDOLPH NO. 1	MURPHY-RANDOLPH NO. 1	OGDEN NO. 9-5
LOCATION	SEC. 17, T15S, R12W	SEC. 12, T15S, R14W	SEC. 9, T14S, R14W
OWNER	TERRA RESOURCES, INC.	TERRA RESOURCES, INC.	CLEARY PETROLEUM CORP.
COMPLETED	NOT GIVEN	09/09/77	NOT GIVEN
SAMPLED	03/13/77	03/28/78	10/-/76
FORMATION	MISS-CARTER	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2570	2812	2415
WELLHEAD PRESSURE, PSIG	1100	1056	705
OPEN FLOW, MCFD	8225	3500	2005
COMPONENT, MOLE PCT			
METHANE	97.5	97.1	90.0
ETHANE	0.7	2.1	4.4
PROPANE	0.1	0.1	1.8
N-BUTANE	0.0	0.0	0.6
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.5	0.6	2.2
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.08	0.05	0.06
HEATING VALUE*	1003	1024	1086
SPECIFIC GRAVITY	0.567	0.569	0.626

	INDEX 10 SAMPLE 16053	INDEX 11 SAMPLE 16054	INDEX 12 SAMPLE 15687
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	MAGEE LAKE	MAGEE LAKE	STAR
WELL NAME	SARAH C. SPROUSE NO. 1	SARAH C. SPROUSE NO. 1	L. J. HAYES NO. 1
LOCATION	SEC. 30, T16S, R15W	SEC. 30, T16S, R15W	SEC. 2, T16S, R16W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.
COMPLETED	NOT GIVEN	NOT GIVEN	04/20/79
SAMPLED	08/08/80	08/08/80	07/12/79
FORMATION	MISS-CARTER	CRET-LEWIS	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4265	4820	4183
WELLHEAD PRESSURE, PSIG	900	430	1621
OPEN FLOW, MCFD	2200	665	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	87.1	89.8
ETHANE	4.2	7.3	5.0
PROPANE	1.4	2.4	1.9
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.0	1.1	1.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	TRACE
HELIUM	0.11	0.08	0.10
HEATING VALUE*	1094	1137	1122
SPECIFIC GRAVITY	0.621	0.652	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 13 SAMPLE 15745	INDEX 14 SAMPLE 15704	INDEX 15 SAMPLE 15705
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	TUSCALOOSA	TUSCALOOSA
FIELD	WILDCAT	COAL MINE	COAL MINE
WELL NAME	MCLAUGHLIN NO. 1	JIM WALTERS RES. NO. 4	JIM WALTERS RES. NO. 4
LOCATION	SEC. 34, T13S, R15W	OAK GROVE AREA	OAK GROVE AREA
OWNER	WARRIOR DRILLING & ENG. CO.	JIM WALTERS RESOURCES	JIM WALTERS RESOURCES
COMPLETED	06/05/79	NOT GIVEN	NOT GIVEN
SAMPLED	09/07/79	NOT GIVEN	NOT GIVEN
FORMATION	MISS-CARTER	PENN-MARY LEE	PENN-MARY LEE
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2372	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	930	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	97.7	97.9
ETHANE	1.1	TRACE	0.1
PROPANE	0.4	TRACE	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	9.8	1.7	1.5
OXYGEN	2.2	0.4	0.4
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.07	0.05	0.02
HEATING VALUE*	920	990	994
SPECIFIC GRAVITY	0.626	0.564	0.564

	INDEX 16 SAMPLE 14562	INDEX 17 SAMPLE 14784	INDEX 18 SAMPLE 4952
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	WALKER	WASHINGTON	WASHINGTON
FIELD	UNNAMED	CHATOM	NOT GIVEN
WELL NAME	FIRST NATIONAL BANK NO. 1	CHATOM UNIT NO. 1-2	WATER WELL
LOCATION	SEC. 36, T13S, R7W	SEC. 20, T6N, R4W	SEC. 24, T4N, R2E
OWNER	SHENANDOAH OIL CO.	PHILLIPS PETROLEUM CO.	DAISEY FIELDS & HEIRS
COMPLETED	03/15/74	NOT GIVEN	NOT GIVEN
SAMPLED	12/29/75	09/20/76	08/29/50
FORMATION	MISS-HARTSELLE	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	1798	16039	29
WELLHEAD PRESSURE,PSIG	778	2200	30
OPEN FLOW, MCFD	2258	3900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.6	65.3	4.4
ETHANE	0.4	9.2	0.7
PROPANE	0.1	3.8	0.6
N-BUTANE	0.0	1.1	0.2
ISOBUTANE	0.0	0.9	TRACE
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	1.8	1.4	90.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	1.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	13.8	---
CARBON DIOXIDE	TRACE	3.4	2.5
HELIUM	0.08	0.02	TRACE
HEATING VALUE*	999	1125	93
SPECIFIC GRAVITY	0.569	0.816	0.976

	INDEX 19 SAMPLE 4124	INDEX 20 SAMPLE 14033	INDEX 21 SAMPLE 14047
STATE	ALABAMA	ALASKA	ALASKA
COUNTY	WINSTON	AK PENINSULA	AK PENINSULA
FIELD	NOT GIVEN	NATURAL GAS SEEP	NATURAL GAS SEEP
WELL NAME	FIRST NAT'L BK OF BIRMINGHAM	AREA HOT SPRING	SALMON CREEK
LOCATION	SEC. 18, T12S, R8W	SEC. 2, T29S, R44W (SM)	SEC. 11, T30S, R41W
OWNER	GLEN D. ROSE OIL & GAS CO.	STATE OF ALASKA	ALASKA
COMPLETED	02/18/45	NOT GIVEN	NOT GIVEN
SAMPLED	09/28/46	06/24/74	07/06/74
FORMATION	MISS-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	972	972
DEPTH, FEET	1377	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	450	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	10.7	15.7
ETHANE	1.2	0.4	0.2
PROPANE	---	0.1	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	3.3	23.2	2.5
OXYGEN	0.4	TRACE	0.3
ARGON	---	0.4	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	65.3	81.3
HELIUM	0.10	0.01	0.01
HEATING VALUE*	983	118	163
SPECIFIC GRAVITY	0.578	1.293	1.360

	INDEX 22 SAMPLE 5374	INDEX 23 SAMPLE 11460	INDEX 24 SAMPLE 13696
STATE	ALASKA	ALASKA	ALASKA
COUNTY	ALASKA FLAT	BARROW	COLEMAN
FIELD	NOT GIVEN	BARROW S	NOT GIVEN
WELL NAME	DDH NO. 2	NO. 7	WATER WELL
LOCATION	NOT GIVEN	SEC. 14, T22N, R18W	10 MILES NE HOMER, AK.
OWNER	U. S. GEOLOGICAL SURVEY	U.S. NAVY	UNIVERSITY OF ALASKA
COMPLETED	NOT GIVEN	04/02/68	08/06/73
SAMPLED	12/27/52	04/25/68	08/13/73
FORMATION	NOT GIVEN	JURA-	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	890	972
DEPTH, FEET	NOT GIVEN	2240	380
WELLHEAD PRESSURE,PSIG	NOT GIVEN	960	85
OPEN FLOW, MCFD	NOT GIVEN	400	13
COMPONENT, MOLE PCT			
METHANE	73.8	98.1	92.5
ETHANE	0.0	1.1	0.0
PROPANE	0.6	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	25.3	0.6	7.4
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.03	0.02	0.01
HEATING VALUE*	763	1016	937
SPECIFIC GRAVITY	0.665	0.563	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 25 SAMPLE 14764	INDEX 26 SAMPLE 14777	INDEX 27 SAMPLE 14760
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	COOK INLET BASIN	COOK INLET N	GRANITE POINT
WELL NAME	A-8S	NORTH COOK INLET UNIT A-5	GRANITE POINT NO. 20
LOCATION	SEC. 4, T9N, R13W	SEC. 6, T11N, R9W	SEC. 31, T11N, R11W
OWNER	UNION OIL CO. OF CALIFORNIA	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.
COMPLETED	11/11/67	08/14/69	05/04/68
SAMPLED	08/--/76	08/06/76	08/06/76
FORMATION	EOCE-TYONEK	EOCE-KENAI	EOCE-TYONEK & HEMLOCK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	4450	8690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1542	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	22230	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.1	99.1	67.0
ETHANE	3.4	0.1	10.1
PROPANE	4.5	0.1	10.3
N-BUTANE	1.7	0.0	3.7
ISOBUTANE	1.5	0.0	2.3
N-PENTANE	0.4	0.0	0.6
ISOPENTANE	0.9	0.0	2.1
CYCLOPENTANE	0.2	0.0	0.3
HEXANES PLUS	0.3	0.0	0.7
NITROGEN	1.5	0.6	2.6
OXYGEN	1.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1226	1008	1492
SPECIFIC GRAVITY	0.712	0.559	0.892

	INDEX 28 SAMPLE 14758	INDEX 29 SAMPLE 14759	INDEX 30 SAMPLE 14762
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MCARTHUR RIVER
WELL NAME	K-17	K-30 SHORT	G-14 SHORT
LOCATION	SEC. 21, T9N, R13W	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	--/--/73	04/29/70	10/07/68
SAMPLED	08/06/76	08/06/76	08/--/76
FORMATION	EOCE-HEMLOCK	EOCE-TYONEK, G	EOCE-TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	11423	10876	4500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	82.3	98.2
ETHANE	5.5	4.0	0.1
PROPANE	6.2	4.7	TRACE
N-BUTANE	2.4	1.8	0.0
ISOBUTANE	1.3	1.1	0.0
N-PENTANE	0.5	0.4	0.0
ISOPENTANE	0.8	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	10.9	4.9	1.5
OXYGEN	1.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1176	1178	997
SPECIFIC GRAVITY	0.787	0.710	0.562

	INDEX 31 SAMPLE 14776	INDEX 32 SAMPLE 14780	INDEX 33 SAMPLE 14781
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MIDDLE GROUND SHOAL
WELL NAME	NO. K-30 LONG	NO. G-33 LONG	NO. 13
LOCATION	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W	SEC. 31, T9N, R12W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIFORNIA	AMOCO PRODUCTION CO.
COMPLETED	04/29/70	03/18/70	01/01/68
SAMPLED	08/06/76	08/04/76	08/--/76
FORMATION	EOCE-KENAI	EOCE-KENAI	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	12006	10086	8425
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	726	600
COMPONENT, MOLE PCT			
METHANE	80.1	61.3	64.6
ETHANE	4.8	12.1	13.7
PROPANE	5.3	10.5	10.9
N-BUTANE	2.0	2.7	3.6
ISOBUTANE	1.0	1.6	1.8
N-PENTANE	0.4	0.3	0.6
ISOPENTANE	0.5	0.7	1.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	5.4	10.4	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1189	1312	1482
SPECIFIC GRAVITY	0.724	0.855	0.878

	INDEX 34 SAMPLE 14782	INDEX 35 SAMPLE 14761	INDEX 36 SAMPLE 14766
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MIDDLE GROUND SHOAL	NICOLAI CREEK	NICOLAI CREEK
WELL NAME	NO. 4	NO. 2	NO. 5
LOCATION	SEC. 31, T9N, R12W	SEC. 22, T11N, R12W	SEC. 20, T11N, R12W
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	TEXACO INC.
COMPLETED	05/01/76	10/24/66	05/04/67
SAMPLED	08/--/76	08/--/76	08/--/76
FORMATION	EOCE-TYONEK	EOCE-TYONEK	EOCE-BELUGA & TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	5782	3420	1900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	98.2	98.1
ETHANE	6.1	0.2	0.1
PROPANE	8.3	0.1	0.1
N-BUTANE	3.3	TRACE	0.0
ISOBUTANE	1.8	TRACE	0.0
N-PENTANE	0.7	0.0	0.0
ISOPENTANE	1.3	0.1	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	TRACE	0.0
NITROGEN	3.0	1.3	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1361	1005	998
SPECIFIC GRAVITY	0.808	0.563	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 37 SAMPLE 14765	INDEX 38 SAMPLE 5960	INDEX 39 SAMPLE 14119
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COPPER RIVER BASIN	COPPER RIVER BASIN
FIELD	TRADING BAY NE	ESKER SPRING NE	NATURAL GAS SEEP
WELL NAME	TS-2	NOT GIVEN	JOHNSON CREEK SEEP
LOCATION	SEC. 34, T10N, R13W	U. S. GEOLOGICAL SURVEY	SEC. 7, T22S, R21E
OWNER	ATLANTIC RICHFIELD CO.	NOT GIVEN	U.S. BUREAU OF MINES
COMPLETED	08/29/68	NOT GIVEN	NOT GIVEN
SAMPLED	08/--/76	09/15/55	07/16/74
FORMATION	EOCE-TYONEK & HEMLOCK	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	9016	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	192	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	69.5	0.2	96.0
ETHANE	5.7	0.2	TRACE
PROPANE	7.1	0.0	TRACE
N-BUTANE	2.3	0.0	0.0
ISOBUTANE	2.0	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	11.6	42.3	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.8	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	56.4	0.9
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1206	6	972
SPECIFIC GRAVITY	0.801	1.286	0.581

	INDEX 40 SAMPLE 14120	INDEX 41 SAMPLE 14121	INDEX 42 SAMPLE 6503
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COPPER RIVER BASIN	COPPER RIVER BASIN	GULKANA LAKE
FIELD	NATURAL GAS SEEP	NATURAL GAS SEEP	NOT GIVEN
WELL NAME	CROOKED CREEK SEEP	JOHNSON CREEK SEEP	NOT GIVEN
LOCATION	SEC. 35, T21S, R19E	SEC. 7, T22S, R21E	COPPER RIVER BASIN
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	NOT GIVEN
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/--/74	07/--/74	10/--/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	84.1	56.2
ETHANE	2.0	0.5	0.0
PROPANE	0.5	0.1	0.2
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.7	5.9	41.3
OXYGEN	0.1	1.3	0.1
ARGON	TRACE	0.1	0.7
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	8.0	1.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1000	863	574
SPECIFIC GRAVITY	0.608	0.668	0.746

	INDEX 43 SAMPLE 14032	INDEX 44 SAMPLE 8101	INDEX 45 SAMPLE 11258
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KEJULIK RIVER	KENAI	KENAI
FIELD	NATURAL GAS SEEP	KENAI	KENAI
WELL NAME	KEJULIK RIVER	KENAI UNIT NO. 44-18	KENAI DEEP TEST NO. 1
LOCATION	SEC. 34, T26S, R38W (SM)	SEC. 18, T4N, R11W	KALIFONSKI BEACH
OWNER	STATE OF ALASKA	OHIO OIL CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	NOT GIVEN	01/29/61	11/13/67
SAMPLED	06/24/74	07/12/61	01/04/68
FORMATION	NOT GIVEN	EOCE-KENAI	EOCE-KENAI D
GEOLOGIC PROVINCE CODE	972	820	820
DEPTH, FEET	NOT GIVEN	4798	9230
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1895	3620
OPEN FLOW, MCFD	NOT GIVEN	32000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	98.9	97.5
ETHANE	TRACE	0.2	0.2
PROPANE	TRACE	TRACE	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	25.8	0.7	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.5	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	746	1005	1029
SPECIFIC GRAVITY	0.664	0.559	0.578

	INDEX 46 SAMPLE 11210	INDEX 47 SAMPLE 10573	INDEX 48 SAMPLE 9968
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI BOROUGH	KENAI BOROUGH	KENAI BOROUGH
FIELD	BEAVER CREEK	NICOLAI CREEK	WILDCAT
WELL NAME	BEAVER CREEK NO. 1-A	NICOLAI CREEK STATE NO. 1	BIRCH HILL UNIT 22-25
LOCATION	SEC. 33, T7N, R10W	SEC. 30, T11N, R12W	SEC. 25, T9N, R9W
OWNER	MARATHON OIL CO.	TEXACO INC., ET AL.	STANDARD OIL CO. OF CALIF.
COMPLETED	08/01/67	04/28/66	06/09/65
SAMPLED	11/05/67	05/14/66	06/24/65
FORMATION	EOCE-KENAI U	EOCE-KENAI U	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	5420	3420	8205
WELLHEAD PRESSURE,PSIG	1463	1531	2855
OPEN FLOW, MCFD	26164	NOT GIVEN	17500
COMPONENT, MOLE PCT			
METHANE	98.3	96.2	98.6
ETHANE	0.1	0.1	0.2
PROPANE	TRACE	0.0	0.3
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.4	3.4	0.7
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	998	976	1014
SPECIFIC GRAVITY	0.561	0.570	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 49 SAMPLE 10589	INDEX 50 SAMPLE 14771	INDEX 51 SAMPLE 14783
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI PENINSULA	KENAI PENINSULA	KENAI PENINSULA
FIELD	FALLS CREEK	KENAI	KENAI
WELL NAME	FALLS CREEK NO. 1	NO. 41-7	NO. 34-31
LOCATION	SEC. 1, T1N, R13W	SEC. 7, T4N, R11W	SEC. 31, T5N, R11W
OWNER	STANDARD OIL CO. OF CALIF.	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA
COMPLETED	04/24/61	NOT GIVEN	11/23/59
SAMPLED	05/27/66	08/05/76	08/05/76
FORMATION	EOCE-KENAI	EOCE-TYONEK	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2200	1500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.1	98.8	98.7
ETHANE	0.2	0.3	0.1
PROPANE	0.3	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.6	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1015	1005	1002
SPECIFIC GRAVITY	0.561	0.561	0.559

	INDEX 52 SAMPLE 14772	INDEX 53 SAMPLE 9537	INDEX 54 SAMPLE 9538
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI PENINSULA	KENAI PENINSULA	KENAI PENINSULA
FIELD	STERLING	SWANSON RIVER	SWANSON RIVER
WELL NAME	NO. 43-9	SWANSON RIVER NO. 212-27	SOLDOTNA CREEK NO. 234-8
LOCATION	SEC. 9, T5N, R10W	SEC. 27	SEC. 8
OWNER	UNION OIL CO. OF CALIFORNIA	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	07/05/63	10/06/61	02/24/62
SAMPLED	08/05/76	08/05/64	08/05/64
FORMATION	EOCE-STERLING	EOCE-KENAI	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	7625	5834
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.3	97.5	98.7
ETHANE	0.2	0.2	0.1
PROPANE	TRACE	0.1	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.4	1.8	1.0
OXYGEN	0.0	0.3	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	999	996	1002
SPECIFIC GRAVITY	0.562	0.566	0.561

	INDEX 55 SAMPLE 12558	INDEX 56 SAMPLE 14291	INDEX 57 SAMPLE 11554
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NAVAL RES FOUR	NORTH SLOPE	NORTH SLOPE
FIELD	BARROW S	IKO BAY	PRUDHOE BAY
WELL NAME	SOUTH BARROW NO. 9	IKO NO. 1	PRUDHOE NO. 1
LOCATION	SEC. 11, T22N, R18W, UPM	SEC. 16, T21N, R16W	NORTH SLOPE
OWNER	U. S. NAVY	U. S. NAVY	ATLANTIC RICHFIELD CO.
COMPLETED	04/15/70	03/09/75	NOT GIVEN
SAMPLED	04/04/70	03/09/75	NOT GIVEN
FORMATION	CRET-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2040	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	166	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.4	96.7	78.8
ETHANE	0.6	1.9	5.2
PROPANE	TRACE	0.4	1.8
N-BUTANE	0.0	0.1	0.6
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.9	0.7	0.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	12.4
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1008	1031	972
SPECIFIC GRAVITY	0.561	0.575	0.737

	INDEX 58 SAMPLE 12307	INDEX 59 SAMPLE 12308	INDEX 60 SAMPLE 15089
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NORTH SLOPE	NORTH SLOPE	NORTHWESTERN
FIELD	PRUDHOE BAY	PRUDHOE BAY	BARROW E
WELL NAME	PRUDHOE BAY STATE NO. 1	SAG RIVER STATE NO. 1	WELL NO. 19
LOCATION	SEC. 10, T11N, R14E	SEC. 4, T10N, R15E	SEC. 23, T22N, R17W
OWNER	ARCO & HUMBLE OIL & REFINING	ARCO & HUMBLE OIL & REFINING	HUSKY OIL NPR OPERATIONS INC
COMPLETED	NOT GIVEN	NOT GIVEN	05/16/78
SAMPLED	05/05/70	04/09/70	01/17/80
FORMATION	PERM-SADLEROCHIT	PERM-SADLEROCHIT	JURA-BARROW
GEOLOGIC PROVINCE CODE	972	972	890
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2050
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7220
COMPONENT, MOLE PCT			
METHANE	78.3	73.7	86.1
ETHANE	5.2	7.1	0.5
PROPANE	2.3	3.1	TRACE
N-BUTANE	0.8	0.7	0.1
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	0.9	0.2	11.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.7	14.1	0.1
HELIUM	0.02	0.01	1.22
HEATING VALUE*	1007	1018	889
SPECIFIC GRAVITY	0.748	0.788	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 61 SAMPLE 15890		INDEX 62 SAMPLE 15891		INDEX 63 SAMPLE 15892	
STATE	ALASKA		ALASKA		ALASKA	
COUNTY	NORTHWESTERN		NORTHWESTERN		NORTHWESTERN	
FIELD	BARROW E		BARROW E		BARROW E	
WELL NAME	WELL NO. 12		WELL NO. 17		WELL NO. 14	
LOCATION	SEC. 23, T22N, R17W		SEC. 30, T22N, R16W		SEC. 25, T22N, R17W	
OWNER	HUSKY OIL NPR OPERATIONS INC		HUSKY OIL NPR OPERATIONS INC		HUSKY OIL NPR OPERATIONS INC	
COMPLETED	05/04/74		04/13/78		03/03/77	
SAMPLED	01/17/80		01/17/80		01/17/80	
FORMATION	JURA-BARROW		JURA-BARROW		NOT GIVEN	
GEOLOGIC PROVINCE CODE	890		890		890	
DEPTH, FEET	2050		2100		2050	
WELLHEAD PRESSURE,PSIG	1000		1000		1000	
OPEN FLOW, MCFD	360		2960		3700	
COMPONENT, MOLE PCT						
METHANE	83.5		94.9		94.3	
ETHANE	0.4		0.9		2.2	
PROPANE	0.2		0.3		2.0	
N-BUTANE	0.7		0.2		0.8	
ISOBUTANE	0.1		0.1		0.0	
N-PENTANE	0.6		0.1		0.0	
ISOPENTANE	0.8		0.0		0.0	
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.5		0.2		0.0	
NITROGEN	8.8		3.1		0.0	
OXYGEN	TRACE		TRACE		0.6	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.0	
HELIUM	4.22		0.13		0.05	
HEATING VALUE*	974		1014		1074	
SPECIFIC GRAVITY	0.630		0.587		0.600	

	INDEX 64 SAMPLE 9429		INDEX 65 SAMPLE 9430		INDEX 66 SAMPLE 14003	
STATE	ALASKA		ALASKA		ALASKA	
COUNTY	NOT GIVEN		NOT GIVEN		NOT GIVEN	
FIELD	BARROW S		BARROW S		BARROW S	
WELL NAME	NO. 5		NO. 6		BARROW S NO. 12	
LOCATION	SEC. 14, T22N, R18W		SEC. 14, T22N, R18W		SEC. 23, T24N, R17W	
OWNER	OFFICE OF NAVAL PET. RESERVE		OFFICE OF NAVAL PET. RESERVE		U.S. NAVY	
COMPLETED	06/17/55		03/24/64		05/04/74	
SAMPLED	07/01/64		07/01/64		05/05/74	
FORMATION	JURA-		JURA-		JURA-BARROW	
GEOLOGIC PROVINCE CODE	972		972		972	
DEPTH, FEET	2456		2363		2087	
WELLHEAD PRESSURE,PSIG	980		980		810	
OPEN FLOW, MCFD	7900		8200		500	
COMPONENT, MOLE PCT						
METHANE	97.8		97.9		90.6	
ETHANE	0.9		0.9		0.7	
PROPANE	0.2		0.1		TRACE	
N-BUTANE	0.0		0.0		0.1	
ISOBUTANE	0.0		0.0		TRACE	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		0.1	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		TRACE	
NITROGEN	1.0		0.9		5.6	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.03		0.03		2.60	
HEATING VALUE*	1012		1010		938	
SPECIFIC GRAVITY	0.566		0.564		0.577	

	INDEX 67 SAMPLE 13980		INDEX 68 SAMPLE 13985		INDEX 69 SAMPLE 10703	
STATE	ALASKA		ALASKA		ALASKA	
COUNTY	NOT GIVEN		NOT GIVEN		NOT GIVEN	
FIELD	BARROW S NO. 2		BARROW S NO. 2		EXPLORATORY	
WELL NAME	BARROW S. NO. 12		BARROW S NO. 12		NORTH FORK NO. 41-35	
LOCATION	SEC. 23, T24N, R17W		SEC. 23, T24N, R17W		SEC. 35, T4S, R14W	
OWNER	U.S. NAVY		U.S. NAVY		STANDARD OIL CO. OF CALIF.	
COMPLETED	DRILL STEM TEST		NOT GIVEN		12/20/65	
SAMPLED	04/21/74		NOT GIVEN		01/19/66	
FORMATION	JURA-BARROW		JURA-BARROW		EOCE-KENAI	
GEOLOGIC PROVINCE CODE	972		972		972	
DEPTH, FEET	2087		NOT GIVEN		8025	
WELLHEAD PRESSURE,PSIG	810		300		2813	
OPEN FLOW, MCFD	500		NOT GIVEN		4500	
COMPONENT, MOLE PCT						
METHANE	87.3		87.8		98.1	
ETHANE	0.4		0.4		0.3	
PROPANE	0.1		TRACE		0.1	
N-BUTANE	0.1		0.1		0.0	
ISOBUTANE	0.1		TRACE		0.0	
N-PENTANE	TRACE		TRACE		0.0	
ISOPENTANE	0.1		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		TRACE		0.0	
NITROGEN	7.9		7.7		1.2	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	3.74		3.69		TRACE	
HEATING VALUE*	910		904		1002	
SPECIFIC GRAVITY	0.584		0.577		0.560	

	INDEX 70 SAMPLE 14048		INDEX 71 SAMPLE 14050		INDEX 72 SAMPLE 10752	
STATE	ALASKA		ALASKA		ALASKA	
COUNTY	NOT GIVEN		NOT GIVEN		NOT GIVEN	
FIELD	GAS SEEP		GAS SEEP		IVAN RIVER	
WELL NAME	OIL CREEK		BLUE CREEK		IVAN RIVER NO. 44-1	
LOCATION	SEC. 3, T29S, R40W		SEC. 13, T29S, R44W		SEC. 1, T13N, R9W	
OWNER	NOT GIVEN		NOT GIVEN		STANDARD OIL CO. OF CALIF.	
COMPLETED	NOT GIVEN		NOT GIVEN		10/08/66	
SAMPLED	07/06/74		07/06/74		10/08/66	
FORMATION	NOT GIVEN		NOT GIVEN		EOCE-KENAI	
GEOLOGIC PROVINCE CODE	972		972		972	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		7935	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		3465	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		5600	
COMPONENT, MOLE PCT						
METHANE	91.2		7.2		98.9	
ETHANE	TRACE		0.0		0.1	
PROPANE	TRACE		TRACE		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	6.7		20.6		0.8	
OXYGEN	TRACE		1.8		0.1	
ARGON	0.1		0.3		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.9		70.1		0.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	924		73		1004	
SPECIFIC GRAVITY	0.601		1.335		0.560	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 73 SAMPLE 13372	INDEX 74 SAMPLE 4388	INDEX 75 SAMPLE 4389
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	KATALLA	NAVAL PET. RESERVE NO. 4	NAVAL PET. RESERVE NO. 4
WELL NAME	KATALLA NATURAL GAS SEEP	SAMPLE NO. 1	SAMPLE NO. 2
LOCATION	SEC. 36, T19S, R5E	NOT GIVEN	NOT GIVEN
OWNER	STANDARD OIL CO. OF CALIF.	OFFICE OF NAVAL PET. RESERVE	OFFICE OF NAVAL PET. RESERVE
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/14/72	12/01/47	12/01/47
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.3	99.8	99.0
ETHANE	13.4	0.0	0.0
PROPANE	10.6	---	---
N-BUTANE	3.1	---	---
ISOBUTANE	2.8	---	---
N-PENTANE	0.6	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.8	0.0	0.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.6	0.2	1.0
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	1427	1011	1003
SPECIFIC GRAVITY	0.883	0.556	0.564

	INDEX 76 SAMPLE 5335	INDEX 77 SAMPLE 7672	INDEX 78 SAMPLE 7673
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NOT GIVEN	60 ANI-0.229	60 ANI-0-224D
WELL NAME	NATURAL GAS SEEPAGE	NOT GIVEN	NOT GIVEN
LOCATION	COPPER RIVER BASIN	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY
OWNER	U.S. GEOLOGICAL SURVEY	NOT GIVEN	NOT GIVEN
COMPLETED	NOT GIVEN	09/15/60	09/15/60
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	NOT GIVEN	972	972
GEOLOGIC PROVINCE CODE	972	NOT GIVEN	NOT GIVEN
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	48.6	58.2	44.6
ETHANE	0.2	0.0	0.0
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	50.6	40.4	55.0
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.1
HELIUM	0.12	0.10	TRACE
HEATING VALUE*	496	592	454
SPECIFIC GRAVITY	0.767	0.733	0.784

	INDEX 79 SAMPLE 7733	INDEX 80 SAMPLE 13278	INDEX 81 SAMPLE 13371
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NOT GIVEN	KEMIK NO. 1	NATURAL GAS SEEP
WELL NAME	TOLSONA NO. 1	SEC. 17, T1N, R20E	SEC. 15, T18S, R6E
LOCATION	NOT GIVEN	FOREST OIL CORP.	NOT GIVEN
OWNER	U.S. GEOLOGICAL SURVEY	NOT GIVEN	NOT GIVEN
COMPLETED	NOT GIVEN	06/11/72	08/14/72
SAMPLED	11/01/60	NOT GIVEN	NOT GIVEN
FORMATION	NOT GIVEN	972	972
GEOLOGIC PROVINCE CODE	972	NOT GIVEN	NOT GIVEN
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	63.4	96.4	94.8
ETHANE	TRACE	0.3	TRACE
PROPANE	0.1	0.1	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	35.9	1.2	4.3
OXYGEN	0.1	0.1	0.5
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.0	0.2
HELIUM	0.10	0.02	TRACE
HEATING VALUE*	645	984	960
SPECIFIC GRAVITY	0.706	0.582	0.577

	INDEX 82 SAMPLE 13373	INDEX 83 SAMPLE 11547	INDEX 84 SAMPLE 9422
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NOT GIVEN	PRUDHOE BAY	STERLING
WELL NAME	ROTHRUN NO. 101	PRUDHOE BAY STATE NO. 1	STERLING NO. 23-15
LOCATION	BERING LAKE	NOT GIVEN	SEC. 15, T5N, R10W
OWNER	FOREST SERVICE	ATLANTIC RICHFIELD	UNION OIL CO. OF CALIF.
COMPLETED	--/--/06	DRILL STEM TEST NO. 15	07/11/61
SAMPLED	08/14/72	NOT GIVEN	06/30/64
FORMATION	NOT GIVEN	NOT GIVEN	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5254
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1964
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	36000
COMPONENT, MOLE PCT			
METHANE	71.3	70.6	97.7
ETHANE	0.1	4.8	0.1
PROPANE	TRACE	2.1	TRACE
N-BUTANE	TRACE	0.9	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	27.2	9.2	2.0
OXYGEN	0.8	2.1	0.0
ARGON	0.5	0.2	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	10.0	0.1
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	724	886	991
SPECIFIC GRAVITY	0.677	0.761	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 85 SAMPLE 13642	INDEX 86 SAMPLE 13641	INDEX 87 SAMPLE 14051
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	SEWARD MERIDIAN
FIELD	WELLS CREEK AREA	WILDCAT	GAS SEEP
WELL NAME	WELLS CREEK NO. 1	SALMON CREEK NO. 2	GAS ROCKS
LOCATION	SEC. 11, T6S, R24W	SEC. 10, T30S, R41W (SM)	SEC. 9, T27S, R44W
OWNER	NOT GIVEN	NOT GIVEN	STATE OF ALASKA
COMPLETED	--/--/03	03/--/40	NOT GIVEN
SAMPLED	06/14/73	06/25/73	07/06/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	1000	7500	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	79.2	18.9	0.1
ETHANE	0.0	0.2	0.0
PROPANE	TRACE	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	20.4	3.0	12.3
OXYGEN	0.0	0.4	3.0
ARGON	0.2	0.0	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	77.3	84.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	802	198	1
SPECIFIC GRAVITY	0.641	1.324	1.447

	INDEX 88 SAMPLE 14118	INDEX 89 SAMPLE 5338	INDEX 90 SAMPLE 6135
STATE	ALASKA	ALASKA	ARIZONA
COUNTY	SEWARD MERIDIAN	YAKATAGE REEF	APACHE
FIELD	NOT GIVEN	NOT GIVEN	BITA PEAK
WELL NAME	WARFIELD SEEP	SAMPLE NO. 52, AMR 110	BITA PEAK NO. 1
LOCATION	SEC. 20, T18N, R3W	NOT GIVEN	SEC. 19, T41N, R31E
OWNER	U.S. BUREAU OF MINES	U. S. GEOLOGICAL SURVEY	EL PASO NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	08/13/56
SAMPLED	07/03/74	NOT GIVEN	08/27/56
FORMATION	NOT GIVEN	NOT GIVEN	PENN-PARADOX
GEOLOGIC PROVINCE CODE	972	972	590
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1847
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.1	87.9	71.2
ETHANE	0.0	0.1	5.9
PROPANE	TRACE	0.0	2.8
N-BUTANE	0.0	0.0	1.1
ISOBUTANE	0.0	0.1	0.6
N-PENTANE	0.0	0.0	0.5
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	22.4	10.6	12.1
OXYGEN	0.2	0.2	0.1
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	4.1
HELIUM	0.03	TRACE	0.88
HEATING VALUE*	781	896	1006
SPECIFIC GRAVITY	0.651	0.610	0.748

	INDEX 91 SAMPLE 13217	INDEX 92 SAMPLE 13484	INDEX 93 SAMPLE 13485
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BLACK ROCK	BLACK ROCK	BLACK ROCK
WELL NAME	MONSANTO-NAVAJO NO. A-1	NAVAJO NO. 1-15	NAVAJO NO. 1-15
LOCATION	SEC. 21, T40N, R29E	SEC. 15, T40N, R29E	SEC. 15, T40N, R29E
OWNER	CITIES SERVICE OIL CO.	UNIVERSAL RESOURCES	UNIVERSAL RESOURCES
COMPLETED	09/14/71	01/18/73	01/18/73
SAMPLED	05/23/72	12/03/72	12/03/72
FORMATION	PENN-PINKERTON	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5553	5282	5282
WELLHEAD PRESSURE,PSIG	1350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.1	78.9	80.9
ETHANE	5.3	5.1	5.2
PROPANE	2.6	2.7	2.6
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	7.3	8.2	6.7
OXYGEN	0.0	0.5	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.8	1.7
HELIUM	0.57	0.51	0.53
HEATING VALUE*	1045	1052	1067
SPECIFIC GRAVITY	0.687	0.702	0.687

	INDEX 94 SAMPLE 5600	INDEX 95 SAMPLE 5674	INDEX 96 SAMPLE 5679
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	E. BOUNDARY BUTTE NO. 1	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2
LOCATION	SEC. 6, T41N, R29E	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/17/54	08/17/54	08/21/54
FORMATION	PENN-HERMOSA	PENN-HERMOSA U	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4884	4601	4620
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4535	1500
OPEN FLOW, MCFD	NOT GIVEN	2700	85
COMPONENT, MOLE PCT			
METHANE	87.0	75.9	76.0
ETHANE	4.9	5.0	4.1
PROPANE	2.6	1.9	0.9
N-BUTANE	0.8	1.0	0.4
ISOBUTANE	0.4	0.9	0.4
N-PENTANE	0.3	0.6	0.1
ISOPENTANE	0.2	0.6	0.1
CYCLOPENTANE	0.1	0.6	0.1
HEXANES PLUS	0.3	1.3	0.2
NITROGEN	3.0	9.8	11.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.6	5.1
HELIUM	0.40	0.83	1.10
HEATING VALUE*	1118	1113	925
SPECIFIC GRAVITY	0.654	0.746	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 97 SAMPLE 5681	INDEX 98 SAMPLE 5682	INDEX 99 SAMPLE 5695
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2
LOCATION	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/29/54	08/31/54	09/27/54
FORMATION	PENN-PARADOX	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4974	5190	4740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	86.2	86.6
ETHANE	3.0	3.1	3.2
PROPANE	0.1	0.6	1.7
N-BUTANE	0.1	0.2	0.4
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.6	8.1	6.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	15.4	0.1	0.0
HELIUM	1.10	1.02	0.49
HEATING VALUE*	797	975	1040
SPECIFIC GRAVITY	0.761	0.619	0.639

	INDEX 100 SAMPLE 5718	INDEX 101 SAMPLE 5948	INDEX 102 SAMPLE 5959
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	BOUNDARY BUTTE E NO. 2	NAVAJO INDIANS NO. 1	NAVAJO INDIAN TRIBE NO. 1
LOCATION	SEC. 3, T41N, R29E	SEC. 4, T41N, R28E	SEC. 4, T41N, R28E
OWNER	SHELL OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/07/54	10/05/55	10/25/55
FORMATION	PENN-HERMOSA	MISS-LEADVILLE	PENN-PARADOX
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4886	5570	4806
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1540	NOT GIVEN
OPEN FLOW, MCFD	115	4261	4385
COMPONENT, MOLE PCT			
METHANE	72.7	43.7	70.3
ETHANE	4.2	2.5	3.6
PROPANE	3.3	1.0	1.7
N-BUTANE	1.9	0.3	0.7
ISOBUTANE	1.0	TRACE	0.3
N-PENTANE	0.6	0.1	0.2
ISOPENTANE	0.9	0.0	0.0
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.7	0.1	0.2
NITROGEN	4.6	36.9	8.2
OXYGEN	TRACE	1.6	0.0
ARGON	TRACE	0.3	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	9.4	9.6	13.8
HELIUM	0.34	3.79	1.00
HEATING VALUE*	1103	533	871
SPECIFIC GRAVITY	0.810	0.827	0.778

	INDEX 103 SAMPLE 7362	INDEX 104 SAMPLE 10964	INDEX 105 SAMPLE 10967
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	E88, 23-11	NAVAJO TRACT 140 NO. 1	NAVAJO TRACT 140 NO. 1
LOCATION	SEC. 11, T41N, R28E	SEC. 8, T35N, R30E	SEC. 8, T35N, R30E
OWNER	SHELL OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	04/25/59	DRILL STEM TEST	DRILL STEM TEST NO. 2
SAMPLED	01/21/60	05/23/67	05/25/67
FORMATION	PENN-HERMOSA U	DEVO-MCCRACKEN	DEVO-ANETH
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4460	4532	4663
WELLHEAD PRESSURE,PSIG	1120	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1500	60
COMPONENT, MOLE PCT			
METHANE	84.5	2.2	3.4
ETHANE	4.4	0.2	0.5
PROPANE	1.9	0.1	0.2
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	7.2	83.4	78.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.8	0.8
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	7.8	11.1
HELIUM	0.80	5.18	5.23
HEATING VALUE*	1009	35	55
SPECIFIC GRAVITY	0.634	0.964	0.980

	INDEX 106 SAMPLE 10971	INDEX 107 SAMPLE 11131	INDEX 108 SAMPLE 11137
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 87 NO. 1	NAVAJO TRIBAL 88 NO. 1	NAVAJO TRIBAL 88 NO. 1
LOCATION	SEC. 23, T36N, R29E	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	DRILL STEM TEST	09/20/67	08/24/68
SAMPLED	05/26/67	09/21/67	09/26/67
FORMATION	DEVO-	PENN-SILL	PENN-SILL
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5223	3407	3407
WELLHEAD PRESSURE,PSIG	NOT GIVEN	620	620
OPEN FLOW, MCFD	NOT GIVEN	250	2919
COMPONENT, MOLE PCT			
METHANE	3.1	24.0	23.9
ETHANE	0.4	3.7	3.8
PROPANE	0.2	2.2	2.2
N-BUTANE	0.1	0.6	0.7
ISOBUTANE	0.0	0.3	0.4
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	78.8	63.5	63.8
OXYGEN	0.3	0.0	0.0
ARGON	0.8	0.6	0.6
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.6	0.1	0.1
HELIUM	5.58	4.39	4.04
HEATING VALUE*	47	415	423
SPECIFIC GRAVITY	0.973	0.865	0.872

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 109 SAMPLE 11167	INDEX 110 SAMPLE 11196	INDEX 111 SAMPLE 11205
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 88 NO. 2	NAVAJO TRACT 88 NO. 2	NAVAJO TRACT 88 NO. 1
LOCATION	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	DRILL STEM TEST NO. 3	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	NOT GIVEN	10/30/67	11/03/67
FORMATION	DEVO-MCCRACKEN	DEVO-MCCRACKEN	PENN-SILL
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	4626	3407
WELLHEAD PRESSURE,PSIG	NOT GIVEN	737	625
OPEN FLOW, MCFD	NOT GIVEN	2	2900
COMPONENT, MOLE PCT			
METHANE	2.7	2.7	23.3
ETHANE	0.4	0.4	3.9
PROPANE	0.1	0.1	2.0
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	78.1	77.3	63.9
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.8	0.6
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	12.6	13.3	0.1
HELIUM	5.16	5.17	4.57
HEATING VALUE*	44	47	414
SPECIFIC GRAVITY	0.992	1.001	0.874

	INDEX 112 SAMPLE 11269	INDEX 113 SAMPLE 11521	INDEX 114 SAMPLE 11903
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 88-3	NAVAJO TRACT 140 NO. 1	NAVAJO TRACT 146 NO. 1
LOCATION	SEC. 36, T36N, R29E	SEC. 8, T35N, R30E	SEC. 15, T35N, R30E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	01/31/68	05/23/68	07/16/68
SAMPLED	01/31/68	05/23/68	06/03/69
FORMATION	PENN-SILL	DEVO-MCCRACKEN	DEVO-MCCRACKEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3692	4570	3832
WELLHEAD PRESSURE,PSIG	580	702	50
OPEN FLOW, MCFD	2163	1600	370
COMPONENT, MOLE PCT			
METHANE	30.2	2.0	0.3
ETHANE	4.5	0.3	0.0
PROPANE	3.2	0.2	0.1
N-BUTANE	1.3	0.0	0.0
ISOBUTANE	1.1	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.6	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	53.8	84.4	89.6
OXYGEN	0.0	0.0	0.0
ARGON	0.5	0.8	0.9
HYDROGEN	TRACE	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	7.2	4.2
HELIUM	3.74	5.08	4.40
HEATING VALUE*	625	31	7
SPECIFIC GRAVITY	0.891	0.962	0.953

	INDEX 115 SAMPLE 7274	INDEX 116 SAMPLE 7584	INDEX 117 SAMPLE 7585
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DRY MESA	DRY MESA	DRY MESA
WELL NAME	NAVAJO TRACT 138 NO. 1	NAVAJO TRACT 138 NO. 3	NAVAJO TRACT 138 NO. 3
LOCATION	SEC. 11, T40N, R28E	SEC. 2, T40N, R28E	SEC. 2, T40N, R28E
OWNER	TEXAS PACIFIC COAL & OIL CO.	TEXAS PACIFIC COAL & OIL CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	07/28/59	NOT GIVEN	NOT GIVEN
SAMPLED	11/03/59	06/18/60	06/18/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5566	5324	5324
WELLHEAD PRESSURE,PSIG	12	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	32	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.0	41.5	42.5
ETHANE	4.6	15.3	15.3
PROPANE	1.9	16.1	15.7
N-BUTANE	1.3	7.5	6.8
ISOBUTANE	1.1	1.5	1.5
N-PENTANE	0.2	2.1	1.8
ISOPENTANE	1.6	1.7	1.7
CYCLOPENTANE	0.3	0.4	0.3
HEXANES PLUS	0.8	1.1	0.9
NITROGEN	43.3	12.2	13.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.1	0.2
HYDROGEN	0.1	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.0	TRACE	0.1
HELIUM	2.60	0.30	0.30
HEATING VALUE*	717	1644	1599
SPECIFIC GRAVITY	0.910	1.081	1.067

	INDEX 118 SAMPLE 7775	INDEX 119 SAMPLE 11203	INDEX 120 SAMPLE 11204
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NAVAJO SPRINGS	NAVAJO SPRINGS	NAVAJO SPRINGS
WELL NAME	SANTA FE NO. 8	SANTA FE NO. 21	SANTA FE NO. 8
LOCATION	SEC. 25, T20N, R27E	SEC. 31, T20N, R28E	SEC. 25, T20N, R27E
OWNER	CREST OIL CO.	APACHE DRILLING CO.	APACHE DRILLING CO.
COMPLETED	11/20/60	09/13/67	11/21/60
SAMPLED	11/16/60	10/31/67	10/31/67
FORMATION	PERM-COCONINO	TRIA-SHINARUMP	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1356	1172	1351
WELLHEAD PRESSURE,PSIG	NOT GIVEN	134	199
OPEN FLOW, MCFD	NOT GIVEN	177	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	TRACE
ETHANE	TRACE	0.1	0.1
PROPANE	TRACE	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	88.8	80.5	88.9
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.8	0.7
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	9.8	0.7
HELIUM	9.80	8.71	9.68
HEATING VALUE*	10	3	2
SPECIFIC GRAVITY	0.892	0.953	0.895

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 121 SAMPLE 12527	INDEX 122 SAMPLE 12528	INDEX 123 SAMPLE 6925
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NAVAJO SPRINGS E	NAVAJO SPRINGS E	NOT GIVEN
WELL NAME	SANTA FE-FEE NO. 21-A	ANCON 21-1	STATE NO. 1
LOCATION	SEC. 31, T20N, R28E	SEC. 31, T20N, R28E	SEC. 20, T9N, R31E
OWNER	WESTERN HELIUM CORP.	WESTERN HELIUM CORP.	MAE BELCHER
COMPLETED	09/15/70	10/18/65	06/17/59
SAMPLED	10/05/70	10/05/70	NOT GIVEN
FORMATION	PERM-COCONINO	TRIA-SHINARUMP	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1232	1196	NOT GIVEN
WELLHEAD PRESSURE,PSIG	131	124	NOT GIVEN
OPEN FLOW, MCFD	470	610	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	0.0	0.1
ETHANE	0.0	0.0	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	89.8	89.5	12.0
OXYGEN	0.1	TRACE	0.1
ARGON	0.8	0.8	0.3
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	87.3
HELIUM	8.73	9.23	0.17
HEATING VALUE*	0	0	3
SPECIFIC GRAVITY	0.903	0.895	1.458

	INDEX 124 SAMPLE 7803	INDEX 125 SAMPLE 7913	INDEX 126 SAMPLE 8513
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	WATER WELL NO. 2	NO. 2	BITA PEAK NO. 1
LOCATION	NOT GIVEN	SEC. 3, T36N, R29E	SEC. 19, T41N, R31E
OWNER	BUREAU OF INDIAN AFFAIRS	BUREAU OF INDIAN AFFAIRS	EL PASO NATURAL GAS CO.
COMPLETED	04/23/60	04/23/60	08/27/56
SAMPLED	12/22/60	03/24/61	04/16/62
FORMATION	NOT GIVEN	NOT GIVEN	PENN-PARADOX
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1847
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	399
COMPONENT, MOLE PCT			
METHANE	4.5	4.6	72.4
ETHANE	0.4	0.4	5.5
PROPANE	0.3	0.1	3.3
N-BUTANE	0.0	0.0	0.9
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	89.0	88.9	11.7
OXYGEN	TRACE	0.1	0.1
ARGON	0.7	0.7	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	4.3
HELIUM	5.00	5.10	0.88
HEATING VALUE*	61	56	980
SPECIFIC GRAVITY	0.911	0.910	0.731

	INDEX 127 SAMPLE 11689	INDEX 128 SAMPLE 11690	INDEX 129 SAMPLE 4840
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NOT GIVEN	NOT GIVEN	PINTA
WELL NAME	SANTA FE NO. 8X	SANTA FE NO. 1	MACIE NO. 1
LOCATION	SEC. 25, T20N, R27E	SEC. 25, T20N, R27E	SEC. 34, T20N, R26E
OWNER	CREST - ARIZONA HELIUM	CREST - ARIZONA HELIUM	KIPLING PETROLEUM CO.
COMPLETED	10/29/68	11/08/68	NOT GIVEN
SAMPLED	11/25/68	11/26/68	05/08/50
FORMATION	PERM-COCONINO	PERM-COCONINO	TRIA-SHINARUMP
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1346	1225	775
WELLHEAD PRESSURE,PSIG	200	135	NOT GIVEN
OPEN FLOW, MCFD	299	470	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.1	TRACE	3.2
ETHANE	0.0	0.0	2.3
PROPANE	0.0	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	88.8	90.0	86.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.6	0.8	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.7	0.6
HELIUM	9.99	8.61	7.30
HEATING VALUE*	1	0	74
SPECIFIC GRAVITY	0.889	0.904	0.899

	INDEX 130 SAMPLE 4841	INDEX 131 SAMPLE 4842	INDEX 132 SAMPLE 4908
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA
WELL NAME	MACIE NO. 1	MACIE NO. 1	MACIE NO. 1
LOCATION	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E
OWNER	KIPLING PETROLEUM CO.	KIPLING PETROLEUM CO.	KIPLING PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/09/50	05/26/50	06/10/50
FORMATION	TRIA-SHINARUMP	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	780	1032	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	50000	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.9	1.0	0.3
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.8	89.1	89.4
OXYGEN	0.3	0.0	0.3
ARGON	0.6	0.7	0.7
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.9	0.9
HELIUM	6.98	8.09	8.19
HEATING VALUE*	13	16	10
SPECIFIC GRAVITY	0.912	0.907	0.909

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 133 SAMPLE 4909	INDEX 134 SAMPLE 5651	INDEX 135 SAMPLE 8599
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA
WELL NAME	MACIE NO. 1	MACIE NO. 1	SANTA FE NO. 13
LOCATION	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E	SEC. 31, T20N, R27E
OWNER	KIPLING PETROLEUM CO.	ARIZONA GAS & CHEMICAL CORP.	EASTERN PETROLEUM CO.
COMPLETED	NOT GIVEN	--/--/50	06/25/62
SAMPLED	06/10/50	07/23/54	06/25/62
FORMATION	TRIA-SHINARUMP	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	1032	977
WELLHEAD PRESSURE,PSIG	NOT GIVEN	98	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2800	1300
COMPONENT, MOLE PCT			
METHANE	0.2	TRACE	0.1
ETHANE	TRACE	0.0	0.0
PROPANE	0.1	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	88.1	89.8	89.6
OXYGEN	2.9	TRACE	0.5
ARGON	0.7	0.6	0.8
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.9
HELIUM	6.85	8.40	8.16
HEATING VALUE*	4	0	4
SPECIFIC GRAVITY	0.923	0.905	0.910

	INDEX 136 SAMPLE 8615	INDEX 137 SAMPLE 8616	INDEX 138 SAMPLE 8643
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA OUTPOST
WELL NAME	HORTENSTINE NO. 1-9	STATE NO. 1	HORTENSTINE NO. 1-9
LOCATION	SEC. 9, T19N, R26E	SEC. 14, T19N, R26E	SEC. 9, T19N, R26E
OWNER	RAM OIL CO.	RAM OIL CO.	RAM OIL CO.
COMPLETED	NOT GIVEN	03/05/62	NOT GIVEN
SAMPLED	07/25/62	06/12/62	08/21/62
FORMATION	TRIA-CHINLE	TRIA-CHINLE	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	732	773	732
WELLHEAD PRESSURE,PSIG	125	164	40
OPEN FLOW, MCFD	NOT GIVEN	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	TRACE	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	75.1	93.6	90.4
OXYGEN	TRACE	TRACE	0.1
ARGON	0.4	0.4	0.5
HYDROGEN	20.4	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	4.02	5.75	8.58
HEATING VALUE*	66	0	4
SPECIFIC GRAVITY	0.753	0.920	0.896

	INDEX 139 SAMPLE 8583	INDEX 140 SAMPLE 6131	INDEX 141 SAMPLE 9164
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA S	RED MESA	TEEC NOS POS
WELL NAME	STATE NO. 1	NAVAJO NO. A-1	NAVAJO TRIBAL O
LOCATION	SEC. 14, T19N, R26E	SEC. 22, T41N, R28E	SEC. 23, T41N, R30E
OWNER	RAM OIL CO.	FRANCO-WESTERN OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/05/62	NOT GIVEN	06/26/63
SAMPLED	06/12/62	08/28/56	11/14/63
FORMATION	TRIA-CHINLE BASAL	PENN-PARADOX	PENN-ISMAY
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	773	NOT GIVEN	5122
WELLHEAD PRESSURE,PSIG	164	1450	1799
OPEN FLOW, MCFD	150	NOT GIVEN	5818
COMPONENT, MOLE PCT			
METHANE	TRACE	28.5	69.1
ETHANE	0.0	10.5	3.7
PROPANE	0.0	16.8	1.9
N-BUTANE	0.0	13.7	0.8
ISOBUTANE	0.0	6.4	TRACE
N-PENTANE	0.0	5.9	0.3
ISOPENTANE	0.0	5.9	0.1
CYCLOPENTANE	0.0	0.7	0.1
HEXANES PLUS	0.0	3.5	0.3
NITROGEN	93.9	0.1	11.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.4	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	7.9	11.1
HELIUM	5.56	0.01	1.20
HEATING VALUE*	0	2301	1179
SPECIFIC GRAVITY	0.923	1.484	0.771

	INDEX 142 SAMPLE 6132	INDEX 143 SAMPLE 11240	INDEX 144 SAMPLE 11560
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	TOH ATIN,N	TOHACHE WASH	TOHACHE WASH
WELL NAME	NAVAJO NO. A-1	NAVAJO Z NO. 1	NAVAJO Z NO. 1
LOCATION	SEC. 22, T41N, R28E	SEC. 36, T41N, R30E	SEC. 36, T41N, R30E
OWNER	FRANCO-WESTERN OIL CO.	TEXACO INC.	AIRCO
COMPLETED	08/21/56	NOT GIVEN	01/17/67
SAMPLED	08/--/56	NOT GIVEN	06/--/68
FORMATION	PENN-PARADOX	MISS-LEADVILLE	MISS-
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5359	NOT GIVEN	6270
WELLHEAD PRESSURE,PSIG	1450	NOT GIVEN	693
OPEN FLOW, MCFD	7450	NOT GIVEN	3203
COMPONENT, MOLE PCT			
METHANE	35.5	14.6	14.8
ETHANE	9.6	1.0	1.1
PROPANE	15.5	0.4	0.4
N-BUTANE	11.1	0.2	0.3
ISOBUTANE	5.8	0.2	TRACE
N-PENTANE	5.1	0.2	0.3
ISOPENTANE	4.5	TRACE	0.0
CYCLOPENTANE	0.9	TRACE	0.1
HEXANES PLUS	3.8	0.2	0.3
NITROGEN	0.3	53.1	53.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.6	0.6
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.8	23.5	23.0
HELIUM	0.10	5.84	5.99
HEATING VALUE*	2143	208	222
SPECIFIC GRAVITY	1.386	1.006	1.006

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 145 SAMPLE 11887	INDEX 146 SAMPLE 12033	INDEX 147 SAMPLE 6166
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	TOHACHE WASH	TOHACHE WASH	WILDCAT
WELL NAME	NAVAJO Z NO. 1	NAVAJO Z NO. 1	MACIE NO. 3
LOCATION	SEC. 36, T41N, R30E	SEC. 36, T41N, R30E	SEC. 34, T20N, R26E
OWNER	TEXACO INC.	TEXACO INC.	KERR-MCGEE CORP.
COMPLETED	07/17/60	07/17/60	10/20/56
SAMPLED	05/19/69	08/27/69	10/24/56
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	6270	6270	1000
WELLHEAD PRESSURE,PSIG	1357	NOT GIVEN	99
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	15.1	14.7	0.1
ETHANE	1.1	1.0	0.0
PROPANE	0.6	0.5	0.0
N-BUTANE	0.2	0.2	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	53.4	54.1	90.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	22.3	22.1	0.9
HELIUM	6.08	5.91	8.25
HEATING VALUE*	220	217	1
SPECIFIC GRAVITY	0.999	1.001	0.906

	INDEX 148 SAMPLE 6327	INDEX 149 SAMPLE 7028	INDEX 150 SAMPLE 7071
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE NO. 4	CHAMBERS-SANDERS NO. 2	CHAMBERS-SANDERS NO. 2
LOCATION	SEC. 32, T20N, R26E	SEC. 27, T21N, R28E	SEC. 27, T21N, R28E
OWNER	KERR MCGEE OIL IND. INC.	JAMES G. BROWN & ASSOCIATES	JAMES G. BROWN & ASSOCIATES
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/11/57	04/20/59	05/09/59
FORMATION	PERM-COCONINO	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	542	542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	TRACE	TRACE
ETHANE	TRACE	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.1	93.6	94.1
OXYGEN	0.1	0.0	2.9
ARGON	0.4	1.2	1.2
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.8	0.2
HELIUM	8.70	2.30	1.50
HEATING VALUE*	2	0	0
SPECIFIC GRAVITY	0.900	0.968	0.964

	INDEX 151 SAMPLE 7089	INDEX 152 SAMPLE 7146	INDEX 153 SAMPLE 7539
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO NO. 1-138	STATE NO. 1-28	SANTA FE NO. 2
LOCATION	SEC. 11, T40N, R28E	SEC. 28, T20N, R26E	SEC. 33, T20N, R27E
OWNER	TEXAS PACIFIC COAL & OIL CO.	EASTERN PETROLEUM CO.	CREST OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/06/59	07/--/59	05/09/60
FORMATION	PENN-PARADOX	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5045	NOT GIVEN	1063
WELLHEAD PRESSURE,PSIG	1450	NOT GIVEN	105
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	589
COMPONENT, MOLE PCT			
METHANE	80.5	0.1	0.2
ETHANE	5.2	0.0	TRACE
PROPANE	3.5	0.1	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.4	0.0	0.0
HEXANES PLUS	0.9	0.0	0.0
NITROGEN	4.0	89.6	89.9
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.6	0.7
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	0.9	0.9
HELIUM	0.40	8.50	8.16
HEATING VALUE*	1123	36	46
SPECIFIC GRAVITY	0.722	0.904	0.908

	INDEX 154 SAMPLE 7668	INDEX 155 SAMPLE 8050	INDEX 156 SAMPLE 8664
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE NO. 1-6	NAVAJO 7 NO. 1	SANTA FE NO. 7
LOCATION	SEC. 6, T19N, R26E	SEC. 7, T40N, R29E	SEC. 6, T19N, R27E
OWNER	EASTERN PETROLEUM CO.	ATLANTIC REFINING CO.	CREST OIL CO.
COMPLETED	09/03/60	NOT GIVEN	09/07/62
SAMPLED	08/07/60	06/30/61	09/05/62
FORMATION	TRIA-CHINLE	MISS-L	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	675	5604	1044
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	120
OPEN FLOW, MCFD	NOT GIVEN	500	185
COMPONENT, MOLE PCT			
METHANE	0.2	11.5	0.0
ETHANE	0.0	1.5	0.0
PROPANE	0.3	1.3	0.0
N-BUTANE	TRACE	0.4	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	95.6	76.3	90.6
OXYGEN	0.0	TRACE	0.0
ARGON	1.1	0.4	0.5
HYDROGEN	2.6	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	2.9	0.8
HELIUM	0.20	5.10	8.03
HEATING VALUE*	18	209	0
SPECIFIC GRAVITY	0.948	0.914	0.907

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 157 SAMPLE 10408	INDEX 158 SAMPLE 10409	INDEX 159 SAMPLE 10410
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SANTA FE NO. 8	ANCON 21	RAM NO. 1-14
LOCATION	SEC. 25, T20N, R27E	SEC. 31, T20N, R28E	SEC. 14, T19N, R26E
OWNER	CREST OIL CO.	EASTERN PETROLEUM CO.	APACHE DRILLING CO.
COMPLETED	11/21/60	10/18/65	03/01/62
SAMPLED	01/21/66	01/21/66	01/21/66
FORMATION	PERM-COCONINO	TRIA-CHINLE	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1372	1196	806
WELLHEAD PRESSURE,PSIG	206	136	166
OPEN FLOW, MCFD	1720	210	93
COMPONENT, MOLE PCT			
METHANE	TRACE	0.1	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	89.0	64.8	93.8
OXYGEN	0.1	0.0	0.0
ARGON	0.7	0.6	0.5
HYDROGEN	0.0	0.7	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	27.0	0.2
HELIUM	9.50	6.80	5.39
HEATING VALUE*	0	1	0
SPECIFIC GRAVITY	0.895	1.058	0.925

	INDEX 160 SAMPLE 11512	INDEX 161 SAMPLE 11513	INDEX 162 SAMPLE 11514
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO TRACT 151 NO. 1	NAVAJO TRACT 151 NO. 1	NAVAJO TRACT 151 NO. 1
LOCATION	SEC. 35, T35N, R30E	SEC. 35, T35N, R30E	SEC. 35, T35N, R30E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	05/11/68	05/11/68	05/11/68
SAMPLED	05/11/68	04/26/68	04/22/68
FORMATION	DEVO-MCCRACKEN	DEVO-ANETH	DEVO-ANETH
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3695	3788	3836
WELLHEAD PRESSURE,PSIG	850	790	790
OPEN FLOW, MCFD	1500	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	0.2	0.2
ETHANE	0.0	0.0	0.0
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.9	92.6	94.2
OXYGEN	0.0	0.3	0.0
ARGON	0.9	0.9	0.9
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	1.3	1.6
HELIUM	4.81	4.59	3.11
HEATING VALUE*	3	2	2
SPECIFIC GRAVITY	0.947	0.939	0.958

	INDEX 163 SAMPLE 11691	INDEX 164 SAMPLE 11944	INDEX 165 SAMPLE 11945
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SPURLOCK NO. 1	NAVAJO BW	NAVAJO BW
LOCATION	SEC. 3, T17N, R26E	SEC. 36, T4N, R7W	SEC. 36, T4N, R7W
OWNER	CREST ARIZONA HELIUM	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	NOT GIVEN	DRILL STEM TEST NO. 1	DRILL STEM TEST NO. 2
SAMPLED	11/26/68	06/25/69	06/26/69
FORMATION	PERM-SUPAI	DEVO-MCCRACKEN	DEVO-ANETH
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1450	1806	1930
WELLHEAD PRESSURE,PSIG	30	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.1	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	99.2	93.8	94.8
OXYGEN	0.0	0.3	0.1
ARGON	0.1	0.5	0.6
HYDROGEN	0.5	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.05	5.22	4.32
HEATING VALUE*	2	1	0
SPECIFIC GRAVITY	0.961	0.927	0.934

	INDEX 166 SAMPLE 11980	INDEX 167 SAMPLE 11995	INDEX 168 SAMPLE 12395
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO CS NO. 1	NAVAJO C-Z	NAVAJO NO. 1-6
LOCATION	SEC. 34, T37N, R30E	SEC. 21, T29N, R24E	SEC. 6, T36N, R30E
OWNER	GULF OIL CORP.	GULF OIL CORP.	UNION TEXAS PETROLEUM
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	07/19/69	08/17/69	08/31/70
FORMATION	PENN-HERMOSA	DEVO-ELBERT	PENN-BARKER CREEK
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3650	4475	3337
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	15
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	4.1	0.2	5.3
ETHANE	0.6	0.0	0.6
PROPANE	0.3	0.1	0.4
N-BUTANE	0.1	0.0	0.3
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	85.8	90.3	78.1
OXYGEN	TRACE	2.7	0.0
ARGON	1.0	1.4	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	9.9
HELIUM	7.43	5.19	4.74
HEATING VALUE*	88	5	85
SPECIFIC GRAVITY	0.905	0.935	0.971

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 169 SAMPLE 1011	INDEX 170 SAMPLE 996	INDEX 171 SAMPLE 7243
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	NAVAJO	NAVAJO	NAVAJO
FIELD	HOLBROOK	NOT GIVEN	NOT GIVEN
WELL NAME	TAYLOR-FULLER NO. 1	TAYLOR-FULLER NO. 1	AZTEC LAND & CATTLE CO. NO.2
LOCATION	SEC. 21, T17N, R20E	SEC. 21, T17N, R20E	NOT GIVEN
OWNER	GREAT BASIN OIL CO.	GREAT BASIN OIL CO.	LYDIA JOHNSON
COMPLETED	DRILL STEM TEST	NOT GIVEN	NOT GIVEN
SAMPLED	03/07/25	02/19/25	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3590	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	100	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	TRACE	---	3.3
ETHANE	TRACE	---	0.4
PROPANE	---	---	0.0
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	19.0	18.9	90.1
OXYGEN	0.5	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	79.4	79.5	5.9
HELIUM	1.07	1.12	0.10
HEATING VALUE*	0	0	44
SPECIFIC GRAVITY	1.405	1.404	0.984

	INDEX 172 SAMPLE 8670	INDEX 173 SAMPLE 9078	INDEX 174 SAMPLE 7077
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	NAVAJO	NAVAJO	NAVAJO
FIELD	NOT GIVEN	PENZANCE	WILDCAT
WELL NAME	L. M. LOCKHART NO. 1	WOODMAN FEDERAL NO. 1X	NEW MEXICO & ARIZONA NO. 1
LOCATION	SEC. 33, T14N, R20E	SEC. 30, T18N, R20E	SEC. 25, T12N, R23E
OWNER	L. M. LOCKHART	BEN HUNT	PAN AMERICAN PETROLEUM CORP.
COMPLETED	06/05/40	-/-/60	NOT GIVEN
SAMPLED	08/25/62	09/07/63	05/14/59
FORMATION	PERM-FORT APACHE	PERM-COCONINO	PENN-
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1678	1556	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	25	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.8	3.8	0.8
ETHANE	3.2	0.3	0.0
PROPANE	1.1	0.1	0.0
N-BUTANE	0.3	TRACE	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	70.7	93.4	94.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	1.0
HYDROGEN	TRACE	0.4	0.9
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	2.8
HELIUM	0.27	1.20	TRACE
HEATING VALUE*	357	48	11
SPECIFIC GRAVITY	0.888	0.943	0.975

	INDEX 175 SAMPLE 9060	INDEX 176 SAMPLE 9532	INDEX 177 SAMPLE 7329
STATE	ARIZONA	ARIZONA	ARKANSAS
COUNTY	NAVAJO	NAVAJO	CLEBURNE
FIELD	WILDCAT	WILDCAT	QUITMAN
WELL NAME	FEE NO. 1	N. M.-ARIZ. LAND CO. NO. C-1	R. A. EVANS NO. 1
LOCATION	SEC. 27, T17N, R22E	SEC. 27, T18N, R23E	SEC. 32, T9N, R11W
OWNER	NEW MEXICO-ARIZONA LAND CO.	FRANKLIN ASTON & FAIR, INC.	BEARD OIL CO.
COMPLETED	NOT GIVEN	06/20/63	07/06/59
SAMPLED	08/02/63	08/07/64	01/02/60
FORMATION	NOT GIVEN	TRIA-SHINARUMP	PENN-ATOKA
GEOLOGIC PROVINCE CODE	590	590	345
DEPTH, FEET	1007	200	1960
WELLHEAD PRESSURE,PSIG	364	40	740
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	430
COMPONENT, MOLE PCT			
METHANE	0.0	0.3	98.6
ETHANE	0.0	0.0	0.8
PROPANE	0.0	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	96.8	93.5	0.3
OXYGEN	TRACE	0.2	TRACE
ARGON	0.1	0.4	0.0
HYDROGEN	0.6	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.2	TRACE
HELIUM	0.10	5.13	0.10
HEATING VALUE*	2	6	1018
SPECIFIC GRAVITY	0.975	0.926	0.561

	INDEX 178 SAMPLE 2832	INDEX 179 SAMPLE 3170	INDEX 180 SAMPLE 13888
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	COLUMBIA	COLUMBIA	COLUMBIA
FIELD	BIG CREEK	BIG CREEK	CHALYBEAT SPRINGS
WELL NAME	PETTY STAVE NO. 1	PETTY STAVE NO. 1	OELTIC UNIT NO. 1
LOCATION	SEC. 4, T17S, R21W	SEC. 4, T17S, R21W	SEC. 35, T19S, R19W
OWNER	STANDARD OIL CO. OF LA.	CARTER OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	12/23/39	12/-/39	10/17/73
SAMPLED	02/21/40	02/14/42	01/31/74
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7956	7956	9959
WELLHEAD PRESSURE,PSIG	3730	3723	2100
OPEN FLOW, MCFD	50000	6000	595
COMPONENT, MOLE PCT			
METHANE	45.6	22.3	83.6
ETHANE	17.0	61.6	6.7
PROPANE	---	---	2.9
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	1.0
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	33.7	9.3	2.5
OXYGEN	0.6	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	3.1	6.5	1.1
HELIUM	0.11	0.00	0.03
HEATING VALUE*	767	1330	1157
SPECIFIC GRAVITY	0.811	0.963	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 181 SAMPLE 3171	INDEX 182 SAMPLE 3168	INDEX 183 SAMPLE 2833
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	COLUMBIA	COLUMBIA	COLUMBIA
FIELD	DORCHEAT	MACEDONIA	VILLAGE
WELL NAME	SAYERS NO. 1	MCALESTER FUEL CO.	W. P. PHILLIPS NO. 1 & 2
LOCATION	T18S, R22W	T18S, R21W	SEC. 15, T17S, R19W
OWNER	MCALESTER FUEL CO.	MCALESTER FUEL CO.	STANDARD OIL CO.
COMPLETED	NOT GIVEN	07/08/41	05/27/38
SAMPLED	02/14/42	04/14/42	02/26/40
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8850	NOT GIVEN	7387
WELLHEAD PRESSURE,PSIG	3569	4030	3320
OPEN FLOW, MCFD	1166	2025	600
COMPONENT, MOLE PCT			
METHANE	25.3	69.7	44.5
ETHANE	65.2	18.3	34.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	6.7	16.5
OXYGEN	0.3	0.4	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	8.0	4.9	3.6
HELIUM	0.00	0.04	0.05
HEATING VALUE*	1425	1034	1074
SPECIFIC GRAVITY	0.962	0.723	0.833

	INDEX 184 SAMPLE 4934	INDEX 185 SAMPLE 11157	INDEX 186 SAMPLE 11214
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	COLUMBIA	CONWAY	CONWAY
FIELD	WARNOCK SPRINGS	BLICK	BLICK
WELL NAME	PHILLIPS-SHOCKLEE NO. A-1	J. L. CARR NO. 1	J. L. CARR NO. 1-T
LOCATION	SEC. 33, T16S, R19W	SEC. 4, T8N, R16W	SEC. 4, T8N, R16W
OWNER	MCALESTER FUEL CO.	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.
COMPLETED	12/08/49	04/16/67	04/15/67
SAMPLED	08/29/50	10/08/67	11/07/67
FORMATION	JURA-SMACKOVER	PENN-BARTON A	PENN-BARTON B
GEOLOGIC PROVINCE CODE	230	345	345
DEPTH, FEET	7396	2299	2356
WELLHEAD PRESSURE,PSIG	2900	1000	967
OPEN FLOW, MCFD	1000	17559	13200
COMPONENT, MOLE PCT			
METHANE	57.1	97.6	97.3
ETHANE	6.0	0.1	0.8
PROPANE	2.7	TRACE	0.0
N-BUTANE	1.1	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	28.3	1.6	1.0
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	3.1	0.3	0.4
HELIUM	0.08	0.27	0.25
HEATING VALUE*	856	990	1000
SPECIFIC GRAVITY	0.806	0.564	0.566

	INDEX 187 SAMPLE 6755	INDEX 188 SAMPLE 7319	INDEX 189 SAMPLE 10975
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CONWAY	CONWAY	CRAWFORD
FIELD	JERUSALEM	OLD HICKORY	ALMA
WELL NAME	RHEA SPEARS UNIT NO. 1	BEARTHA BARRETT NO. 1	EARL ROSS UNIT NO. 1-C
LOCATION	SEC. 28, T9N, R17W	SEC. 22, T8N, R17W	SEC. 18, T9N, R30W
OWNER	CARTER OIL CO.	BEARD OIL CO.	TENNECO OIL CO.
COMPLETED	04/01/58	09/28/58	12/30/66
SAMPLED	07/21/58	12/21/59	NOT GIVEN
FORMATION	PENN-BARTON B	PENN-BARTON	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2100	2875	4252
WELLHEAD PRESSURE,PSIG	880	1245	590
OPEN FLOW, MCFD	15830	5000	3650
COMPONENT, MOLE PCT			
METHANE	94.4	92.6	95.9
ETHANE	0.0	0.6	1.3
PROPANE	0.2	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	4.8	5.6	1.9
OXYGEN	TRACE	0.0	0.4
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.7	0.2
HELIUM	0.30	0.40	0.07
HEATING VALUE*	971	949	998
SPECIFIC GRAVITY	0.580	0.586	0.573

	INDEX 190 SAMPLE 10978	INDEX 191 SAMPLE 10980	INDEX 192 SAMPLE 12933
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	ALMA	ALMA	DYER
WELL NAME	EARL ROSS UNIT NO. 1	EARL ROSS UNIT NO. 1	ALEXANDER NO. 3
LOCATION	SEC. 18, T9N, R30W	SEC. 18, T9N, R30W	SEC. 9, T9N, R29W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	12/30/66	12/30/66	05/04/71
SAMPLED	NOT GIVEN	NOT GIVEN	07/21/71
FORMATION	PENN-HALE	PENN-DUNN A	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5492	4480	4882
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1095
OPEN FLOW, MCFD	8400	13799	4100
COMPONENT, MOLE PCT			
METHANE	97.1	98.0	97.9
ETHANE	1.0	1.1	0.9
PROPANE	TRACE	TRACE	0.2
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.8	0.4	0.8
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.05	0.05	0.13
HEATING VALUE*	1018	1012	1013
SPECIFIC GRAVITY	0.576	0.565	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 193 SAMPLE 14517	INDEX 194 SAMPLE 14518	INDEX 195 SAMPLE 10876
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	DYER	DYER	HOLLIS LAKE
WELL NAME	LETHA CHANCELLOR NO. 1	LETHA CHANCELLOR NO. 1	T. W. ARNOLD NO. 1-T
LOCATION	SEC. 31, T10N, R29W	SEC. 31, T10N, R29W	SEC. 14, T8N, R31W
OWNER	WESTRANS PETROLEUM, INC.	WESTRANS PETROLEUM, INC.	STEPHENS PRODUCTION CO.
COMPLETED	04/06/75	04/06/75	11/02/66
SAMPLED	10/25/75	10/25/75	02/22/67
FORMATION	PENN-DUNN A	PENN-BARTON	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4820	4890	5388
WELLHEAD PRESSURE,PSIG	1175	1110	952
OPEN FLOW, MCFD	19243	18337	6400
COMPONENT, MOLE PCT			
METHANE	97.3	89.0	95.8
ETHANE	1.2	1.1	1.1
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.6	7.2	1.6
OXYGEN	0.0	1.6	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	1.0
HELIUM	0.07	0.07	0.07
HEATING VALUE*	1010	924	993
SPECIFIC GRAVITY	0.569	0.605	0.577

	INDEX 196 SAMPLE 9831	INDEX 197 SAMPLE 9971	INDEX 198 SAMPLE 9972
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	FRANKLIN	FRANKLIN
FIELD	KIBLER-WILLIAMS	AETNA	AETNA
WELL NAME	MCVEY NO. 1	HUNT-HEMBREE NO. 2	HUNT-HEMBREE NO. 2
LOCATION	SEC. 13, T9N, R30W	SEC. 11, T8N, R26W	SEC. 11, T8N, R26W
OWNER	GULF OIL CORP.	ARKANSAS-LOUISIANA GAS CO.	ARKANSAS-LOUISIANA GAS CO.
COMPLETED	01/22/65	07/24/64	07/24/64
SAMPLED	03/30/65	07/14/65	07/14/65
FORMATION	PENN-HALE	PENN-ATOKA	PENN-ATOKA & DUNN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5601	4282	5509
WELLHEAD PRESSURE,PSIG	1788	1045	1126
OPEN FLOW, MCFD	4750	1875	6500
COMPONENT, MOLE PCT			
METHANE	97.5	98.0	97.8
ETHANE	1.1	1.0	0.8
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.5	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.7
HELIUM	0.06	0.14	0.20
HEATING VALUE*	1015	1016	1013
SPECIFIC GRAVITY	0.570	0.565	0.568

	INDEX 199 SAMPLE 11558	INDEX 200 SAMPLE 11559	INDEX 201 SAMPLE 10270
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	AETNA	AETNA	ALTUS
WELL NAME	R. H. SMITH UNIT NO. 1	R. H. SMITH UNIT NO. 1	WESTERN COAL CO. NO. 1
LOCATION	SEC. 19, T9N, R26W	SEC. 19, T9N, R26W	SEC. 23, T9N, R26W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/13/67	12/13/67	06/05/65
SAMPLED	06/28/68	06/28/68	11/03/65
FORMATION	PENN-DUNN A	PENN-BARTON	PENN-DUNN & SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4742	4834	4865
WELLHEAD PRESSURE,PSIG	718	966	1125
OPEN FLOW, MCFD	111	10307	2700
COMPONENT, MOLE PCT			
METHANE	98.0	97.8	97.3
ETHANE	0.9	1.0	1.1
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.3	0.4	0.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	0.05	0.06	0.09
HEATING VALUE*	1012	1013	1023
SPECIFIC GRAVITY	0.565	0.563	0.573

	INDEX 202 SAMPLE 10271	INDEX 203 SAMPLE 11144	INDEX 204 SAMPLE 6358
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	ALTUS	ALTUS	CECIL
WELL NAME	WESTERN COAL CO. NO. 1	OCHSNER	JETA TAYLOR NO. 1
LOCATION	SEC. 23, T9N, R26W	SEC. 24, T9N, R26W	SEC. 33, T9N, R28W
OWNER	HUMBLE OIL & REFINING CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS-LOUISIANA GAS CO.
COMPLETED	06/05/64	05/19/67	05/26/57
SAMPLED	11/03/65	10/02/67	08/27/57
FORMATION	PENN-BARTON	ORDO-JENKINS	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4353	4285	4374
WELLHEAD PRESSURE,PSIG	1125	1133	1000
OPEN FLOW, MCFD	2700	3500	13700
COMPONENT, MOLE PCT			
METHANE	95.0	98.0	97.9
ETHANE	1.0	1.1	1.2
PROPANE	0.2	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.9	0.4	0.3
OXYGEN	0.7	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.10	0.11	0.08
HEATING VALUE*	9A50	1015	1014
SPECIFIC GRAVITY	0.578	0.567	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 205 SAMPLE 6521	INDEX 206 SAMPLE 10520	INDEX 207 SAMPLE 10521
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	CECIL	CECIL	CECIL
WELL NAME	EDWARD C. EVANS NO. 1	SAM HARDING NO. 1	SAM HARDING NO. 1
LOCATION	SEC. 4, T8N, R28W	SEC. 9, T9N, R27W	SEC. 9, T9N, R27W
OWNER	STEPHENS, INC.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	12/21/57	03/23/66	03/23/66
SAMPLED	03/17/58	04/12/66	04/12/66
FORMATION	PENN-ATOKA	PENN-HALE	PENN-DUNN C
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4510	4450	4070
WELLHEAD PRESSURE,PSIG	1015	1600	1000
OPEN FLOW, MCFD	24000	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.8	97.1	98.2
ETHANE	1.3	1.3	1.0
PROPANE	0.2	0.2	0.2
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	0.9	0.3
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1019	1012	1018
SPECIFIC GRAVITY	0.566	0.570	0.564

	INDEX 208 SAMPLE 10522	INDEX 209 SAMPLE 11200	INDEX 210 SAMPLE 11201
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	CECIL	CECIL	CECIL
WELL NAME	SAM HARDING NO. 1	J.C. JONES NO. 1	J.C. JONES NO. 1
LOCATION	SEC. 9, T9N, R27W	SEC. 32, T10N, R27W	SEC. 32, T10N, R27W
OWNER	ARKANSAS LOUSIANA GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	03/23/66	04/04/67	04/04/67
SAMPLED	04/12/66	11/01/67	11/01/67
FORMATION	PENN-DUNN A	PENN-DUNN A	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3100	3758	3434
WELLHEAD PRESSURE,PSIG	1000	873	946
OPEN FLOW, MCFD	5000	755	21000
COMPONENT, MOLE PCT			
METHANE	98.6	98.5	98.0
ETHANE	1.0	0.8	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.09	0.12	0.09
HEATING VALUE*	1019	1015	1014
SPECIFIC GRAVITY	0.561	0.562	0.564

	INDEX 211 SAMPLE 14932	INDEX 212 SAMPLE 10898	INDEX 213 SAMPLE 10899
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	JETHRO	LONE ELM	LONE ELM
WELL NAME	CARR NO. 1	NOEL LEWIS NO. 1	NOEL LEWIS NO. 1
LOCATION	SEC. 21, T11N, R27W	SEC. 28, T10N, R28W	SEC. 28, T10N, R28W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	09/08/76	11/11/66	11/11/66
SAMPLED	03/09/77	NOT GIVEN	NOT GIVEN
FORMATION	PENN-DUNN A	PENN-CASEY & HENSON	-KELLY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1600	3041	3967
WELLHEAD PRESSURE,PSIG	494	580	1160
OPEN FLOW, MCFD	3500	4000	5400
COMPONENT, MOLE PCT			
METHANE	98.0	98.2	98.0
ETHANE	0.9	1.0	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.8	0.4	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.09	0.11	0.12
HEATING VALUE*	1011	1015	1013
SPECIFIC GRAVITY	0.563	0.564	0.563

	INDEX 214 SAMPLE 9037	INDEX 215 SAMPLE 9038	INDEX 216 SAMPLE 11681
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	PETER PENDER	PETER PENDER	PETER PENDER
WELL NAME	G. A. TERRY	MARTHA MCGEE	FLANAGAN NO. 1
LOCATION	SEC. 16, T8N, R28W	SEC. 15, T8N, R28W	SEC. 27, T8N, R28W
OWNER	MOBIL OIL CO.	MOBIL OIL CO.	GULF OIL CORP.
COMPLETED	10/09/62	11/09/61	08/05/68
SAMPLED	07/06/63	07/06/63	11/06/68
FORMATION	PENN-HALE	PENN-HALE	PENN-CARPENTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7396	6574	3315
WELLHEAD PRESSURE,PSIG	1875	1725	767
OPEN FLOW, MCFD	1900	4400	9550
COMPONENT, MOLE PCT			
METHANE	97.0	97.0	98.1
ETHANE	1.1	1.1	1.0
PROPANE	0.3	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.2
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1010	1005	1015
SPECIFIC GRAVITY	0.574	0.572	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 217 SAMPLE 10973	INDEX 218 SAMPLE 10974	INDEX 219 SAMPLE 10976
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	POSSUMTROT	POSSUMTROT	POSSUMTROT
WELL NAME	FRED CANNON UNIT NO. 1	CARL STRONG UNIT NO. 1	ROBBIE BLACK UNIT NO. 1
LOCATION	SEC. 8, T10N, R27W	SEC. 10, T10N, R27W	SEC. 7, T10N, R27W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	12/03/66	01/03/67	01/03/67
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PENN-HALE	PENN-BRENTWOOD	PENN-DUNN A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4667	4711	3506
WELLHEAD PRESSURE,PSIG	1040	1150	NOT GIVEN
OPEN FLOW, MCFD	10500	280	14000
COMPONENT, MOLE PCT			
METHANE	97.6	97.2	98.1
ETHANE	0.9	1.3	1.0
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.9	0.5
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.09	0.07	0.10
HEATING VALUE*	1007	1011	1012
SPECIFIC GRAVITY	0.566	0.567	0.562

	INDEX 220 SAMPLE 10977	INDEX 221 SAMPLE 10979	INDEX 222 SAMPLE 14703
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	POSSUMTROT	POSSUMTROT	ROCK CREEK
WELL NAME	ROBBIE BLACK UNIT NO. 1	ROBBIE BLACK UNIT NO. 1	E. WALKER NO. 1-32
LOCATION	SEC. 7, T10N, R27W	SEC. 7, T10N, R27W	SEC. 32, T11N, R26W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	01/03/67	01/03/67	05/14/76
SAMPLED	NOT GIVEN	NOT GIVEN	06/16/76
FORMATION	PENN-BARTON R	PENN-CASEY	MISS-WEDINGTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3580	3182	2560
WELLHEAD PRESSURE,PSIG	NOT GIVEN	930	999
OPEN FLOW, MCFD	7400	6474	1600
COMPONENT, MOLE PCT			
METHANE	91.8	95.1	97.0
ETHANE	0.9	1.1	0.9
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	5.6	2.9	1.8
OXYGEN	1.3	0.6	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.08	0.08	0.14
HEATING VALUE*	949	986	1001
SPECIFIC GRAVITY	0.593	0.577	0.568

	INDEX 223 SAMPLE 15997	INDEX 224 SAMPLE 14942	INDEX 225 SAMPLE 14944
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	ROCK CREEK	VESTA	VESTA
WELL NAME	STARDUANT NO. 1-15	ALLEN W. KING NO. 1	ALLEN W. KING NO. 1
LOCATION	SEC. 15, T11N, R26W	SEC. 29, T 8N, R28W	SEC. 29, T8N, R28W
OWNER	SEECO INC.	STEPHENS PRODUCTION CO.	STEPHENS PRODUCTION CO.
COMPLETED	03/19/80	04/14/76	04/14/76
SAMPLED	07/02/80	03/17/77	03/17/77
FORMATION	PENN-MORROW	PERM-ALMA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2258	2513	7600
WELLHEAD PRESSURE,PSIG	596	1015	2377
OPEN FLOW, MCFD	925	2200	2750
COMPONENT, MOLE PCT			
METHANE	97.3	96.3	96.8
ETHANE	1.3	1.6	1.6
PROPANE	0.2	0.2	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.7	0.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	1.1
HELIUM	0.12	0.07	0.08
HEATING VALUE*	1014	1009	1014
SPECIFIC GRAVITY	0.568	0.579	0.576

	INDEX 226 SAMPLE 5939	INDEX 227 SAMPLE 10873	INDEX 228 SAMPLE 10874
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	WHITE OAK	WHITE OAK	WHITE OAK
WELL NAME	WOOLSEY	CONATSER UNIT NO. 1-C	CONATSER UNIT NO. 1-C
LOCATION	SEC. 13, T10N, R27W	SEC. 17, T10N, R27W	SEC. 17, T10N, R27W
OWNER	ARKANSAS WESTERN GAS CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	07/31/55	10/11/66	10/11/66
SAMPLED	09/06/55	02/20/67	02/20/67
FORMATION	PENN-ATOKA	-BYNUM	PENN-BRENTWOOD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3173	2851	4244
WELLHEAD PRESSURE,PSIG	942	728	1669
OPEN FLOW, MCFD	5000	6700	2275
COMPONENT, MOLE PCT			
METHANE	98.3	98.1	97.7
ETHANE	1.0	1.0	1.3
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.10	0.09	0.06
HEATING VALUE*	1019	1014	1016
SPECIFIC GRAVITY	0.563	0.563	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 229 SAMPLE 9671	INDEX 230 SAMPLE 14180	INDEX 231 SAMPLE 14181
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	JOHNSON	JOHNSON
FIELD	WILDCAT	ALTUS	ALTUS
WELL NAME	H. E. FLANAGAN NO. 1	WOODROW HOING NO. 1-28	WOODROW HOING NO. 1-28
LOCATION	SEC. 8, T7N, R28W	SEC. 28, T9N, R25W	SEC. 28, T9N, R25W
OWNER	ARKANSAS LOUISIANA GAS CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	09/23/64	03/18/74	03/18/74
SAMPLED	12/14/64	10/12/74	10/12/74
FORMATION	PERM-MORRIS	PERM-MORRIS	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4931	2709	5706
WELLHEAD PRESSURE,PSIG	1800	1625	1625
OPEN FLOW, MCFD	1040	3158	3542
COMPONENT, MOLE PCT			
METHANE	97.7	97.8	97.8
ETHANE	1.3	1.0	1.0
PROPANE	0.3	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.08	0.12	0.12
HEATING VALUE*	1021	1012	1012
SPECIFIC GRAVITY	0.568	0.564	0.564

	INDEX 232 SAMPLE 15120	INDEX 233 SAMPLE 13990	INDEX 234 SAMPLE 13991
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON	BATSON-OZONE	BATSON-OZONE
WELL NAME	BIBLER BROTHERS NO. 1	FEDERAL ES5263 NO. 1	FEDERAL ES5263 NO. 1
LOCATION	SEC. 8, T11N, R24W	SEC. 14, T11N, R25W	SEC. 14, T11N, R25W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	09/27/77	02/15/74	02/15/74
SAMPLED	10/13/77	04/26/74	04/26/74
FORMATION	PENN-SELLS	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1015	1706	1906
WELLHEAD PRESSURE,PSIG	116	320	500
OPEN FLOW, MCFD	290	1100	2500
COMPONENT, MOLE PCT			
METHANE	97.6	98.0	98.0
ETHANE	0.2	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.6	1.6	1.6
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.11	0.13	0.12
HEATING VALUE*	997	995	995
SPECIFIC GRAVITY	0.565	0.563	0.562

	INDEX 235 SAMPLE 13992	INDEX 236 SAMPLE 13993	INDEX 237 SAMPLE 13994
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON-OZONE	BATSON-OZONE	BATSON-OZONE
WELL NAME	FEDERAL ES4068 NO. 1	FEDERAL ES5276 NO. 1	FEDERAL ES5262
LOCATION	SEC. 28, T12N, R24W	SEC. 33, T12N, R24W	SEC. 12, T11N, R25W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	03/05/74	04/19/74	12/14/73
SAMPLED	04/26/74	04/26/74	04/26/74
FORMATION	MISS-BOONE	PENN-BRENTWOOD	MISS-BOONE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2280	1408	2578
WELLHEAD PRESSURE,PSIG	790	300	820
OPEN FLOW, MCFD	2000	2000	7600
COMPONENT, MOLE PCT			
METHANE	90.1	97.8	91.2
ETHANE	1.6	TRACE	1.7
PROPANE	0.2	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.7	1.7	6.5
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.25	0.13	0.26
HEATING VALUE*	967	991	991
SPECIFIC GRAVITY	0.595	0.563	0.591

	INDEX 238 SAMPLE 13995	INDEX 239 SAMPLE 13996	INDEX 240 SAMPLE 13997
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON-OZONE	BATSON-OZONE	BATSON-OZONE
WELL NAME	COOPER NO. 1	MOORE NO. 1	MOORE NO. 1
LOCATION	SEC. 15, T11N, R25W	SEC. 6, T11N, R23W	SEC. 6, T11N, R23W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	11/20/73	02/12/74	02/12/74
SAMPLED	04/26/74	04/26/74	04/26/74
FORMATION	PENN-ATOKA	PENN-DUNN	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1404	1376	2278
WELLHEAD PRESSURE,PSIG	156	120	420
OPEN FLOW, MCFD	1000	900	1300
COMPONENT, MOLE PCT			
METHANE	97.9	98.0	98.8
ETHANE	0.2	0.3	0.2
PROPANE	TRACE	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	1.2	0.7
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.13	0.13	0.09
HEATING VALUE*	995	1001	1005
SPECIFIC GRAVITY	0.563	0.561	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 241 SAMPLE 13998	INDEX 242 SAMPLE 13999	INDEX 243 SAMPLE 14000
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON-OZONE	BATSON-OZONE	BATSON-OZONE
WELL NAME	TAYLOR NO. 1	TAYLOR NO. 1	FEDERAL ES5269 NO. 1
LOCATION	SEC. 1, T11N, R24W	SEC. 1, T11N, R24W	SEC. 13, T11N, R25W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	02/19/74	02/19/74	10/25/73
SAMPLED	04/26/74	04/26/74	04/26/74
FORMATION	MISS-BOONE	PENN-ORR	PENN-ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2620	1439	1482
WELLHEAD PRESSURE,PSIG	420	245	300
OPEN FLOW, MCFD	600	3000	1000
COMPONENT, MOLE PCT			
METHANE	96.7	96.4	98.1
ETHANE	1.3	1.4	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.7	1.7	1.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.10	0.10	0.12
HEATING VALUE*	1005	1004	996
SPECIFIC GRAVITY	0.568	0.571	0.561

	INDEX 244 SAMPLE 14001	INDEX 245 SAMPLE 1625	INDEX 246 SAMPLE 1778
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON-OZONE	CLARKSVILLE	CLARKSVILLE
WELL NAME	PAYNE NO. 1	NOT GIVEN	MCPHERSON NO. 1
LOCATION	NOT GIVEN	SEC. 14, T10N, R24W	SEC. 10, T11N, R24W
OWNER	ARKANSAS WESTERN GAS CO.	EMPIRE OIL & REFINING CO.	ARKANSAS NATURAL GAS CORP.
COMPLETED	03/15/74	08/--/27	05/11/29
SAMPLED	04/26/74	03/23/28	05/18/29
FORMATION	PENN-ORR	NOT GIVEN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	3012	3345
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1250	1000
OPEN FLOW, MCFD	NOT GIVEN	18000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.9	96.0	98.5
ETHANE	TRACE	2.3	0.6
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	10.2	1.1	0.6
OXYGEN	2.4	0.3	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.2	0.3	0.2
HELIUM	0.09	0.04	0.06
HEATING VALUE*	860	1014	1009
SPECIFIC GRAVITY	0.631	0.575	0.562

	INDEX 247 SAMPLE 4004	INDEX 248 SAMPLE 11129	INDEX 249 SAMPLE 11130
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	CLARKSVILLE	CLARKSVILLE	CLARKSVILLE
WELL NAME	S. M. HUDSON UNIT NO. 1	BLACKBURN NO. 1-C	BLACKBURN NO. 1-C
LOCATION	SEC. 15, T10N, R24W	SEC. 16, T10N, R24W	SEC. 16, T10N, R24W
OWNER	ARKANSAS LOUISIANA GAS CO.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	12/26/44	10/29/65	10/29/65
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PENN-ATOKA	PENN-ATOKA & HUDSON	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3400	2516	3586
WELLHEAD PRESSURE,PSIG	1372	857	1317
OPEN FLOW, MCFD	2400	12300	3400
COMPONENT, MOLE PCT			
METHANE	98.7	95.8	97.3
ETHANE	0.4	1.0	1.1
PROPANE	---	0.1	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.1	2.4	1.0
OXYGEN	0.2	0.4	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.3
HELIUM	0.06	0.00	0.06
HEATING VALUE*	1007	991	1008
SPECIFIC GRAVITY	0.562	0.574	0.567

	INDEX 250 SAMPLE 11225	INDEX 251 SAMPLE 14179	INDEX 252 SAMPLE 16105
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	CLARKSVILLE	COAL HILL	COAL HILL
WELL NAME	GROVER POTEET UNIT NO. 1	J.G. HOING NO. 1-20	GREENWOOD NO. 2-31
LOCATION	SEC. 16, T10N, R24W	SEC. 20, T9N, R25W	SEC. 31, T10N, R25W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	SOUTHERN UNION EXPL. CO.
COMPLETED	05/03/67	03/18/74	01/15/80
SAMPLED	NOT GIVEN	10/12/74	10/22/80
FORMATION	-HUDSON	PENN-ATOKA	PENN-DUNN A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2430	3655	3420
WELLHEAD PRESSURE,PSIG	714	1350	1141
OPEN FLOW, MCFD	147	3732	6449
COMPONENT, MOLE PCT			
METHANE	97.5	97.8	98.5
ETHANE	0.9	1.1	0.8
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.8	0.5	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.09	0.13	0.12
HEATING VALUE*	1005	1013	1015
SPECIFIC GRAVITY	0.562	0.562	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 253 SAMPLE 6809	INDEX 254 SAMPLE 6854	INDEX 255 SAMPLE 15021
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	HARTMAN	KNOXVILLE	KNOXVILLE
WELL NAME	BEN HARDGRAVES	TACKETT NO. 1	STOKES NO. 1-35
LOCATION	SEC. 5, T9N, R24W	SEC. 2, T8N, R22W	SEC. 35, T9N, R23W
OWNER	STEPHENS PRODUCTION CO.	GULF OIL CORP.	TENNECO OIL CO.
COMPLETED	06/17/57	12/31/57	10/--/76
SAMPLED	09/24/58	11/04/58	06/08/77
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-ARECI
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4659	3308	4648
WELLHEAD PRESSURE,PSIG	1940	427	840
OPEN FLOW, MCFD	25	8	4963
COMPONENT, MOLE PCT			
METHANE	97.0	97.9	98.0
ETHANE	1.5	0.9	1.2
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.2	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	TRACE
HELIUM	0.10	0.20	0.13
HEATING VALUE*	1015	1010	1017
SPECIFIC GRAVITY	0.570	0.565	0.562

	INDEX 256 SAMPLE 15087	INDEX 257 SAMPLE 15088	INDEX 258 SAMPLE 5019
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LINVILLE	LINVILLE	LOW GAP
WELL NAME	G. PAYNE NO. 1-24	G. PAYNE NO. 1-24	LOW GAP UNIT NO. 1
LOCATION	SEC. 24, T11N, R25W	SEC. 24, T11N, R25W	SEC. 17, T11N, R24W
OWNER	OIL DEVELOPMENT CO. OF UTAH	OIL DEVELOPMENT CO. OF UTAH	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/30/77	08/30/77	05/06/51
FORMATION	PENN-ORR	-PATTERSON	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1427
WELLHEAD PRESSURE,PSIG	265	241	195
OPEN FLOW, MCFD	664	1838	728
COMPONENT, MOLE PCT			
METHANE	98.4	97.4	98.0
ETHANE	0.2	0.2	0.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.2	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.1	1.4	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.13	0.13	0.11
HEATING VALUE*	1003	1013	1011
SPECIFIC GRAVITY	0.561	0.571	0.564

	INDEX 259 SAMPLE 5138	INDEX 260 SAMPLE 5390	INDEX 261 SAMPLE 5391
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LOW GAP	LOW GAP	LOW GAP
WELL NAME	NO. 2	LOW GAP UNIT NO. 4-A	LOW GAP NO. 3
LOCATION	SEC. 33, T12N, R24W	SEC. 6, T11N, R23W	SEC. 30, T11N, R24W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.-BIG CHIEF DRLG.
COMPLETED	06/21/51	10/04/52	04/23/52
SAMPLED	09/18/51	02/06/53	02/06/53
FORMATION	PENN-ATOKA	PENN-HALE	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1273	2324	1295
WELLHEAD PRESSURE,PSIG	250	510	495
OPEN FLOW, MCFD	566	1300	462
COMPONENT, MOLE PCT			
METHANE	97.4	98.9	98.5
ETHANE	TRACE	0.3	0.1
PROPANE	0.1	0.0	0.0
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.8	0.7	1.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.12	0.10	0.11
HEATING VALUE*	1001	1007	1000
SPECIFIC GRAVITY	0.571	0.558	0.562

	INDEX 262 SAMPLE 8671	INDEX 263 SAMPLE 15543	INDEX 264 SAMPLE 2322
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LOW GAP	LUTHERVILLE	NOT GIVEN
WELL NAME	NORTH LOW GAP NO. 2	LEAVILLE NO. 1-25	COLLIER NO. 1
LOCATION	SEC. 14, T11N, R25W	SEC. 25, T10N, R22W	SEC. 21, T9N, R25W
OWNER	PHILLIPS PETROLEUM CO.	SEECO INC.	RIVER VALLEY GAS CO.
COMPLETED	05/2A/62	08/11/78	NOT GIVEN
SAMPLED	09/13/62	12/19/78	05/09/31
FORMATION	PENN-ATOKA	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1504	4380	1965
WELLHEAD PRESSURE,PSIG	261	1650	600
OPEN FLOW, MCFD	1900	9000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.1	96.1	98.9
ETHANE	0.5	1.1	0.3
PROPANE	0.1	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	2.8	2.1	0.4
OXYGEN	0.3	0.1	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.3	0.3
HELIUM	0.13	0.18	0.17
HEATING VALUE*	985	996	1007
SPECIFIC GRAVITY	0.570	0.572	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 265 SAMPLE 14847	INDEX 266 SAMPLE 11126	INDEX 267 SAMPLE 11127
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	OZONE	ROSS	ROSS
WELL NAME	LEONARD ADAMS NO. 1-10	REYNOLDS NO. 1	REYNOLDS NO. 1
LOCATION	SEC. 10, T11N, R24W	SEC. 10, T9N, R22W	SEC. 10, T9N, R22W
OWNER	ARKANSAS WESTERN GAS CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	08/13/76	11/07/66	11/07/66
SAMPLED	10/27/76	09/11/67	09/11/67
FORMATION	PENN-PATTERSON	PENN-ALLEN	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1658	4478	4320
WELLHEAD PRESSURE,PSIG	244	1185	1185
OPEN FLOW, MCFD	500	19200	8800
COMPONENT, MOLE PCT			
METHANE	97.9	85.1	97.4
ETHANE	0.1	1.1	1.2
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.8	10.3	0.7
OXYGEN	0.1	2.5	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	0.5
HELIUM	0.13	0.07	0.09
HEATING VALUE*	994	884	1011
SPECIFIC GRAVITY	0.562	0.623	0.569

	INDEX 268 SAMPLE 11224	INDEX 269 SAMPLE 12121	INDEX 270 SAMPLE 9681
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SCRANTON	SCRANTON	SPADRA
WELL NAME	R. L. ANDERSON UNIT NO. 1	YEAGER NO. 1-C	J. R. ROGERS NO. 1
LOCATION	SEC. 29, T9N, R24W	SEC. 20, T9N, R24W	SEC. 23, T9N, R24W
OWNER	TENNECO OIL CO.	LEBEN DRILLING, INC.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	02/22/67	02/19/69	10/29/64
SAMPLED	NOT GIVEN	11/20/69	01/06/65
FORMATION	PENN-BARTON	PENN-DUNN B	PENN-CARPENTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6415	5376	2127
WELLHEAD PRESSURE,PSIG	1565	1439	700
OPEN FLOW, MCFD	4100	2050	2400
COMPONENT, MOLE PCT			
METHANE	96.4	94.5	98.6
ETHANE	1.1	1.1	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	2.5	0.4
OXYGEN	0.1	0.5	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.1	0.1
HELIUM	0.11	0.06	0.16
HEATING VALUE*	999	980	1012
SPECIFIC GRAVITY	0.577	0.584	0.560

	INDEX 271 SAMPLE 10914	INDEX 272 SAMPLE 10915	INDEX 273 SAMPLE 11707
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SPADRA	SPADRA	SPADRA
WELL NAME	NEW JERSEY ZINC CO. NO. 1	NEW JERSEY ZINC CO. NO. 1	EARL WHITE NO. 1
LOCATION	SEC. 8, T9N, R23W	SEC. 8, T9N, R23W	SEC. 4, T9N, R23W
OWNER	GULF OIL CORP.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	09/21/66	09/21/66	02/21/67
SAMPLED	04/03/67	04/03/67	12/02/68
FORMATION	PENN-MCGUIRE	PENN-CASEY	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5168	4798	4776
WELLHEAD PRESSURE,PSIG	1209	834	1534
OPEN FLOW, MCFD	18500	85	2701
COMPONENT, MOLE PCT			
METHANE	97.2	98.4	97.7
ETHANE	1.0	1.0	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.8	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.4
HELIUM	0.10	0.13	0.08
HEATING VALUE*	1005	1017	1016
SPECIFIC GRAVITY	0.572	0.561	0.567

	INDEX 274 SAMPLE 11796	INDEX 275 SAMPLE 11797	INDEX 276 SAMPLE 11817
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SPADRA	SPADRA	SPADRA
WELL NAME	TED MELTON NO. 1	TED MELTON NO. 1	TED MELTON NO. 2
LOCATION	SEC. 23, T9N, R23W	SEC. 23, T9N, R23W	SEC. 23, T9N, R23W
OWNER	SUN OIL CO., DX DIVISION	SUN OIL CO., DX DIVISION	SUN OIL CO., DX DIVISION
COMPLETED	10/08/68	10/08/68	03/20/69
SAMPLED	03/18/69	03/18/69	03/18/69
FORMATION	PENN-MCGUIRE	PENN-CARPENTER C	-GLASSY U
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6221	2672	2913
WELLHEAD PRESSURE,PSIG	1434	402	402
OPEN FLOW, MCFD	7900	1280	293000
COMPONENT, MOLE PCT			
METHANE	97.4	97.5	96.4
ETHANE	1.0	0.7	0.7
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.7	1.6
OXYGEN	0.1	0.1	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.5
HELIUM	0.18	0.18	0.17
HEATING VALUE*	1008	1001	992
SPECIFIC GRAVITY	0.568	0.567	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 277 SAMPLE 13298	INDEX 278 SAMPLE 13498	INDEX 279 SAMPLE 11402
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	UNION CITY	UNION CITY	WILDCAT
WELL NAME	FELKINS BRYANT NO. 1	BAXTER-CARTER NO. 2	JOHNSON NO. 1
LOCATION	SEC. 2, T9N, R24W	SEC. 7, T9N, R24W	SEC. 28, T10N, R22W
OWNER	DIAMOND SHAMROCK CORP.	STEPHENS PRODUCTION CO.	W. A. MONCRIEF
COMPLETED	04/11/72	02/08/72	10/25/67
SAMPLED	07/14/72	01/02/73	03/20/68
FORMATION	PENN-KELLY-ORR	PENN-CASEY	PENN-BARTON A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6200	3831	3900
WELLHEAD PRESSURE,PSIG	1875	1405	1575
OPEN FLOW, MCFD	25500	25000	2500
COMPONENT, MOLE PCT			
METHANE	97.1	98.2	97.2
ETHANE	1.4	1.0	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.3	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.2
HELIUM	0.06	0.10	0.18
HEATING VALUE*	1011	1015	1005
SPECIFIC GRAVITY	0.572	0.564	0.567

	INDEX 280 SAMPLE 9583	INDEX 281 SAMPLE 3164	INDEX 282 SAMPLE 6853
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LAFAYETTE	LAFAYETTE	LOGAN
FIELD	LAKE ERLING	MCKAMIE	BOONEVILLE
WELL NAME	INTERNATIONAL PAPER NO. 4	CORNELIUS NO. 1	BORUM NO. 1
LOCATION	SEC. 36, T19S, R24W	SEC. 28, T17S, R23W	SEC. 18, T6N, R28W
OWNER	AUSTRAL OIL CO., INC.	BARNSDALL CO.	GULF OIL CORP.
COMPLETED	11/08/63	01/--/42	01/25/58
SAMPLED	10/03/66	02/14/42	11/05/58
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	PENN-ATOKA
GEOLOGIC PROVINCE CODE	230	230	345
DEPTH, FEET	11043	9200	4888
WELLHEAD PRESSURE,PSIG	3174	4242	1625
OPEN FLOW, MCFD	NOT GIVEN	1600	3
COMPONENT, MOLE PCT			
METHANE	86.5	34.4	97.4
ETHANE	4.8	48.6	1.7
PROPANE	2.5	---	0.2
N-BUTANE	1.0	---	0.0
ISOBUTANE	0.8	---	TRACE
N-PENTANE	0.5	---	0.0
ISOPENTANE	0.2	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.4	---	TRACE
NITROGEN	1.6	3.6	TRACE
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.6	13.1	0.3
HELIUM	TRACE	0.00	0.10
HEATING VALUE*	1138	1219	1023
SPECIFIC GRAVITY	0.677	0.939	0.566

	INDEX 283 SAMPLE 9973	INDEX 284 SAMPLE 7298	INDEX 285 SAMPLE 11653
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CAULKSVILLE	CHISMVILLE	MANSFIELD
WELL NAME	JOHN WEEKS HEIRS NO. 1	BETH WILLIAMS NO. 1	WORTH JAMES NO. 1
LOCATION	SEC. 4, T7N, R27W	SEC. 7, T6N, R27W	SEC. 31, T5N, R29W
OWNER	ARKANSAS-LOUISIANA GAS CO.	ANDERSON-PRICHARD OIL CORP.	J. C. TRAHAN DRILLING CONT.
COMPLETED	06/08/64	04/04/59	01/03/68
SAMPLED	07/14/65	12/02/59	09/20/68
FORMATION	PENN-ORR	PENN-ATOKA	PENN-HARTFORD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	8190	1131	6414
WELLHEAD PRESSURE,PSIG	1675	315	1723
OPEN FLOW, MCFD	3650	1100	5308
COMPONENT, MOLE PCT			
METHANE	95.5	98.1	97.4
ETHANE	1.2	1.1	1.4
PROPANE	0.2	0.3	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.3	0.2	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.1	0.6
HELIUM	0.08	0.10	0.06
HEATING VALUE*	994O	1021	1017
SPECIFIC GRAVITY	0.589	0.564	0.570

	INDEX 286 SAMPLE 11654	INDEX 287 SAMPLE 10402	INDEX 288 SAMPLE 6855
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	MANSFIELD	NOT GIVEN	PARIS
WELL NAME	WORTH JAMES NO. 1	SANATORIUM NO. 1	HEMBREE NO. 1
LOCATION	SEC. 31, T5N, R29W	SEC. 28, T5N, R28W	SEC. 13, T8N, R26W
OWNER	J. C. TRAHAN DRILLING CONT.	MIDWEST OIL CORP.	GULF OIL CORP.
COMPLETED	01/14/68	11/14/65	03/06/58
SAMPLED	09/20/68	02/17/66	11/04/58
FORMATION	EOCE-MANSFIELD	PENN-ATOKA	PENN-ATOKA BASAL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2336	2592	7274
WELLHEAD PRESSURE,PSIG	300	282	1675
OPEN FLOW, MCFD	400	461	2
COMPONENT, MOLE PCT			
METHANE	97.7	98.0	96.5
ETHANE	0.9	1.1	1.2
PROPANE	0.1	0.2	0.2
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.3	0.3	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	1.2
HELIUM	0.07	0.08	0.03
HEATING VALUE*	1034	1024	1018
SPECIFIC GRAVITY	0.574	0.565	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 289 SAMPLE 15938	INDEX 290 SAMPLE 6852	INDEX 291 SAMPLE 7300
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PRAIRIE VIEW	SPADRA	WILDCAT
WELL NAME	MIDLAND OIL CORP. NO. 1	ARECI NO. 1	BIRCH NO. 1
LOCATION	SEC. 22, T8N, R24W	SEC. 32, T9N, R23W	SEC. 2, T6N, R27W
OWNER	SANTA FE ENERGY CO.	GULF OIL CORP.	ANDERSON-PRICHARD OIL CORP.
COMPLETED	NOT GIVEN	07/17/58	11/01/59
SAMPLED	04/18/80	11/04/58	11/30/59
FORMATION	PENN-ORR	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6477	5574	5818
WELLHEAD PRESSURE,PSIG	650	850	1960
OPEN FLOW, MCFD	2113	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	94.9	97.3	97.5
ETHANE	0.9	1.3	1.4
PROPANE	0.1	0.2	TRACE
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	0.9	0.1	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	1.1	0.5
HELIUM	0.27	0.10	0.10
HEATING VALUE*	988	1014	1013
SPECIFIC GRAVITY	0.591	0.574	0.566

	INDEX 292 SAMPLE 1985	INDEX 293 SAMPLE 5966	INDEX 294 SAMPLE 15578
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	MADISON	MILLER	MILLER
FIELD	WILDCAT	FOUKE	GENOA
WELL NAME	BANKS NO. 1	E. H. SILBERBERG NO. 1	ROSA MEEK NO. 1
LOCATION	SEC. 6, T16N, R27W	SEC. 36, T16S, R27W	SEC. 16, T16S, R27W
OWNER	INDEPENDENT OIL & GAS CO.	CARTER OIL CO.	AMERICAN PETROFINA CO.
COMPLETED	NOT GIVEN	08/08/55	05/16/78
SAMPLED	04/07/30	11/01/55	03/05/79
FORMATION	NOT GIVEN	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	345	230	230
DEPTH, FEET	NOT GIVEN	8977	7823
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3137	2750
OPEN FLOW, MCFD	NOT GIVEN	3050	3250
COMPONENT, MOLE PCT			
METHANE	92.6	55.4	43.2
ETHANE	1.1	4.1	4.3
PROPANE	---	2.4	2.5
N-BUTANE	---	0.8	0.9
ISOBUTANE	---	0.6	0.7
N-PENTANE	---	0.3	0.4
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.3	0.2
NITROGEN	5.8	29.1	45.7
OXYGEN	0.2	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.6	0.0
CARBON DIOXIDE	0.3	5.9	1.8
HELIUM	TRACE	0.08	0.12
HEATING VALUE*	958	789	665
SPECIFIC GRAVITY	0.588	0.819	0.845

	INDEX 295 SAMPLE 15579	INDEX 296 SAMPLE 3607	INDEX 297 SAMPLE 9009
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	MILLER	MILLER	POPE
FIELD	GENOA	NOT GIVEN	BOOGER HOLLOW
WELL NAME	MCININCH NO. 1	LENA ORR NO. 1	A. F. JONES NO. 1
LOCATION	SEC. 17, T16S, R27W	SEC. 3, T16S, R28W	SEC. 31, T10N, R20W
OWNER	AMERICAN PETROFINA CO.	CARTER OIL CO.	SUN OIL CO.
COMPLETED	11/12/77	NOT GIVEN	01/15/62
SAMPLED	03/05/79	10/08/42	06/11/63
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	PENN-ALLEN U
GEOLOGIC PROVINCE CODE	230	230	345
DEPTH, FEET	7900	7343	3223
WELLHEAD PRESSURE,PSIG	2741	2600	1000
OPEN FLOW, MCFD	7500	21000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.9	59.6	98.3
ETHANE	4.3	0.0	0.9
PROPANE	2.6	---	0.1
N-BUTANE	1.0	---	0.0
ISOBUTANE	0.7	---	0.0
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	45.8	38.7	0.5
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.8	1.0	0.2
HELIUM	0.12	0.09	0.10
HEATING VALUE*	463	604	1014
SPECIFIC GRAVITY	0.845	0.727	0.564

	INDEX 298 SAMPLE 13393	INDEX 299 SAMPLE 13394	INDEX 300 SAMPLE 7637
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	BOOGER HOLLOW	BOOGER HOLLOW	DOVER
WELL NAME	ARTHUR NO. 1	ARTHUR NO. 1	JOHN P. GRAHAM NO. 1
LOCATION	SEC. 33, T10N, R20W	SEC. 33, T10N, R20W	SEC. 19, T9N, R19W
OWNER	FERGUSON OIL CO., INC.	FERGUSON OIL CO., INC.	HUMBLE OIL & REFINING CO.
COMPLETED	07/18/72	07/18/72	04/24/60
SAMPLED	09/22/72	09/22/72	08/10/60
FORMATION	PENN-BARTON B	PENN-BARTON A	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3170	3094	3992
WELLHEAD PRESSURE,PSIG	1300	1310	1600
OPEN FLOW, MCFD	43120	49171	13
COMPONENT, MOLE PCT			
METHANE	97.6	97.7	97.6
ETHANE	1.1	1.1	1.1
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.8	0.8	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.11	0.10
HEATING VALUE*	1011	1012	1015
SPECIFIC GRAVITY	0.565	0.566	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 301 SAMPLE 11151	INDEX 302 SAMPLE 11202	INDEX 303 SAMPLE 11648
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	DOVER	DOVER	DOVER
WELL NAME	JESSIE JENNINGS NO. 1	KINSLOW NO. 1	NEWTON POWERS NO. 1
LOCATION	SEC. 3, T9N, R19W	SEC. 10, T8N, R20W	SEC. 9, T9N, R20W
OWNER	SKELLY OIL CO.	SUNRAY DX OIL CO.	DIAMOND SHAMROCK O&G CO.
COMPLETED	07/19/66	07/13/66	06/05/68
SAMPLED	09/20/67	10/26/67	09/15/68
FORMATION	PENN-ATOKA	PENN-ALLEN	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2155	NOT GIVEN	3324
WELLHEAD PRESSURE,PSIG	710	1154	932
OPEN FLOW, MCFD	7800	528	6350
COMPONENT, MOLE PCT			
METHANE	97.7	96.9	94.0
ETHANE	1.0	1.6	0.9
PROPANE	0.1	0.3	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.5	4.0
OXYGEN	0.0	0.0	0.7
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.1
HELIUM	0.09	0.13	0.08
HEATING VALUE*	1010	1018	968
SPECIFIC GRAVITY	0.565	0.573	0.579

	INDEX 304 SAMPLE 15645	INDEX 305 SAMPLE 15516	INDEX 306 SAMPLE 15955
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	DOVER	KNOXVILLE	KNOXVILLE
WELL NAME	GRANT NO. 1	DORN UNIT NO. 1-C	MARTIN NO. 1
LOCATION	SEC. 35, T9N, R20W	SEC. 33, T9N, R21W	SEC. 32, T9N, R21W
OWNER	RESERVE OIL CO.	SAMSON RESOURCES CO.	SAMSON RESOURCES CO.
COMPLETED	NOT GIVEN	07/31/78	11/15/79
SAMPLED	06/06/71	10/10/78	04/24/80
FORMATION	PENN-SPIRO & ATOKA	-TACKETT	PENN-ARECI
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4656	3178	3710
WELLHEAD PRESSURE,PSIG	1660	655	NOT GIVEN
OPEN FLOW, MCFD	3000	5300	2200
COMPONENT, MOLE PCT			
METHANE	87.8	96.7	93.6
ETHANE	1.2	1.1	1.6
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	8.4	1.0	3.5
OXYGEN	1.9	0.0	0.8
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	TRACE
HELIUM	0.11	0.23	0.14
HEATING VALUE*	914	1005	982
SPECIFIC GRAVITY	0.609	0.568	0.582

	INDEX 307 SAMPLE 15956	INDEX 308 SAMPLE 15124	INDEX 309 SAMPLE 6560
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	KNOXVILLE	LINVILLE	MORELAND
WELL NAME	MARTIN NO. 1	G. PAYNE NO. 1	C. A. RAINWATER NO. 1
LOCATION	SEC. 32, T9N, R21W	SEC. 24, T11N, R25W	SEC. 11, T8N, R19W
OWNER	SAMSON RESOURCES CO.	OIL DEVELOPMENT CO. OF UTAH	MURPHY CORP.
COMPLETED	11/15/79	NOT GIVEN	01/19/58
SAMPLED	04/24/80	10/17/77	04/21/58
FORMATION	PENN-ARECI	PENN-HALE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3730	NOT GIVEN	3914
WELLHEAD PRESSURE,PSIG	NOT GIVEN	510	1500
OPEN FLOW, MCFD	NOT GIVEN	2031	20500
COMPONENT, MOLE PCT			
METHANE	83.6	98.1	97.9
ETHANE	1.4	0.1	1.0
PROPANE	0.2	TRACE	0.1
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	11.5	1.5	0.5
OXYGEN	3.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.12	0.11	0.10
HEATING VALUE*	877	996	1012
SPECIFIC GRAVITY	0.627	0.563	0.563

	INDEX 310 SAMPLE 15964	INDEX 311 SAMPLE 15965	INDEX 312 SAMPLE 16087
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	MORELAND	MORELAND	MORELAND
WELL NAME	W. G. BLACKWELL NO. 1	W. G. BLACKWELL NO. 1	CAMMIE VIRDEN NO. 9-1
LOCATION	SEC. 7, T8N, R19W	SEC. 7, T8N, R19W	SEC. 9, T8N, R19W
OWNER	CHARLES E. MCRAY & ASSOC.	CHARLES E. MCRAY & ASSOC.	GETTY OIL CO.
COMPLETED	03/14/80	03/14/80	NOT GIVEN
SAMPLED	05/16/80	05/16/80	09/25/80
FORMATION	PENN-CLINE	PENN-MCGUIRE	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5535	4358	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2025	1425	NOT GIVEN
OPEN FLOW, MCFD	1883	9998	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.5	97.1	91.5
ETHANE	1.1	1.0	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.8	0.9	6.7
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	0.10	0.09	0.08
HEATING VALUE*	1010	1004	947
SPECIFIC GRAVITY	0.566	0.570	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 313 SAMPLE 7975	INDEX 314 SAMPLE 10086	INDEX 315 SAMPLE 10087
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	NEW HOPE	NEW HOPE	NEW HOPE
WELL NAME	IDA JONES NO. 1	ALICE SMITH UNIT NO. 1	ALICE SMITH UNIT NO. 1
LOCATION	SEC. 18, T9N, R20W	SEC. 17, T9N, R20W	SEC. 17, T9N, R20W
OWNER	GULF OIL CORP.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	01/27/61	08/21/64	08/21/64
SAMPLED	05/10/61	08/24/65	08/24/65
FORMATION	PENN-CASEY	PENN-HALE	PENN-BARTON & ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3063	4200	3789
WELLHEAD PRESSURE,PSIG	871	1604	1778
OPEN FLOW, MCFD	5300	1642	3657
COMPONENT, MOLE PCT			
METHANE	97.7	97.7	98.2
ETHANE	1.0	1.1	1.0
PROPANE	0.2	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.2
HELIUM	0.10	0.06	0.06
HEATING VALUE*	1042	1009	1013
SPECIFIC GRAVITY	0.567	0.567	0.563

	INDEX 316 SAMPLE 10088	INDEX 317 SAMPLE 13207	INDEX 318 SAMPLE 13208
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	NEW HOPE	ROSS	ROSS
WELL NAME	ALICE SMITH UNIT NO. 1	EUBANKS NO. 1	EUBANKS NO. 1
LOCATION	SEC. 17, T9N, R20W	SEC. 11, T9N, R21W	SEC. 11, T9N, R21W
OWNER	GULF OIL CORP.	FERGUSON OIL CO., INC.	FERGUSON OIL CO., INC.
COMPLETED	08/21/64	02/02/72	02/02/72
SAMPLED	08/24/65	05/13/72	05/13/72
FORMATION	PENN-BARTON	PENN-ALLEN	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3729	4120	4390
WELLHEAD PRESSURE,PSIG	1488	1725	1654
OPEN FLOW, MCFD	4513	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.6	97.8	97.6
ETHANE	1.0	1.3	0.9
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.4	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.14	0.08	0.08
HEATING VALUE*	1007	1017	1008
SPECIFIC GRAVITY	0.565	0.566	0.565

	INDEX 319 SAMPLE 5742	INDEX 320 SAMPLE 3796	INDEX 321 SAMPLE 14558
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	RUSSELLVILLE	SILEX	SILEX
WELL NAME	BARTON NO. 1	LADD & STRONG NO. 1	SILEX GAS UNIT NO. 3
LOCATION	SEC. 10, T8N, R19W	SEC. 22, T10N, R21W	SEC. 22, T10N, R21W
OWNER	MURPHY CORP.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	12/07/54	07/07/44	04/06/75
SAMPLED	12/10/54	04/25/44	01/14/76
FORMATION	PENN-ATOKA	PENN-ATOKA	-KELLY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4000	2861	2814
WELLHEAD PRESSURE,PSIG	NOT GIVEN	560	1100
OPEN FLOW, MCFD	7600	6250	6782
COMPONENT, MOLE PCT			
METHANE	97.4	95.0	97.9
ETHANE	1.0	1.4	1.0
PROPANE	0.2	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.9	3.0	0.8
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.10	0.13	0.10
HEATING VALUE*	1010	987	1010
SPECIFIC GRAVITY	0.567	0.577	0.563

	INDEX 322 SAMPLE 7662	INDEX 323 SAMPLE 10403	INDEX 324 SAMPLE 11502
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	SCOTT	SCOTT
FIELD	WILDCAT	MANSFIELD	MANSFIELD
WELL NAME	S.E. LEE ESTATE NO. 1	HARP NO. 1	QUICK NO. 1
LOCATION	SEC. 4, T9N, R19W	SEC. 4, T4N, R30E	SEC. 25, T5N, R30W
OWNER	MURPHY CORP.	MIDWEST OIL CORP.	MIDWEST OIL CORP.
COMPLETED	08/17/60	11/12/65	10/01/67
SAMPLED	09/02/60	02/17/66	08/16/68
FORMATION	PENN-HALE	PENN-HARTFORD	PENN-HARTFORD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1936	5788	6250
WELLHEAD PRESSURE,PSIG	803	2392	2450
OPEN FLOW, MCFD	NOT GIVEN	3200	11506
COMPONENT, MOLE PCT			
METHANE	81.1	96.7	97.1
ETHANE	0.0	1.6	1.4
PROPANE	0.0	0.3	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	14.9	0.6	0.4
OXYGEN	3.4	0.0	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.7
HELIUM	0.10	0.06	0.06
HEATING VALUE*	822	1016	1014
SPECIFIC GRAVITY	0.636	0.574	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 325 SAMPLE 8597	INDEX 326 SAMPLE 10034	INDEX 327 SAMPLE 10037
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	BONANZA	BONANZA	BONANZA
WELL NAME	NO. 1	HAMILTON 1-12	JOHNSON 2-10
LOCATION	SEC. 36, T7N, R32W	SEC. 12, T6N, R32W	SEC. 10, T6N, R32W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/02/62	02/19/64	02/06/65
SAMPLED	07/26/62	08/04/65	08/04/65
FORMATION	DEVO-HUNTON	PENN-ATOKA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7936	3933	7304
WELLHEAD PRESSURE,PSIG	3050	1100	2083
OPEN FLOW, MCFD	6000	3690	4120
COMPONENT, MOLE PCT			
METHANE	92.8	97.5	94.8
ETHANE	2.1	1.2	0.9
PROPANE	0.4	0.3	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	3.0	0.4	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	2.2
HELIUM	0.12	0.07	0.10
HEATING VALUE*	988	1017	9840
SPECIFIC GRAVITY	0.595	0.569	0.590

	INDEX 328 SAMPLE 10201	INDEX 329 SAMPLE 6856	INDEX 330 SAMPLE 9983
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	BONANZA	BOONEVILLE	EWING
WELL NAME	HAMILTON NO.1-12A	P. X. WILLIAMS NO. 1	FRANK WRIGHT UNIT NO. 1
LOCATION	SEC. 12, T6N, R32W	SEC. 13, T6N, R29W	SEC. 13, T8N, R30W
OWNER	SHELL OIL CO.	GULF OIL CORP.	STEPHENS PRODUCTION CO.
COMPLETED	02/19/64	05/08/58	03/03/64
SAMPLED	10/07/65	11/05/58	07/19/65
FORMATION	PENN-SPIRO	PENN-ATOKA	PENN-BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3933	1470	6152
WELLHEAD PRESSURE,PSIG	850	375	832
OPEN FLOW, MCFD	700	NOT GIVEN	7500
COMPONENT, MOLE PCT			
METHANE	95.4	97.3	97.6
ETHANE	1.0	1.6	0.9
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.4	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.5	0.1	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.0	0.8
HELIUM	0.11	0.03	0.12
HEATING VALUE*	9920	1050	1013
SPECIFIC GRAVITY	0.590	0.578	0.570

	INDEX 331 SAMPLE 13177	INDEX 332 SAMPLE 13178	INDEX 333 SAMPLE 13501
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	EWING	EWING	EWING
WELL NAME	A. E. WILSON NO. 2	A. E. WILSON NO. 2	BONNIE STEWART NO. 1
LOCATION	SEC. 17, T8N, R29W	SEC. 17, T8N, R29W	SEC. 2, T7N, R30W
OWNER	GULF OIL CO.-U.S.	GULF OIL CO.-U.S.	STEPHENS PRODUCTION CO.
COMPLETED	06/04/71	06/04/71	02/14/72
SAMPLED	04/03/72	04/03/72	01/02/73
FORMATION	PENN-DUNN C	PENN-DUNN A	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6875
WELLHEAD PRESSURE,PSIG	921	864	2184
OPEN FLOW, MCFD	400	11033	7000
COMPONENT, MOLE PCT			
METHANE	97.6	98.0	97.3
ETHANE	1.0	0.9	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.9
HELIUM	0.09	0.09	0.05
HEATING VALUE*	1009	1011	1012
SPECIFIC GRAVITY	0.567	0.565	0.571

	INDEX 334 SAMPLE 13502	INDEX 335 SAMPLE 13503	INDEX 336 SAMPLE 7970
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	EWING	EWING	GREGG
WELL NAME	BONNIE STEWART NO. 1	BONNIE STEWART NO. 1	A. M. DUCKETT NO. 1
LOCATION	20 IN. DISCHARGE	SEC. 2, T7N, R30W	SEC. 20, T6N, R29W
OWNER	STEPHENS PRODUCTION CO.	STEPHENS PRODUCTION CO.	GULF OIL CORP.
COMPLETED	02/14/72	02/14/72	05/11/61
SAMPLED	01/02/73	01/02/73	05/11/61
FORMATION	PERM-MORRIS	PENN-BARTON R	-MICHOLS
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3529	5767	4183
WELLHEAD PRESSURE,PSIG	612	1112	1401
OPEN FLOW, MCFD	4100	5700	20000
COMPONENT, MOLE PCT			
METHANE	97.7	97.1	97.5
ETHANE	1.3	1.3	1.8
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.3	0.4	TRACE
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.3
HELIUM	0.07	0.09	0.03
HEATING VALUE*	1016	1012	1023
SPECIFIC GRAVITY	0.566	0.568	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 337 SAMPLE 15940	INDEX 338 SAMPLE 2277	INDEX 339 SAMPLE 6286
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	HOLLIS LAKE	LAVACA	MASSARD
WELL NAME	FT CHAFFEE FEDERAL NO.2	LAWRENCE WRIGHT NO. 1	MARY FISHER ALLEN NO. 1
LOCATION	SEC.26, R31W, R31W	SEC. 29, T8, R30	SEC. 30, T8N, R31W
OWNER	GULF OIL EXPL. & PROD. CO.	OZARK NATURAL GAS CO.	STEPHENS PRODUCTION CO.
COMPLETED	01/29/80	12/20/30	01/15/57
SAMPLED	04/16/80	02/18/31	04/01/57
FORMATION	PENN-SPIRO	PENN-ATOKA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5737	2820	5392
WELLHEAD PRESSURE,PSIG	987	280	1600
OPEN FLOW, MCFD	2803	5000	27000
COMPONENT, MOLE PCT			
METHANE	96.5	98.5	96.4
ETHANE	1.3	0.0	1.2
PROPANE	0.2	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.4	0.8	1.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.2	0.6	0.9
HELIUM	0.07	0.08	0.08
HEATING VALUE*	1015	998	998
SPECIFIC GRAVITY	0.579	0.564	0.576

	INDEX 340 SAMPLE 6731	INDEX 341 SAMPLE 8020	INDEX 342 SAMPLE 11221
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	MASSARD	MASSARD	URSULA
WELL NAME	THOMAS HORAN	DORA A. PIGG NO. 1	EARL WHITE NO. 1
LOCATION	SEC. 19, T8N, R31W	SEC. 31, T8N, R31W	SEC. 5, T7N, R29W
OWNER	FORT SMITH GAS CORP.	STEPHENS PRODUCTION CO.	GULF OIL CORP.
COMPLETED	03/11/58	01/24/61	02/21/67
SAMPLED	07/15/58	06/11/61	11/06/67
FORMATION	PENN-ATOKA BASAL	PENN-SPIRO	PENN-CARPENTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5150	5424	3064
WELLHEAD PRESSURE,PSIG	905	670	268
OPEN FLOW, MCFD	4000	16500	5500
COMPONENT, MOLE PCT			
METHANE	97.3	96.6	97.5
ETHANE	1.2	1.2	1.4
PROPANE	0.0	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.5	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.5	0.5
HELIUM	0.10	0.10	0.08
HEATING VALUE*	1007	1003	1018
SPECIFIC GRAVITY	0.571	0.578	0.569

	INDEX 343 SAMPLE 14415	INDEX 344 SAMPLE 14416	INDEX 345 SAMPLE 16066
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	WITCHERVILLE	WITCHERVILLE	WITCHERVILLE
WELL NAME	CARTER NO. 1	CARTER NO. 1	FRANKLIN-HOLLAND NO. 1
LOCATION	SEC. 26, T6N, R31W	SEC. 26, T6N, R31W	SEC.31,T6N,R30W
OWNER	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	03/10/75	07/17/75	07/21/80
SAMPLED	07/17/75	07/17/75	09/16/80
FORMATION	PENN-TURNER U	PENN-TURNER L	PENN-BORUM
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3581	3776	4500
WELLHEAD PRESSURE,PSIG	550	1075	760
OPEN FLOW, MCFD	1200	2100	5428
COMPONENT, MOLE PCT			
METHANE	97.7	97.8	96.9
ETHANE	1.4	1.3	1.1
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.3	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	TRACE
HELIUM	0.07	0.07	0.08
HEATING VALUE*	1020	1019	1004
SPECIFIC GRAVITY	0.567	0.568	0.567

	INDEX 346 SAMPLE 16067	INDEX 347 SAMPLE 12641	INDEX 348 SAMPLE 618
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTION	UNION
FIELD	WITCHERVILLE	EXCELSIOR	EL DORADO
WELL NAME	FRANKLIN HOLLAND NO. 1	PLUNKETT NO. 1	MCCAULOIN NO. 1
LOCATION	SEC.31,T6N,R30W	SEC. 29, T6N, R31W	SEC. 31, T15S, R17W
OWNER	ARKLA EXPLORATION CO.	FERGUSON OIL CO.	EL DORADO NATURAL GAS CO.
COMPLETED	07/21/80	06/30/70	03/-/21
SAMPLED	09/16/80	01/21/71	07/17/21
FORMATION	PENN-TURNER	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	850	345	230
DEPTH, FEET	3573	5400	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1809	250
OPEN FLOW, MCFD	5598	7000	25
COMPONENT, MOLE PCT			
METHANE	95.2	97.2	87.0
ETHANE	1.9	1.5	11.7
PROPANE	0.2	0.2	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	2.6	0.3	0.8
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.8	0.2
HELIUM	0.05	0.06	0.01
HEATING VALUE*	1004	1017	1091
SPECIFIC GRAVITY	0.576	0.573	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 349 SAMPLE 619	INDEX 350 SAMPLE 5650	INDEX 351 SAMPLE 5787
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	UNION	UNION	UNION
FIELD	EL DORADO	HIBANK S	RAINBOW S
WELL NAME	HEARTHSTONE	UNION SAW MILL NO. B-7	A. A. JERRY NO. 1
LOCATION	SEC. 26, T16S, R17W	SEC. 35, T18S, R14W	SEC. 29, T17S, R14W
OWNER	EL DORADO NATURAL GAS CO.	LAWTON OIL CORP.	SPARTAN DRILLING CO.
COMPLETED	05/--/21	04/08/54	12/23/54
SAMPLED	07/17/21	07/17/54	03/01/55
FORMATION	NOT GIVEN	CRET-OZAN	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	NOT GIVEN	2663	3080
WELLHEAD PRESSURE, PSIG	250	1261	1150
OPEN FLOW, MCFD	15	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	87.3	90.4	93.7
ETHANE	11.5	3.5	1.0
PROPANE	---	1.2	0.4
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.8	3.3	3.8
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.05	0.05
HEATING VALUE*	1090	1056	1018
SPECIFIC GRAVITY	0.616	0.618	0.599

	INDEX 352 SAMPLE 3163	INDEX 353 SAMPLE 3169	INDEX 354 SAMPLE 7289
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	UNION	UNION	UNION
FIELD	SCHULER	SCHULER	ST. LONG N
WELL NAME	SEWELL NO. 3	SEPARATOR 36	OLIN D NO. 1
LOCATION	SEC. 10, T18S, R19W	SEC. 7, T18S, R18W	SEC. 19, T18S, R12W
OWNER	LION OIL & REFINING CO.	SCHULER UNIT	CADDO OIL CO., INC.
COMPLETED	01/16/39	10/10/38	10/31/56
SAMPLED	02/14/42	02/14/42	10/10/59
FORMATION	JURA-SMACKOVER	JURA-JONES	CRET-NACATOCH
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7659	7608	2300
WELLHEAD PRESSURE, PSIG	3390	1500	925
OPEN FLOW, MCFD	140	NOT GIVEN	280
COMPONENT, MOLE PCT			
METHANE	61.3	64.5	91.3
ETHANE	22.7	23.7	2.5
PROPANE	---	---	0.6
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	11.5	8.8	4.4
OXYGEN	0.4	1.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	4.1	1.9	TRACE
HELIUM	TRACE	0.00	0.05
HEATING VALUE*	1028	1078	1025
SPECIFIC GRAVITY	0.756	0.733	0.608

	INDEX 355 SAMPLE 9554	INDEX 356 SAMPLE 4448	INDEX 357 SAMPLE 4422
STATE	ARKANSAS	ARKANSAS	CALIFORNIA
COUNTY	WASHINGTON	YELL	BUTTE
FIELD	NOT GIVEN	WILDCAT	CHICO
WELL NAME	WATER WELL	NO. 1	TOWNE NO. 1
LOCATION	SEC. 30, T14N, R29W	SEC. 2, T6N, R21W	SEC. 18, T20N, R1E
OWNER	R. N. JACKSON	VAN WESLEY	SUPERIOR OIL CO.
COMPLETED	--/--/58	--/--/24	12/03/47
SAMPLED	08/21/64	04/15/48	02/01/48
FORMATION	DEVO-SYLAMORE	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	730
DEPTH, FEET	420	1910	2175
WELLHEAD PRESSURE, PSIG	100	35	NOT GIVEN
OPEN FLOW, MCFD	200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	97.3	67.6
ETHANE	10.4	1.0	1.4
PROPANE	2.3	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.0	0.8	29.9
OXYGEN	0.0	0.3	0.8
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	0.08	0.04	0.01
HEATING VALUE*	1134	1004	710
SPECIFIC GRAVITY	0.656	0.570	0.692

	INDEX 358 SAMPLE 4123	INDEX 359 SAMPLE 4424	INDEX 360 SAMPLE 11522
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	BUTTE	BUTTE	BUTTE
FIELD	DURHAM AREA	DURHAM AREA	LLANO SECO
WELL NAME	DONOHOE FEE NO. 1	WAHL COMM NO. 1	BUTTE LLANO SECO NO. 1
LOCATION	SEC. 6, T20N, R1E	SEC. 32, T21N, R1E	SEC. 34, T20N, R1W
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	CALIFORNIA TIME PETROLEUM CO
COMPLETED	07/17/46	08/10/47	09/05/67
SAMPLED	10/15/46	01/30/48	05/21/68
FORMATION	NOT GIVEN	EOCE-CAPAY	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2140	2090	1787
WELLHEAD PRESSURE, PSIG	915	930	676
OPEN FLOW, MCFD	NOT GIVEN	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.2	69.2	84.4
ETHANE	1.8	0.4	0.0
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	30.5	29.7	15.4
OXYGEN	0.9	0.4	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	703	708	855
SPECIFIC GRAVITY	0.700	0.684	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 361 SAMPLE 5141	INDEX 362 SAMPLE 7421	INDEX 363 SAMPLE 7623
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	BUTTE	COLUSA	COLUSA
FIELD	NOT GIVEN	ARBUCKLE	BUCKEYE
WELL NAME	WILD GOOSE NO. 1	UNIT M NO. 1	WILKINS UNIT B-1
LOCATION	SEC. 17, T17N, R1E	SEC. 34, T14N, R2W	SEC. 13, T13N, R1W
OWNER	HONOLULU OIL CORP.	OCCIDENTAL PETROLEUM CORP.	WESTERN GULF OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	04/26/60
SAMPLED	12/14/51	05/--/60	07/27/60
FORMATION	NOT GIVEN	NOT GIVEN	CRET-
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	8112
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	4330
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	13000
COMPONENT, MOLE PCT			
METHANE	79.1	95.8	97.3
ETHANE	0.1	0.4	0.7
PROPANE	0.1	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	20.2	3.6	1.5
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	818	981	1001
SPECIFIC GRAVITY	0.647	0.573	0.565

	INDEX 364 SAMPLE 3711	INDEX 365 SAMPLE 12330	INDEX 366 SAMPLE 15815
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	COLUSA
FIELD	COLUSA	GRIMES SE	GRIMES SW
WELL NAME	CAPITAL NO. 1	BROWNING NO. 1	ARBUCKLE ROAD NO. 1
LOCATION	SEC. 15, T16N, R1W	SEC. 21, T15N, R1E	SEC. 7, T14W, R1E
OWNER	GENERAL PETROLEUM CORP.	KING RESOURCES CO.	GAS PRODUCING ENTERPRISES
COMPLETED	12/06/43	03/26/69	01/--/79
SAMPLED	12/22/43	07/01/70	10/24/79
FORMATION	CRET-	CRET-FORBES	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2919	8107	8378
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	5087
OPEN FLOW, MCFD	620	10100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.7	99.0	99.2
ETHANE	0.9	0.2	0.2
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	20.2	0.7	0.5
OXYGEN	0.2	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	813	1006	1008
SPECIFIC GRAVITY	0.643	0.559	0.558

	INDEX 367 SAMPLE 7929	INDEX 368 SAMPLE 10867	INDEX 369 SAMPLE 10868
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	COLUSA
FIELD	NOT GIVEN	WILDCAT	WILDCAT
WELL NAME	SAUHREITER NO. 1	HALSEY NO. 1-3	STEIDLMAYER NO. 1-10
LOCATION	SEC. 4, T14N, R1W	SEC. 3, T15N, R1W	SEC. 10, T15N, R1W
OWNER	OCCIDENTAL PETROLEUM CORP.	GREAT BASINS PETROLEUM CO.	GREAT BASINS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/11/61	02/08/67	02/08/67
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4103
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4090
COMPONENT, MOLE PCT			
METHANE	89.8	91.1	92.5
ETHANE	0.4	0.6	0.5
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	9.5	8.0	6.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	919	936	949
SPECIFIC GRAVITY	0.599	0.590	0.585

	INDEX 370 SAMPLE 8893	INDEX 371 SAMPLE 13198	INDEX 372 SAMPLE 11627
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	CONTRA COSTA
FIELD	CONCORD	DUTCH SLOUGH	RIVER BREAK
WELL NAME	ROYLAN NO. 1	UNION STEFFENSON NO. 1	MASSONI-DEMARTINI NO. 1
LOCATION	SEC. 24, T2N, R2W	SEC. 8, T2N, R3E	SEC. 27, T2N, R2E
OWNER	STANDARD OIL CO. OF CALIF.	TRI-VALLEY OIL & GAS CO.	GREAT YELLOWSTONE CORP.
COMPLETED	12/23/62	08/29/71	06/18/68
SAMPLED	03/19/63	04/24/72	08/26/68
FORMATION	CRET-FORBES	EOCE-MEGANOS	-MASSIVE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2208	7269	5523
WELLHEAD PRESSURE,PSIG	1139	2035	2246
OPEN FLOW, MCFD	2700	9000	3700
COMPONENT, MOLE PCT			
METHANE	97.8	91.5	92.6
ETHANE	0.1	3.1	3.5
PROPANE	TRACE	1.2	1.7
N-BUTANE	0.0	0.2	0.6
ISOBUTANE	0.0	0.3	0.4
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.6	TRACE
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	0.4	0.2
NITROGEN	2.1	2.0	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.0
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1008	1088	1105
SPECIFIC GRAVITY	0.564	0.627	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 373 SAMPLE 11628	INDEX 374 SAMPLE 7237	INDEX 375 SAMPLE 7238
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	CONTRA COSTA
FIELD	RIVER BREAK	WILLOW PASS	WILLOW PASS
WELL NAME	TRANSAMERICA NO. 1	FARIA UNIT NO. 1	FARIA UNIT NO. 2
LOCATION	SEC. 3, T1N, R2E	SEC. 21, T2N, R1W	SEC. 21, T2N, R1W
OWNER	GREAT YELLOWSTONE CORP.	TRICO OIL & GAS CO.	TRICO OIL & GAS CO.
COMPLETED	06/22/68	05/31/59	07/28/59
SAMPLED	08/26/68	10/01/59	10/01/59
FORMATION	-WILLIAMSON	EOCE-	EOCE-
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4297	1714	1498
WELLHEAD PRESSURE,PSIG	1835	625	510
OPEN FLOW, MCFD	1900	4300	1500
COMPONENT, MOLE PCT			
METHANE	93.5	53.5	98.6
ETHANE	3.3	0.1	TRACE
PROPANE	1.0	0.0	0.2
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	1.2	40.7	1.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.4	0.0
HYDROGEN	TRACE	1.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	4.1	0.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1074	996	1004
SPECIFIC GRAVITY	0.605	0.760	0.560

	INDEX 376 SAMPLE 7239	INDEX 377 SAMPLE 4088	INDEX 378 SAMPLE 3850
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	FRESNO	FRESNO
FIELD	WILLOW PASS	BURREL	COALINGA
WELL NAME	FARIA UNIT NO. 3	BURREL NO. 68-35	21-17E
LOCATION	SEC. 21, T2N, R1W	SEC. 35, T16S, R18E	SEC. 17, T21S, R15E
OWNER	TRICO OIL & GAS CO.	GENERAL PET. CORP. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	08/11/59	10/26/43	04/18/44
SAMPLED	10/01/59	02/23/45	04/29/44
FORMATION	EOCE-	MIOC-	MIOC-TEMBLOR
GEOLOGIC PROVINCE CODE	730	745	745
DEPTH, FEET	1570	6484	3173
WELLHEAD PRESSURE,PSIG	620	860	NOT GIVEN
OPEN FLOW, MCFD	3000	183	6580
COMPONENT, MOLE PCT			
METHANE	98.2	69.0	77.5
ETHANE	0.1	24.8	20.4
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.5	4.5	0.0
OXYGEN	TRACE	0.0	1.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	1.7	1.1
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	997	1143	1151
SPECIFIC GRAVITY	0.563	0.712	0.672

	INDEX 379 SAMPLE 3721	INDEX 380 SAMPLE 4090	INDEX 381 SAMPLE 3800
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	FRESNO	FRESNO
FIELD	JACALITOS DOME	NOT GIVEN	RAISIN CITY
WELL NAME	WELL 67-17E	NO. 21-21E	SAN JOAQUIN NO. 1-1
LOCATION	SEC. 17, T21N, R15E	SEC. 21, T21S, R15E	SEC. 10, T15S, R17E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	SHELL OIL CO.
COMPLETED	02/01/44	NOT GIVEN	10/04/43
SAMPLED	NOT GIVEN	NOT GIVEN	04/14/44
FORMATION	MIOC-TEMBLOR	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	3700	NOT GIVEN	4975
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	600
OPEN FLOW, MCFD	4392	NOT GIVEN	150
COMPONENT, MOLE PCT			
METHANE	80.6	10.6	95.2
ETHANE	17.3	5.2	1.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	75.4	0.0
OXYGEN	0.3	0.0	1.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	8.8	1.9
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1127	201	991
SPECIFIC GRAVITY	0.650	0.977	0.588

	INDEX 382 SAMPLE 14057	INDEX 383 SAMPLE 10518	INDEX 384 SAMPLE 10871
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	FRESNO	GLENN
FIELD	SAN JOAQUIN	SAN JOAQUIN NW	BLACK BUTTE
WELL NAME	TEED NO. 1	TEED NO. 1	SUN-PUTNAM NO. 1
LOCATION	NOT GIVEN	SEC. 23, T15S, R16E	SEC. 1, T22N, R4W
OWNER	TEXACO INC.	TEXACO & SUPERIOR	MCCULLOCH OIL CORP. OF CALIF
COMPLETED	NOT GIVEN	11/01/65	01/11/65
SAMPLED	07/09/74	03/29/66	02/06/67
FORMATION	NOT GIVEN	EOCE-	CRET-FORBES
GEOLOGIC PROVINCE CODE	745	745	730
DEPTH, FEET	NOT GIVEN	6794	4320
WELLHEAD PRESSURE,PSIG	1600	2550	2332
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	9600
COMPONENT, MOLE PCT			
METHANE	97.1	97.4	97.9
ETHANE	0.8	0.8	0.3
PROPANE	0.2	0.2	0.0
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.5	1.4	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1015	1010	997
SPECIFIC GRAVITY	0.573	0.569	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 385 SAMPLE 7399	INDEX 386 SAMPLE 10961	INDEX 387 SAMPLE 3747
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	GLENN	GLENN	GLENN
FIELD	CAPAY RANCHO	MALTON	ORD BEND
WELL NAME	MODA NO. 54-10	MALTON UNIT 1 NO. 1	KNIGHT NO. 1
LOCATION	SEC. 10, T22N, R2W	SEC. 5, T22N, R3E	SEC. 13, T21N, R2W
OWNER	MOBIL OIL CORP.	HUMBLE OIL & REFINING CO.	SUPERIOR OIL CO.
COMPLETED	08/21/59	09/15/64	08/24/43
SAMPLED	02/10/60	05/12/67	04/29/44
FORMATION	PLIO-TEHAMA	CRET-FORBES	CRET-KIONE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1710	3541	3653
WELLHEAD PRESSURE,PSIG	714	1759	1480
OPEN FLOW, MCFD	12700	1220	4150
COMPONENT, MOLE PCT			
METHANE	83.9	98.6	90.6
ETHANE	0.0	0.2	0.0
PROPANE	0.1	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	15.8	0.9	8.9
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.02	TRACE	0.00
HEATING VALUE*	852	1002	918
SPECIFIC GRAVITY	0.621	0.560	0.594

	INDEX 388 SAMPLE 3748	INDEX 389 SAMPLE 15706	INDEX 390 SAMPLE 2778
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	GLENN	GLENN	HUMBOLDT
FIELD	ORD BEND	RANCHO CAPAY	TOMPKINS HILL
WELL NAME	CAPAY GRANT COMM. -1 NO. 2	WELDGEN EDDINS NO. 1	EUREKA NO. 2
LOCATION	SEC. 13, T21N, R2W	SEC. 14, T22N, R2W	SEC. 22, T3N, R1W
OWNER	SUPERIOR OIL CO.	GULF OIL CORP.	TEXAS CO.
COMPLETED	03/02/44	NOT GIVEN	07/18/37
SAMPLED	04/29/44	07/23/79	11/29/37
FORMATION	CRET-KIONE	CRET-FORBES	PLIO-
GEOLOGIC PROVINCE CODE	730	730	720
DEPTH, FEET	3670	5354	4010
WELLHEAD PRESSURE,PSIG	1500	2402	2386
OPEN FLOW, MCFD	4550	5100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	97.8	96.9
ETHANE	0.0	0.2	1.3
PROPANE	---	TRACE	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	11.2	1.8	1.4
OXYGEN	0.4	TRACE	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	895	994	1005
SPECIFIC GRAVITY	0.603	0.563	0.570

	INDEX 391 SAMPLE 4283	INDEX 392 SAMPLE 5970	INDEX 393 SAMPLE 4797
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	HUMBOLDT	INYO	KERN
FIELD	TOMPKINS HILL	NOT GIVEN	ANTELOPE PLAINS
WELL NAME	HOLMES-EUREKA NO. 3	WATER WELL	BOLTON 83
LOCATION	SEC. 22, T3N, R1W	NOT GIVEN	SEC. 27, T27S, R19E
OWNER	TEXAS CO.	ELMO R. JENKINS	INDEPENDENT EXPLORATION
COMPLETED	10/10/46	NOT GIVEN	03/05/49
SAMPLED	03/11/47	NOT GIVEN	10/24/49
FORMATION	PLIO-	NOT GIVEN	EOCE-
GEOLOGIC PROVINCE CODE	720	625	745
DEPTH, FEET	3940	NOT GIVEN	3203
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	350
OPEN FLOW, MCFD	1500	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	95.6	5.1	97.1
ETHANE	1.2	0.1	1.5
PROPANE	---	0.0	0.5
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	1.8	34.1	0.3
OXYGEN	0.8	TRACE	TRACE
ARGON	---	0.4	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	60.2	0.2
HELIUM	TRACE	0.16	TRACE
HEATING VALUE*	990	53	1036
SPECIFIC GRAVITY	0.578	1.285	0.575

	INDEX 394 SAMPLE 5168	INDEX 395 SAMPLE 12694	INDEX 396 SAMPLE 1958
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BELGIAN ANTICLINE	BELGIAN ANTICLINE	BUTTONWILLOW
WELL NAME	TULARE FEE NO. 1	USL-62-25	HARRIS NO. 1
LOCATION	SEC. 19, T30S, R22E	NOT GIVEN	SEC. 8, T28S, R23E
OWNER	OHIO OIL CO.	NORRIS OIL CO.	MILHAM EXPLORATION CO.
COMPLETED	11/14/51	--/--/70	02/28/29
SAMPLED	02/28/52	02/--/71	03/14/30
FORMATION	EOCE-	EOCE-POINT OF ROCKS 2ND	PLIO-PASO ROBLES
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	6544	5400	2450
WELLHEAD PRESSURE,PSIG	3100	NOT GIVEN	1040
OPEN FLOW, MCFD	10000	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	86.9	97.8
ETHANE	3.5	6.0	0.6
PROPANE	1.5	3.2	---
N-BUTANE	0.5	0.8	---
ISOBUTANE	TRACE	0.7	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.4	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.7	0.8	0.6
OXYGEN	0.1	0.1	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.8	0.8
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1042	1161	1001
SPECIFIC GRAVITY	0.607	0.670	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 397 SAMPLE 2758	INDEX 398 SAMPLE 4859	INDEX 399 SAMPLE 15318
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BUTTONWILLOW	BUTTONWILLOW	CAL CANAL
WELL NAME	KERN NO. 4	NO. CL 27-6	CHEVRON CAL CANAL NO. 1
LOCATION	SEC. 5, T28S, R23E	SEC. 5, T28S, R23E	SEC. 31, T28S, R22E
OWNER	SEABOARD OIL CO.	STANDARD OIL CO. OF CALIF.	OCCIDENTAL EXPL. & PROD. CO.
COMPLETED	04/07/28	10/13/49	09/09/77
SAMPLED	06/25/37	02/21/50	07/12/78
FORMATION	PLIO-MYA	PLIO-SAN JOAQUIN	MIOC-STEVENS
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2483	3403	11050
WELLHEAD PRESSURE,PSIG	1050	950	4600
OPEN FLOW, MCFD	A200	400	2200
COMPONENT, MOLE PCT			
METHANE	97.4	98.1	74.0
ETHANE	0.0	0.4	8.6
PROPANE	---	0.3	5.6
N-BUTANE	---	0.2	2.4
ISOBUTANE	---	0.0	1.4
N-PENTANE	---	0.2	0.8
ISOPENTANE	---	0.0	1.3
CYCLOPENTANE	---	TRACE	0.5
HEXANES PLUS	---	0.2	0.9
NITROGEN	1.5	0.4	0.2
OXYGEN	0.6	0.1	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.0	4.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	987	1034	1332
SPECIFIC GRAVITY	0.569	0.573	0.825

	INDEX 400 SAMPLE 4109	INDEX 401 SAMPLE 5219	INDEX 402 SAMPLE 9302
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	ELK HILLS	ELK HILLS	ENGLISH COLONY
WELL NAME	NO. 86-22R	NO. X-55	KCL 55 NO. 28
LOCATION	SEC. 22, T30S, R23E	SEC. 30, T30S, R23E	SEC. 22, T29S, R26E
OWNER	OFFICE OF NAVAL PET. RESERVE	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	05/03/46	01/10/52	11/08/63
SAMPLED	08/--/46	02/28/52	04/14/64
FORMATION	PLIO-SUB MULINIA ZONE	MIOC-CARNEROS	MIOC-STEVENS
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2526	9330	6968
WELLHEAD PRESSURE,PSIG	913	4188	2625
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	95.1	83.1	86.5
ETHANE	3.0	8.4	5.0
PROPANE	---	3.2	3.4
N-BUTANE	---	0.8	1.3
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.0	0.4
HEXANES PLUS	---	0.1	0.7
NITROGEN	1.3	0.7	0.5
OXYGEN	0.4	0.1	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	2.8	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1017	1138	1209
SPECIFIC GRAVITY	0.579	0.687	0.691

	INDEX 403 SAMPLE 5653	INDEX 404 SAMPLE 4222	INDEX 405 SAMPLE 1957
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	JOHE RANCH	MCKITTRICK AREA	MIDWAY
WELL NAME	HANCOCK NO. 25 A-7	WEST PET NO. 1	NOT GIVEN
LOCATION	SEC. 7, T30S, R21E	SEC. 29, T30S, R22E	SEC. 1, T32S, R23E
OWNER	UNION OIL CO. OF CALIF.	TEXAS CO.	STANDARD OIL CO. OF CALIF.
COMPLETED	04/23/54	10/21/46	NOT GIVEN
SAMPLED	07/21/54	01/10/47	03/14/30
FORMATION	MIOC-PHACOIDES	MIOC-OCEANIC	PLIO-ETCHEGOIN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	1502	5173	2500
WELLHEAD PRESSURE,PSIG	408	2651	300
OPEN FLOW, MCFD	NOT GIVEN	2000	6000
COMPONENT, MOLE PCT			
METHANE	94.9	74.7	55.9
ETHANE	2.6	8.3	20.8
PROPANE	0.5	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	0.9	2.5	10.0
OXYGEN	0.0	1.5	1.7
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	13.0	11.7
HELIUM	0.03	0.01	0.00
HEATING VALUE*	1040	905	939
SPECIFIC GRAVITY	0.589	0.741	0.823

	INDEX 406 SAMPLE 1622	INDEX 407 SAMPLE 3726	INDEX 408 SAMPLE 2757
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	MIDWAY-SUNSET	MOUNT POSO	SEMI-TROPIC
WELL NAME	NOT GIVEN	VEDDER NO. 1-18	CONTINENTAL 63-15
LOCATION	NOT GIVEN	SEC. 18, T27S, R28E	SEC. 15, T27S, R23E
OWNER	MIDWAY GAS CO.	DWIGHT G. VEDDER	SEABOARD OIL CO.
COMPLETED	NOT GIVEN	12/27/43	07/16/35
SAMPLED	03/23/28	03/19/44	06/28/37
FORMATION	NOT GIVEN	MIOC-L	MIOC-
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	2440	2395
WELLHEAD PRESSURE,PSIG	300	650	750
OPEN FLOW, MCFD	NOT GIVEN	5000	17028
COMPONENT, MOLE PCT			
METHANE	75.9	98.1	97.1
ETHANE	10.7	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.4	0.9	1.7
OXYGEN	1.1	0.4	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	8.8	0.6	0.6
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	961	994	984
SPECIFIC GRAVITY	0.713	0.566	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 409 SAMPLE 5801	INDEX 410 SAMPLE 7706	INDEX 411 SAMPLE 4419
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	SHAFTER	SHALE FLATS AREA	SHEEP SPRINGS
WELL NAME	LOEPP NO. 63-18	UNIT NO. 15	CYMRIC NO. 12A
LOCATION	SEC. 18, T28S, R25E	SEC. 9, T27S, R19E	SEC. 21, T29S, R21E
OWNER	TWA CAPITAL CO.&GEOCHM. SUR.	SHELL OIL CO. ET AL.	INDEPENDENT EXPLORATION CO.
COMPLETED	12/10/54	07/19/60	10/09/47
SAMPLED	04/08/55	10/06/60	01/12/48
FORMATION	PLIO-ETCHEGOIN	EOCE-M	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	4315	2805	4692
WELLHEAD PRESSURE,PSIG	1686	1094	1900
OPEN FLOW, MCFD	3000	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	99.3	98.6	78.3
ETHANE	0.1	0.8	19.7
PROPANE	0.3	TRACE	---
N-BUTANE	TRACE	TRACE	---
ISOBUTANE	0.0	TRACE	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	0.0	0.3	1.4
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.4
HELIUM	0.15	0.02	TRACE
HEATING VALUE*	1016	1013	1146
SPECIFIC GRAVITY	0.557	0.559	0.663

	INDEX 412 SAMPLE 8312	INDEX 413 SAMPLE 4872	INDEX 414 SAMPLE 4688
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KINGS	KINGS
FIELD	TEN SECTION	HARVESTER	KETTLEMAN
WELL NAME	KCL-46-46-33	HARVESTER UNIT NO. 1	S.F.&F.L. NO. 68-4Z
LOCATION	SEC. 33, T30S, R26E	SEC. 11, T23S, R21E	SEC. 4, T24S, R19E
OWNER	STANDARD OIL CO. OF CALIF.	SHELL OIL CO.	STANDARD OIL CO. OF CALIF.
COMPLETED	08/--/61	02/01/50	NOT GIVEN
SAMPLED	11/26/61	04/19/50	04/08/49
FORMATION	MIOC-U	PLIO-MYA	MIOC-L
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	8073	2797	10487
WELLHEAD PRESSURE,PSIG	157	1230	NOT GIVEN
OPEN FLOW, MCFD	450	4150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	98.6	83.9
ETHANE	7.7	0.3	7.9
PROPANE	4.8	0.1	3.3
N-BUTANE	1.7	0.1	1.2
ISOBUTANE	1.1	0.0	0.5
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.5	0.0	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	0.5	0.7	0.2
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.8	0.0	1.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1240	1018	1202
SPECIFIC GRAVITY	0.716	0.567	0.699

	INDEX 415 SAMPLE 1936	INDEX 416 SAMPLE 1959	INDEX 417 SAMPLE 4716
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	KETTLEMAN HILLS	KETTLEMAN HILLS	KETTLEMAN MIDDLE DOME
WELL NAME	NO. A	NO.B	S.F.&F.L. 64-4Z
LOCATION	SEC. 1, T22S, R17E	SEC. 1, T22S, R17E	SEC. 4, T24S, R19E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	12/30/29	12/26/29	NOT GIVEN
SAMPLED	02/17/30	03/14/30	07/08/49
FORMATION	MIOC-TEMBLOR	MIOC-TEMBLOR	MIOC-L
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	6100	6100	10805
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2300	6500
OPEN FLOW, MCFD	108000	101000	70
COMPONENT, MOLE PCT			
METHANE	66.7	65.2	75.1
ETHANE	30.6	30.5	8.7
PROPANE	---	---	5.7
N-BUTANE	---	---	2.7
ISOBUTANE	---	---	1.2
N-PENTANE	---	---	1.2
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.3
HEXANES PLUS	---	---	1.4
NITROGEN	1.9	3.7	0.9
OXYGEN	0.2	0.3	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	2.4
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	1224	1207	1345
SPECIFIC GRAVITY	0.715	0.725	0.815

	INDEX 418 SAMPLE 5593	INDEX 419 SAMPLE 5594	INDEX 420 SAMPLE 2548
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	MCCLURE VALLEY	MCCLURE VALLEY	NOT GIVEN
WELL NAME	ALSO NO. 22-13X	ALSO NO. 22-13X	WISHON-WATSON CO. WELL
LOCATION	SEC. 13, T24S, R17E	SEC. 13, T24S, R17E	SEC. 7, T23S, R20E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	WISHON-WATSON CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/06/54	02/07/54	09/09/32
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	3551	3611	1241
WELLHEAD PRESSURE,PSIG	800	1500	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.6	96.6	97.1
ETHANE	1.8	1.8	1.0
PROPANE	0.9	0.8	---
N-BUTANE	TRACE	0.1	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	0.4	0.4	0.5
OXYGEN	TRACE	TRACE	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.9
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1038	1038	1002
SPECIFIC GRAVITY	0.575	0.575	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 421 SAMPLE 4119	INDEX 422 SAMPLE 4598	INDEX 423 SAMPLE 903
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	LOS ANGELES	LOS ANGELES
FIELD	TRICO	ALISO CANYON	DOMINGUEZ
WELL NAME	DISCOMBE COMMUNITY NO. 1	FREW NO. 1-5	CALLENDER NO. 1
LOCATION	SEC. 1, T24S, R22E	SEC. 29, T3N, R16W	SEC. 33, T3S, R13W
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	08/05/46	07/29/48	NOT GIVEN
SAMPLED	10/--/46	10/25/48	07/07/24
FORMATION	PLIO-	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	749	760	760
DEPTH, FEET	2468	8360	4090
WELLHEAD PRESSURE, PSIG	1130	3350	83
OPEN FLOW, MCFD	3000	300	887000
COMPONENT, MOLE PCT			
METHANE	99.2	82.2	64.6
ETHANE	0.0	16.8	33.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.6	1.2
OXYGEN	0.4	0.2	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1005	1134	1248
SPECIFIC GRAVITY	0.561	0.643	0.726

	INDEX 424 SAMPLE 904	INDEX 425 SAMPLE 905	INDEX 426 SAMPLE 1967
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	DOMINGUEZ	DOMINGUEZ	INGLEWOOD
WELL NAME	CALLENDER NO. 2	REYER NO. 4	BICKERS 1-3
LOCATION	SEC. 33, T3S, R13W	SEC. 33, T3S, R13W	SEC. 17, T2S, R14W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	NOT GIVEN	NOT GIVEN	03/17/25
SAMPLED	07/07/24	07/07/24	03/17/30
FORMATION	NOT GIVEN	NOT GIVEN	PLIO-VICKERS
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	4365	4355	1671
WELLHEAD PRESSURE, PSIG	87	32	NOT GIVEN
OPEN FLOW, MCFD	4752	5853	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.6	59.4	92.3
ETHANE	29.5	37.8	5.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	1.3	1.0
OXYGEN	0.6	0.8	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.9
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1224	1279	1025
SPECIFIC GRAVITY	0.709	0.753	0.591

	INDEX 427 SAMPLE 1968	INDEX 428 SAMPLE 1960	INDEX 429 SAMPLE 1961
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	INGLEWOOD	SANTA FE SPRINGS	SANTA FE SPRINGS
WELL NAME	RICKERS 1-16	WALKER NO. 11	WALKER NO. 19
LOCATION	SEC. 7, T2S, R14W	SEC. 6, T3S, R11W	SEC. 6, T3S, R11W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	NOT GIVEN	06/25/29	09/21/29
SAMPLED	02/11/30	03/14/30	03/15/30
FORMATION	PLIO-VICKERS & MACHADO	PLIO-OCONNELL	PLIO-CLARKE
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	1473	6296	7720
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.9	66.5	66.6
ETHANE	10.0	32.7	32.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.6	0.0	0.3
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.3	0.5	0.2
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1039	1260	1261
SPECIFIC GRAVITY	0.639	0.723	0.722

	INDEX 430 SAMPLE 1963	INDEX 431 SAMPLE 2681	INDEX 432 SAMPLE 5447
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	MADERA	MADERA
FIELD	SEAL BEACH	CHOWCHILLA	CHOWCHILLA
WELL NAME	NOT GIVEN	CHOWCHILLA NO. 1	REDMAN-STONE 1-7
LOCATION	NOT GIVEN	SEC. 7, T10S, R14E	SEC. 7, T10S, R14E
OWNER	STANDARD OIL CO. OF CALIF.	PURE OIL CO.	TIDEWATER ASSOC. OIL CO.
COMPLETED	NOT GIVEN	11/13/34	02/01/53
SAMPLED	03/17/30	11/20/34	04/17/53
FORMATION	PLIO-	CRET-	MIOC-ZILCH
GEOLOGIC PROVINCE CODE	760	745	745
DEPTH, FEET	4800	7765	2614
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3000	1050
OPEN FLOW, MCFD	NOT GIVEN	16000	1000
COMPONENT, MOLE PCT			
METHANE	64.6	39.0	88.2
ETHANE	12.0	1.8	TRACE
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	20.4	58.9	11.5
OXYGEN	2.9	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.00	0.02	0.02
HEATING VALUE*	869	427	894
SPECIFIC GRAVITY	0.716	0.808	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 433 SAMPLE 3801	INDEX 434 SAMPLE 3773	INDEX 435 SAMPLE 2704
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MADERA	MADERA
FIELD	GILL AREA HERMINGHAUS	MOFFAT AREA	NOT GIVEN
WELL NAME	GILL NO. 38-18	MOFFAT NO. 1-7	CHOWCHILLA NO. 1
LOCATION	SEC. 18, T13S, R16E	SEC. 7, T12S, R15E	SEC. 7, T10S, R14E
OWNER	SHELL OIL CO.	TEXAS CO.	PURE OIL CO.
COMPLETED	12/00/43	09/16/43	11/14/34
SAMPLED	04/14/44	04/05/44	05/21/35
FORMATION	EOCE-M	EOCE-DOMENGINE	CRET-
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	4410	3920	7768
WELLHEAD PRESSURE,PSIG	1405	1750	1440
OPEN FLOW, MCFD	NOT GIVEN	6000	10000
COMPONENT, MOLE PCT			
METHANE	88.6	91.2	38.5
ETHANE	1.4	0.0	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.5	8.3	59.0
OXYGEN	0.4	0.4	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.00	0.00	0.00
HEATING VALUE*	923	924	424
SPECIFIC GRAVITY	0.604	0.592	0.811

	INDEX 436 SAMPLE 11190	INDEX 437 SAMPLE 2529	INDEX 438 SAMPLE 14313
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MENDOCINO	MERCED	MERCED
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	EEL-GLENN NO. 9-CORE HOLE	GEO. BLOSS	PACHECO TUNNEL
LOCATION	SEC. 1, T21N, R10W	SEC. 14, T8S, R13E	SEC. 14, T10S, R7E
OWNER	CALIF. DEPT. WATER RESOURCES	SAN JOAQUIN LIGHT & POWER CO	U.S. BUREAU OF RECLAMATION
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	03/26/75
FORMATION	JURA-& CRET-FRANCISCAN	NOT GIVEN	JURA-CRET-FRANCISCAN
GEOLOGIC PROVINCE CODE	725	745	745
DEPTH, FEET	1350	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.5	71.3	35.1
ETHANE	0.1	0.6	0.1
PROPANE	0.1	---	TRACE
N-BUTANE	0.0	---	TRACE
ISOBUTANE	0.0	---	0.1
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	TRACE
NITROGEN	5.1	27.5	63.6
OXYGEN	0.0	0.3	0.0
ARGON	0.1	---	0.0
HYDROGEN	4.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.06	0.01	0.01
HEATING VALUE*	934	733	365
SPECIFIC GRAVITY	0.558	0.676	0.834

	INDEX 439 SAMPLE 15739	INDEX 440 SAMPLE 15969	INDEX 441 SAMPLE 4603
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MERCED	MERCED	MONTEREY
FIELD	NOT GIVEN	O'NEILL FOREBAY DAM	SAN ARDO
WELL NAME	GAS SEEP IN LAKE	GAS SEEP	FERRINI NO. 73
LOCATION	SEC. 18, T10S, R9E	DOWNSTREAM OF DAM	SEC. 11, T23S, R10E
OWNER	U.S. GOVERNMENT	U.S. GOVERNMENT	JERGINS OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/02/48
SAMPLED	08/28/79	05/08/80	10/21/48
FORMATION	PLIO-PLEISTOCENE	-ALLUVIAN	MIOC-U
GEOLOGIC PROVINCE CODE	745	745	740
DEPTH, FEET	NOT GIVEN	2	1954
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	875
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	100
COMPONENT, MOLE PCT			
METHANE	40.8	1.1	94.2
ETHANE	0.1	0.1	2.7
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	54.8	94.7	0.1
OXYGEN	0.0	0.0	0.3
ARGON	0.7	0.8	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	3.6	3.0	2.7
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	415	21	1003
SPECIFIC GRAVITY	0.822	0.985	0.596

	INDEX 442 SAMPLE 955	INDEX 443 SAMPLE 1624	INDEX 444 SAMPLE 7647
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	NAPA	ORANGE	ORANGE
FIELD	BERRYESSA	HUNTINGTON BEACH	SUNSET BEACH
WELL NAME	NO. 5	NOT GIVEN	BOARD OF SUPERVISORS NO. 1
LOCATION	SEC. 7, T8N, R3W	NOT GIVEN	SEC. 29, T5S, R11W
OWNER	GRIFFITHS OIL CO.	MIDWAY GAS CO.	GOLDEN WEST OIL CORP.
COMPLETED	DRILL STEM TEST	NOT GIVEN	10/21/55
SAMPLED	12/24/24	03/23/28	08/12/60
FORMATION	CRET-	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	725	760	760
DEPTH, FEET	3360	NOT GIVEN	7720
WELLHEAD PRESSURE,PSIG	160	60	1800
OPEN FLOW, MCFD	2000	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	96.1	67.3	71.3
ETHANE	0.0	24.4	6.5
PROPANE	---	---	7.6
N-BUTANE	---	---	4.5
ISOBUTANE	---	---	0.9
N-PENTANE	---	---	1.4
ISOPENTANE	---	---	2.2
CYCLOPENTANE	---	---	1.7
HEXANES PLUS	---	---	1.6
NITROGEN	2.7	3.9	0.0
OXYGEN	0.7	0.9	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	3.5	2.2
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	973	1119	1518
SPECIFIC GRAVITY	0.573	0.730	0.906

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 445 SAMPLE 7661	INDEX 446 SAMPLE 2555	INDEX 447 SAMPLE 5464
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	ORANGE	RIVERSIDE	SACRAMENTO
FIELD	YORBA LINDA	NOT GIVEN	FREEPORT
WELL NAME	MID CONTINENT NO. 3A	FACEMEYER	SIMS COMMUNITY NO. 1
LOCATION	SEC. 16, T3S, R9W	SEC. 35, T3S, R2W	SEC. 19, T7N, R5E
OWNER	MID COUNTIES OIL CORP.	FACEMEYER	STANDARD OIL CO. OF CALIF.
COMPLETED	10/30/56	02/--/32	05/22/52
SAMPLED	08/18/60	10/07/32	05/01/53
FORMATION	PLIO-L	NOT GIVEN	CRET-
GEOLOGIC PROVINCE CODE	760	645	730
DEPTH, FEET	2560	NOT GIVEN	5778
WELLHEAD PRESSURE,PSIG	610	NOT GIVEN	1881
OPEN FLOW, MCFD	300	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	86.2	91.7	87.8
ETHANE	0.6	0.0	0.6
PROPANE	0.0	---	0.6
N-BUTANE	0.1	---	0.0
ISOBUTANE	0.3	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	1.3	4.7	11.0
OXYGEN	0.2	0.6	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	11.0	3.0	0.0
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	907	929	916
SPECIFIC GRAVITY	0.681	0.606	0.609

	INDEX 448 SAMPLE 4912	INDEX 449 SAMPLE 4917	INDEX 450 SAMPLE 10294
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SACRAMENTO
FIELD	ISLETON	ISLETON	POPPY RIDGE
WELL NAME	GARDINER NO. 1	MARIA NO. 1	ATKISON NO. 1
LOCATION	SEC. 35, T4N, R3E	SEC. 3, T3N, R3E	SEC. 9, T6N, R5E
OWNER	BRAZOS OIL & GAS CO.	BRAZOS OIL & GAS CO.	MILON L. JOHNSTON
COMPLETED	05/18/48	07/14/48	01/01/62
SAMPLED	05/29/50	05/29/50	11/11/65
FORMATION	PLIO-CAPAY	EOCE-MIDLAND	-F ZONE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4494	4595	7300
WELLHEAD PRESSURE,PSIG	1700	1623	2600
OPEN FLOW, MCFD	1000	500	2500
COMPONENT, MOLE PCT			
METHANE	94.6	94.2	72.4
ETHANE	2.6	2.8	0.3
PROPANE	0.6	0.7	0.0
N-BUTANE	0.1	0.4	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	1.6	1.4	27.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1031	1054	7390
SPECIFIC GRAVITY	0.584	0.598	0.669

	INDEX 451 SAMPLE 10944	INDEX 452 SAMPLE 7088	INDEX 453 SAMPLE 1620
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SAN BERNARDINO
FIELD	SHERMAN ISLAND	WALNUT GROVE	BREA
WELL NAME	REYNOLDS UNIT 1 NO. 4	FONG UNIT NO. 1	NOT GIVEN
LOCATION	SEC. 2, T2N, R2E	SEC. 2, T4N, R4E	NOT GIVEN
OWNER	OCCIDENTAL PETROLEUM CORP.	BRAZOS OIL & GAS CO.	MIDWAY GAS CO.
COMPLETED	09/14/66	04/19/59	NOT GIVEN
SAMPLED	04/16/67	06/04/59	03/23/28
FORMATION	PALE-ANDERSON	EOCE-MEGANOS	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	640
DEPTH, FEET	6105	4566	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2450	1800	250
OPEN FLOW, MCFD	6842	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.7	95.4	66.3
ETHANE	1.8	0.2	31.7
PROPANE	0.5	0.0	---
N-BUTANE	0.2	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	3.3	4.4	1.2
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1018	970	1240
SPECIFIC GRAVITY	0.594	0.575	0.723

	INDEX 454 SAMPLE 9536	INDEX 455 SAMPLE 10429	INDEX 456 SAMPLE 3751
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN BERNARDINO	SAN JOAQUIN	SAN JOAQUIN
FIELD	NOT GIVEN	BOULDIN ISLAND	LODI
WELL NAME	NOT GIVEN	WEST CAL. CAN. NO. 6	COMMUNITY 9 NO. 1
LOCATION	SEC. 11, T1N, R4W	SEC. 7, T3N, R4E	SEC. 9, T4N, R7E
OWNER	CAMPUS CRUSADE FOR CHRIST	SIGNAL OIL & GAS CO.	AMERADA PETROLEUM CORP.
COMPLETED	05/--/63	10/01/65	04/03/43
SAMPLED	08/13/64	02/28/66	04/01/44
FORMATION	NOT GIVEN	EOCE-CAPAY	EOCE-DOMENGINE
GEOLOGIC PROVINCE CODE	640	730	730
DEPTH, FEET	NOT GIVEN	4300	2240
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1725	934
OPEN FLOW, MCFD	NOT GIVEN	3800	5000
COMPONENT, MOLE PCT			
METHANE	0.3	92.4	71.7
ETHANE	0.0	0.4	2.8
PROPANE	0.0	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	98.1	7.1	25.1
OXYGEN	0.0	0.0	0.4
ARGON	1.4	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.15	0.01	0.00
HEATING VALUE*	3	946	777
SPECIFIC GRAVITY	0.972	0.587	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 457 SAMPLE 3753	INDEX 458 SAMPLE 7599	INDEX 459 SAMPLE 7600
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	LODI	MCMULLIN RANCH	MCMULLIN RANCH
WELL NAME	COMMUNITY 10 NO. 1	SIGNET-WHITING 66-23	SIGNET-PERRIN 33-25
LOCATION	SEC. 10, T4N, R7E	SEC. 23, T2S, R6E	SEC. 25, T2S, R6E
OWNER	AMERADA PETROLEUM CORP.	GREAT BASINS PETROLEUM CO.	GREAT BASINS PETROLEUM CO.
COMPLETED	06/15/43	05/05/60	05/27/60
SAMPLED	04/01/44	07/10/60	07/10/60
FORMATION	EOCE-DOMENGINE	CRET-TRACY 1ST	CRET-TRACY 1ST
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2300	5925	5266
WELLHEAD PRESSURE,PSIG	935	2400	2200
OPEN FLOW, MCFD	5000	5000	10000
COMPONENT, MOLE PCT			
METHANE	75.0	84.8	84.9
ETHANE	0.0	0.7	0.7
PROPANE	---	0.6	0.1
N-BUTANE	---	TRACE	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	24.7	13.4	13.8
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.2	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	760	897	889
SPECIFIC GRAVITY	0.658	0.622	0.623

	INDEX 460 SAMPLE 2549	INDEX 461 SAMPLE 2715	INDEX 462 SAMPLE 11445
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	NOT GIVEN	NOT GIVEN	RIPON W
WELL NAME	SAN JOAQUIN LIGHT&POWER CO.	F.O.L. NO. 2	ALPINE-GREAT BASIN NO. 1-28
LOCATION	CITY OF STOCKTON	SEC. 15, T2S, R5E	SEC. 28, T2S, R7E
OWNER	PACIFIC GAS & ELECTRIC CO.	AMERADA PETROLEUM CORP.	GREAT BASINS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	12/29/67
SAMPLED	09/12/32	12/13/35	04/10/68
FORMATION	NOT GIVEN	CRET-TRACY	CRET-BLEWETT
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	3000	4003	5125
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1559	2040
OPEN FLOW, MCFD	NOT GIVEN	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	86.2	85.6
ETHANE	1.0	3.0	0.8
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	30.1	10.6	12.6
OXYGEN	2.1	0.2	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.0	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	687	927	907
SPECIFIC GRAVITY	0.703	0.614	0.624

	INDEX 463 SAMPLE 10858	INDEX 464 SAMPLE 7449	INDEX 465 SAMPLE 9216
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	ROBERTS ISLAND	STATEN ISLAND	STATEN ISLAND
WELL NAME	DE CARLI NO. 2-3	M&T NO. 2	MILTON & TOWNE A NO. 1
LOCATION	SEC. 3, T1N, R5E	SEC. 14, T4N, R4E	SEC. 13, T4N, R4E, MDB&M SUR
OWNER	ARCADY OIL CO.	SUNRAY-BRAZOS-VISTARIO	BRAZOS OIL & GAS CO.
COMPLETED	NOT GIVEN	08/10/59	08/18/63
SAMPLED	01/31/67	02/14/60	01/07/64
FORMATION	-DE CARLI	PENN-WEWOKA M	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6496	4096	8463
WELLHEAD PRESSURE,PSIG	2500	1625	3365
OPEN FLOW, MCFD	NOT GIVEN	8600	28000
COMPONENT, MOLE PCT			
METHANE	92.4	92.5	90.5
ETHANE	0.5	0.2	0.5
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.0	7.0	8.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	948	941	928
SPECIFIC GRAVITY	0.587	0.584	0.595

	INDEX 466 SAMPLE 2731	INDEX 467 SAMPLE 3752	INDEX 468 SAMPLE 14626
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	STOCKTON	THORNTON	UNION ISLAND
WELL NAME	MCDONALD ISL. FARMS NO. 1	MCGILLIVRAY COMM. NO. 1	YAMADA NO. 1
LOCATION	SEC. 25, T2N, R4E	SEC. 29, T5N, R5E	SEC. 16, T1S, R5E
OWNER	STANDARD OIL CO. OF CALIF.	AMERADA PETROLEUM CORP.	UNION OIL CO. OF CALIFORNIA
COMPLETED	05/30/36	03/08/44	03/--/75
SAMPLED	09/16/36	04/01/44	04/01/76
FORMATION	EOCE-	EOCE-CAPAY	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	5176	3333	10000
WELLHEAD PRESSURE,PSIG	2086	1382	4250
OPEN FLOW, MCFD	26647	5000	7000
COMPONENT, MOLE PCT			
METHANE	93.6	92.2	87.0
ETHANE	0.0	0.9	0.4
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	5.5	6.7	11.4
OXYGEN	0.7	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	948	950	891
SPECIFIC GRAVITY	0.583	0.588	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 469 SAMPLE 11237	INDEX 470 SAMPLE 2764	INDEX 471 SAMPLE 1970
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN LUIS OBISPO	SANTA BARBARA
FIELD	VERNALIS	TEMBOR	ELWOOD
WELL NAME	NAVARRA NO. 1	TEMBOR OIL CO. NO. 1	BLUE GOOSE
LOCATION	SEC. 29, T3S, R6E	SEC. 22, T31S, R21E	SEC. 16, T4N, R29W
OWNER	W. F. STRANGMAN	STANDARD OIL CO. OF CALIF.	STANDARD GASOLINE CO.
COMPLETED	NOT GIVEN	NOT GIVEN	11/16/29
SAMPLED	12/06/67	09/04/37	03/18/30
FORMATION	NOT GIVEN	MIOC-VAQUEROS	MIOC-VAQUEROS
GEOLOGIC PROVINCE CODE	730	740	750
DEPTH, FEET	NOT GIVEN	3045	3435
WELLHEAD PRESSURE,PSIG	NOT GIVEN	165	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	18	2500
COMPONENT, MOLE PCT			
METHANE	88.7	76.8	56.8
ETHANE	0.6	18.9	42.3
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	10.4	3.5	0.4
OXYGEN	0.1	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	912	1117	1333
SPECIFIC GRAVITY	0.603	0.668	0.769

	INDEX 472 SAMPLE 2565	INDEX 473 SAMPLE 14419	INDEX 474 SAMPLE 2771
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SHASTA	SISKIYOU
FIELD	GOLETA	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 1	DRAINAGE HOLE	GAS SEEPAGE
LOCATION	SEC. 21, T4N, R28W	WHISKEYTOWN DAMSITE	SEC. 24, T47N, R5W
OWNER	GEN. PET. CORP. OF CALIF.	U.S. BUREAU OF RECLAMATION	NOT GIVEN
COMPLETED	07/14/32	--/--/65	NOT GIVEN
SAMPLED	10/18/32	07/23/75	11/01/37
FORMATION	NOT GIVEN	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	715	715
DEPTH, FEET	4182	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1680	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	58000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	68.4	0.0
ETHANE	8.5	0.1	0.0
PROPANE	---	TRACE	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	0.2	30.7	4.2
OXYGEN	0.7	0.0	0.2
ARGON	---	0.3	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	TRACE	---
CARBON DIOXIDE	0.0	0.5	95.6
HELIUM	0.00	0.01	0.00
HEATING VALUE*	1070	695	0
SPECIFIC GRAVITY	0.601	0.694	1.505

	INDEX 475 SAMPLE 4011	INDEX 476 SAMPLE 4613	INDEX 477 SAMPLE 11106
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	CACHE SLOUGH AREA	DENVERTON	DENVERTON
WELL NAME	CAL. PAC. CORP. NO. 2	PETERSON NO. 1	LAMBIE NO. 1
LOCATION	SEC. 6, T4N, R3E	SEC. 25, T5N, R1W	SEC. 9, T4N, R1E
OWNER	STANDARD OIL CO. OF CALIF.	HONOLULU OIL CORP.	MOBIL OIL CORP.
COMPLETED	03/02/45	08/27/48	08/13/67
SAMPLED	04/26/45	11/02/48	09/08/67
FORMATION	EOCE-MIDLAND	EOCE-L	EOCE-ANDERSON-WAGENET
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4810	1425	8587
WELLHEAD PRESSURE,PSIG	1598	900	2810
OPEN FLOW, MCFD	10000	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	90.2	68.2	91.5
ETHANE	3.6	18.5	2.6
PROPANE	---	---	0.9
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	6.0	13.0	3.7
OXYGEN	0.2	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.3	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	978	1022	1032
SPECIFIC GRAVITY	0.598	0.703	0.612

	INDEX 478 SAMPLE 4010	INDEX 479 SAMPLE 4371	INDEX 480 SAMPLE 11302
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	KIRBY HILL	KIRBY HILL	LINDSEY SLOUGH
WELL NAME	LAMBIE NO. 1A	WAGENET NO. 2	PETERSEN ESTATE NO. 2
LOCATION	SEC. 24, T4N, R1W	SEC. 19, T4N, R1E	SEC. 34, T5N, R2E
OWNER	SHELL OIL CO.	SHELL OIL CO.	AMERADA PETROLEUM CORP.
COMPLETED	01/10/45	04/30/47	NOT GIVEN
SAMPLED	04/13/45	10/13/47	NOT GIVEN
FORMATION	EOCE-	EOCE-	CRET-PETERSON
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2273	5398	9057
WELLHEAD PRESSURE,PSIG	1128	2360	NOT GIVEN
OPEN FLOW, MCFD	3980	17500	4728
COMPONENT, MOLE PCT			
METHANE	97.0	89.1	90.7
ETHANE	0.4	5.9	3.9
PROPANE	---	---	1.3
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.1
NITROGEN	1.3	4.5	2.5
OXYGEN	0.8	0.3	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.2	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	990	1008	1069
SPECIFIC GRAVITY	0.571	0.606	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 481 SAMPLE 11303	INDEX 482 SAMPLE 15996	INDEX 483 SAMPLE 4226
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	LINDSEY SLOUGH	LINDSEY SLOUGH	MAINE PRAIRIE
WELL NAME	PETERSEN ESTATE NO. 2	HASTING RANCH NO.1-21	I & L WINEMAN
LOCATION	SEC. 34, T5N, R2E	SEC. 21, T 5N, R 2E	SEC. 26, T6N, R2E
OWNER	AMERADA PETROLEUM CORP.	MCOR OIL & GAS CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	01/28/80	03/02/45
SAMPLED	NOT GIVEN	06/27/80	12/27/46
FORMATION	-K-1 ZONE	CRET-PETERSON	EOCE-CAPAY
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	10122	9335	4763
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3250	1911
OPEN FLOW, MCFD	5232	16000	6000
COMPONENT, MOLE PCT			
METHANE	86.7	91.7	97.3
ETHANE	4.2	4.3	0.6
PROPANE	1.4	1.5	---
N-BUTANE	0.4	0.3	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.6	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	5.2	1.4	1.4
OXYGEN	0.8	TRACE	0.3
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1045	1083	996
SPECIFIC GRAVITY	0.643	0.615	0.569

	INDEX 484 SAMPLE 10620	INDEX 485 SAMPLE 10621	INDEX 486 SAMPLE 11471
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	MAINE PRAIRIE	MAINE PRAIRIE	MILLAR W
WELL NAME	MILLER UNIT NO. 1	MILLER UNIT NO. 1	CAMPBELL RANCH NO. 1
LOCATION	SEC. 3, T5N, R2E	SEC. 3, T5N, R2E	SEC. 4, T6N, R2E
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	09/10/65	09/10/65	10/25/68
SAMPLED	06/13/66	06/13/66	05/09/68
FORMATION	EOCE-MARTINEZ	CRET-MARTINEZ	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6550	6425	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2142	2255	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	91.1	93.1
ETHANE	3.7	3.8	1.8
PROPANE	1.4	1.5	TRACE
N-BUTANE	0.4	0.3	0.0
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.5	0.3	0.0
CYCLOPENTANE	0.3	0.3	0.0
HEXANES PLUS	0.4	0.3	0.0
NITROGEN	2.0	1.9	4.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1098	1090	976
SPECIFIC GRAVITY	0.630	0.624	0.584

	INDEX 487 SAMPLE 2730	INDEX 488 SAMPLE 11424	INDEX 489 SAMPLE 11212
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	RIO VISTA	RIO VISTA	SHERMAN ISLAND
WELL NAME	EMIGH NO. 1	EMIGH NO. 12	DECKER ISLAND UNIT 1, NO. 2
LOCATION	SEC. 26, T4N, R2E	SEC. 27, T4N, R2E	SEC. 27, T3N, R2E
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	SIGNAL OIL & GAS CO.
COMPLETED	06/18/36	01/15/68	09/17/66
SAMPLED	09/16/36	03/29/68	11/06/67
FORMATION	EOCE-EMIGH	CRET-MCCORMICK	EOCE-ANDERSON
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4278	NOT GIVEN	6165
WELLHEAD PRESSURE,PSIG	1724	2500	2250
OPEN FLOW, MCFD	81255	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.7	93.2	93.3
ETHANE	3.1	3.4	1.9
PROPANE	---	1.0	0.5
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.6	1.5	3.3
OXYGEN	0.4	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1015	1062	1028
SPECIFIC GRAVITY	0.581	0.603	0.600

	INDEX 490 SAMPLE 11213	INDEX 491 SAMPLE 3749	INDEX 492 SAMPLE 2434
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	STANISLAUS
FIELD	SHERMAN ISLAND	WILDCAT	WATERFORD
WELL NAME	DECKER ISLAND UNIT 1, NO. 1	S. O. HONKER COMM. 1-A	WATERFORD NO. 1
LOCATION	SEC. 27, T3N, R2E	SEC. 25, T3N, R1W	SEC. 34, T3S, R11E
OWNER	SIGNAL OIL & GAS CO.	STANDARD OIL CO. OF CALIF.	J. A. WENGER & ASSOCIATES
COMPLETED	09/17/66	NOT GIVEN	NOT GIVEN
SAMPLED	11/06/67	03/29/44	11/09/31
FORMATION	EOCE-HAMILTON	EOCE-	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	745
DEPTH, FEET	6165	7190	390
WELLHEAD PRESSURE,PSIG	2250	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	88.2	46.8
ETHANE	1.3	7.1	0.5
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	3.5	3.9	51.5
OXYGEN	0.0	0.3	0.6
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.5	0.6
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	985	1021	483
SPECIFIC GRAVITY	0.574	0.612	0.779

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 493 SAMPLE 2616	INDEX 494 SAMPLE 2747	INDEX 495 SAMPLE 11363
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SUTTER	SUTTER	SUTTER
FIELD	MARYSVILLE BUTTES	MARYSVILLE BUTTES	SUTTER BUTTES
WELL NAME	BUTTES NO. 1	SOPHIA DAVIS NO. 1	BUTTES COMMUNITY 2 NO. 81
LOCATION	SEC. 35, T16N, R1E	SEC. 2, T15N, R1E	SEC. 31, T15N, R1E
OWNER	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.	SANTA FE DRILLING CO.
COMPLETED	02/02/33	02/09/33	09/02/67
SAMPLED	04/18/33	03/12/37	03/03/68
FORMATION	CRET-CHICO	CRET-CHICO	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2100	2450	6390
WELLHEAD PRESSURE,PSIG	1235	1420	4000
OPEN FLOW, MCFD	3061	3425	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	82.5	97.2
ETHANE	0.8	0.0	0.3
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.8	13.3	2.4
OXYGEN	0.8	3.9	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	992	836	990
SPECIFIC GRAVITY	0.571	0.634	0.565

	INDEX 496 SAMPLE 3984	INDEX 497 SAMPLE 4056	INDEX 498 SAMPLE 4057
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING	CORNING	CORNING
WELL NAME	SALDUBEHERE NO. 1	SALDUBEHERE NO. 1	SALDUBEHERE NO. 1
LOCATION	SEC. 12, T24N, R3W	SEC. 12, T24N, R3W	SEC. 12, T24N, R3W
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	10/21/44	10/21/45	10/21/45
SAMPLED	01/10/45	08/31/45	08/31/45
FORMATION	PLIO-TEHAMA	PLIO-TEHAMA	PLIO-TEHAMA
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1387	1070	1070
WELLHEAD PRESSURE,PSIG	660	560	670
OPEN FLOW, MCFD	17	17000	17000
COMPONENT, MOLE PCT			
METHANE	74.6	66.7	75.0
ETHANE	24.4	3.9	1.1
PROPANE	---	---	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	29.2	23.8
OXYGEN	0.6	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.00	0.03	0.01
HEATING VALUE*	1193	746	779
SPECIFIC GRAVITY	0.682	0.696	0.659

	INDEX 499 SAMPLE 5250	INDEX 500 SAMPLE 5251	INDEX 501 SAMPLE 5252
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING	CORNING	CORNING
WELL NAME	CORNING COMMUNITY NO. 1A	CORNING COMMUNITY NO. 1-A	CORNING COMMUNITY NO. 1
LOCATION	SEC. 1, T24N, R6W	SEC. 1, T24N, R3W	SEC. 1, T24N, R3W
OWNER	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.
COMPLETED	07/09/49	07/09/49	06/12/49
SAMPLED	05/24/52	05/24/52	05/24/52
FORMATION	PLIO-TEHAMA	PLIO-TEHAMA	PLIO-TEHAMA
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1427	1427	1407
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	16760	16760	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	75.1	75.6
ETHANE	0.0	TRACE	0.0
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	24.5	24.8	24.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.01	0.10	0.01
HEATING VALUE*	770	761	766
SPECIFIC GRAVITY	0.660	0.658	0.655

	INDEX 502 SAMPLE 5253	INDEX 503 SAMPLE 5258	INDEX 504 SAMPLE 10557
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING	CORNING S	CORNING S
WELL NAME	CORNING COMMUNITY NO. 1	WELL NO. 8	BITHELL ESTATE UNIT NO. 1
LOCATION	SEC. 1, T24N, R3W	SEC. 31, T24N, R2W	SEC. 12, T23N, R3W
OWNER	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.	BUTTES GAS & OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/20/66
SAMPLED	05/24/52	06/25/52	05/02/66
FORMATION	PLIO-TEHAMA	NOT GIVEN	CRET-KIONE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1407	NOT GIVEN	2446
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1010
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	84.8	94.8
ETHANE	TRACE	0.1	0.0
PROPANE	TRACE	0.1	0.0
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	24.5	14.7	5.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.01	0.02	0.01
HEATING VALUE*	769	867	960
SPECIFIC GRAVITY	0.661	0.620	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 505 SAMPLE 11098	INDEX 506 SAMPLE 11099	INDEX 507 SAMPLE 16084
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	RICE CREEK	RICE CREEK	RICE CREEK E
WELL NAME	LEPP NO. 1	ZIMMERMAN A-1	BETTENCOURT NO.1
LOCATION	NOT GIVEN	SEC. 23, T23N, R3W	SEC. 28, T23N, R2W
OWNER	MCCULLOCH OIL CORP. OF CALIF	MCCULLOCH OIL CORP. OF CALIF	OXY PETROLEUM, INC.
COMPLETED	08/01/66	07/01/66	NOT GIVEN
SAMPLED	09/07/67	09/07/67	09/29/80
FORMATION	CRET-FORBES	CRET-FORBES	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4946
WELLHEAD PRESSURE,PSIG	2390	NOT GIVEN	2220
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2762
COMPONENT, MOLE PCT			
METHANE	96.3	97.5	94.5
ETHANE	0.2	0.2	0.4
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	2.8	1.9	4.8
OXYGEN	0.6	0.4	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.01	0.04	0.02
HEATING VALUE*	979	991	964
SPECIFIC GRAVITY	0.570	0.565	0.575

	INDEX 508 SAMPLE 4089	INDEX 509 SAMPLE 3930	INDEX 510 SAMPLE 2221
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TULARE	VENTURA	VENTURA
FIELD	TRICO	NOT GIVEN	PIRU
WELL NAME	ATWELL ISLAND COMM. NO. 1	LEONARD WELL	SNOW NO. 1-A
LOCATION	SEC. 7, T24S, R23E	NOT GIVEN	SEC. 4, T4N, R18W
OWNER	STANDARD OIL CO. OF CALIF.	JAMES LEONARD INVESTMENT CO.	BOLSA CHICA OIL CORP.
COMPLETED	10/14/45	03--/44	08/19/30
SAMPLED	10/15/45	09/20/44	10/20/30
FORMATION	PLIO-SAN JOAQUIN M	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	745	755	755
DEPTH, FEET	3168	428	2496
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	24000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.2	64.8	73.1
ETHANE	1.4	---	12.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	33.1	0.6
OXYGEN	0.0	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	2.0	14.2
HELIUM	0.00	0.02	0.00
HEATING VALUE*	1020	656	957
SPECIFIC GRAVITY	0.565	0.711	0.756

	INDEX 511 SAMPLE 1621	INDEX 512 SAMPLE 1623	INDEX 513 SAMPLE 10716
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	YOLO
FIELD	VENTURA	VENTURA	CLARKSBURG
WELL NAME	NOT GIVEN	NOT GIVEN	SHERMAN UNIT NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 32, T7N, R4E
OWNER	VENTURA FUEL CO.	MIDWAY GAS CO.	OCCIDENTAL PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	06/20/66
SAMPLED	03/23/28	NOT GIVEN	09/12/66
FORMATION	NOT GIVEN	NOT GIVEN	CRET-FORBES
GEOLOGIC PROVINCE CODE	755	755	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	11064
WELLHEAD PRESSURE,PSIG	350	375	4050
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1122
COMPONENT, MOLE PCT			
METHANE	81.9	82.9	87.2
ETHANE	17.5	16.5	0.4
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.1	0.2	12.1
OXYGEN	0.2	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	1143	1135	894
SPECIFIC GRAVITY	0.645	0.641	0.610

	INDEX 514 SAMPLE 10921	INDEX 515 SAMPLE 4432	INDEX 516 SAMPLE 4599
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	CLARKSBURG	DUNNIGAN HILLS	DUNNIGAN HILLS
WELL NAME	PARSONS UNIT ONE NO. 1	DONAHUE NO. 1	HERMLE NO. 1
LOCATION	SEC. 24, T7N, R3E	SEC. 22, T11N, R1W	SEC. 22, T11N, R1W
OWNER	OCCIDENTAL PETROLEUM CORP.	SUPERIOR OIL CO.	STANDARD OIL CO. OF CALIF.
COMPLETED	11/05/66	01/20/48	07/29/48
SAMPLED	NOT GIVEN	01/24/48	10/28/48
FORMATION	CRET-WINTERS	EOCE-	-HERMLE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	7300	2480	2472
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1075	900
OPEN FLOW, MCFD	5102	5000	3450
COMPONENT, MOLE PCT			
METHANE	87.3	93.7	94.3
ETHANE	0.8	0.7	0.5
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	11.7	5.0	4.7
OXYGEN	TRACE	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	901	962	964
SPECIFIC GRAVITY	0.609	0.583	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 517 SAMPLE 4877	INDEX 518 SAMPLE 9909	INDEX 519 SAMPLE 10694
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	DUNNIGAN HILLS	FAIRFIELD KNOLLS	GREEN UNIT
WELL NAME	DUNNIGAN UNIT NO. 1	CORCORAN 33-4	GREEN UNIT NO. 2
LOCATION	SEC. 27, T11N, R1W	SEC. 33, T9N, R1E	SEC. 21, T6N, R4E
OWNER	TEXAS CO.	FRANCO WESTERN OIL CO.	UNION OIL CO. OF CALIF.
COMPLETED	09/27/47	04/01/64	04/24/66
SAMPLED	04/29/50	05/26/65	08/09/66
FORMATION	CRET-U	CRET-	-COURTLAND
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2630	5187	7400
WELLHEAD PRESSURE,PSIG	1080	1918	2900
OPEN FLOW, MCFD	750	23200	10000
COMPONENT, MOLE PCT			
METHANE	94.9	90.7	87.5
ETHANE	0.1	0.5	1.3
PROPANE	0.1	0.1	0.5
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	4.6	8.6	10.6
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	974	9300	923
SPECIFIC GRAVITY	0.581	0.593	0.610

	INDEX 520 SAMPLE 4680	INDEX 521 SAMPLE 4801	INDEX 522 SAMPLE 12145
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	PLEASANT CREEK	PLEASANT CREEK	SAXON
WELL NAME	UNIT NO. 3-1	UNIT NO. 4-1	H&C-GLIDE COLBY NO. 5
LOCATION	SEC. 8, T8N, R1W	SEC. 8, T8N, R1W	SEC. 29, T7N, R3E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SIGNAL OIL & GAS CO.
COMPLETED	12/22/48	06/29/49	09/02/69
SAMPLED	02/10/49	10/02/49	11/13/69
FORMATION	CRET-U	CRET-	CRET-STARKEY
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2783	2712	6260
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1259	2412
OPEN FLOW, MCFD	9500	9900	4800
COMPONENT, MOLE PCT			
METHANE	90.4	92.2	77.9
ETHANE	0.3	0.3	0.7
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	8.5	6.9	19.9
OXYGEN	0.4	TRACE	1.1
ARGON	TRACE	0.0	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	924	951	807
SPECIFIC GRAVITY	0.596	0.592	0.650

	INDEX 523 SAMPLE 13189	INDEX 524 SAMPLE 11161	INDEX 525 SAMPLE 11833
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	SAXON	TODHUNTER LAKE	TODHUNTER LAKE
WELL NAME	H&C-GLIDE NO. 1	REAVIS & BAKER NO. 1	I.O.C. NO. 1
LOCATION	SEC. 17, T7N, R3E	SEC. 33, T9N, R3E	SEC. 27, T9N, R3E
OWNER	SIGNAL OIL & GAS CO.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	11/04/71	06/01/67	04/25/69
SAMPLED	04/11/72	10/11/67	04/25/69
FORMATION	CRET-WINTERS	CRET-STARKEY	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6817	3993	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2657	1650	1550
OPEN FLOW, MCFD	2600	4750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	86.6	87.0
ETHANE	0.8	0.2	0.0
PROPANE	0.2	0.1	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	12.9	12.9	12.9
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	892	884	881
SPECIFIC GRAVITY	0.614	0.611	0.607

	INDEX 526 SAMPLE 4228	INDEX 527 SAMPLE 5271	INDEX 528 SAMPLE 13634
STATE	CALIFORNIA	CALIFORNIA	COLORADO
COUNTY	YOLO	YOLO	ADAMS
FIELD	WINTERS	WINTERS	AMBUSH
WELL NAME	UNIT 1-1	WINTERS COMMUNITY NO. 1	CHAMPLIN 75 AMOCO C NO. 1
LOCATION	SEC. 19, T8N, R1E	SEC. 13, T8N, R1W	SEC. 19, T2S, R64W
OWNER	SHELL OIL CO.	MOHAWK PETROLEUM CORP.	AMOCO PRODUCTION CO.
COMPLETED	09/30/46	06/21/52	04/22/73
SAMPLED	02/28/47	07/20/52	06/22/73
FORMATION	EOCE	CRET-MCCUNE	CRET-MUDDY J
GEOLOGIC PROVINCE CODE	730	730	540
DEPTH, FEET	4960	5000	8006
WELLHEAD PRESSURE,PSIG	2030	NOT GIVEN	1825
OPEN FLOW, MCFD	4500	NOT GIVEN	2306
COMPONENT, MOLE PCT			
METHANE	87.4	83.4	74.4
ETHANE	2.5	1.4	12.1
PROPANE	---	0.2	5.8
N-BUTANE	---	0.0	1.4
ISOBUTANE	---	0.0	0.9
N-PENTANE	---	0.0	0.4
ISOPENTANE	---	0.1	0.6
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	TRACE	0.4
NITROGEN	9.0	14.9	1.9
OXYGEN	0.5	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	TRACE	1.8
HELIUM	0.01	0.02	0.03
HEATING VALUE*	930	879	1269
SPECIFIC GRAVITY	0.613	0.627	0.765

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 529 SAMPLE 5672	INDEX 530 SAMPLE 15008	INDEX 531 SAMPLE 10457
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	BEACON	CHIEFTAN	DEER TRAIL
WELL NAME	COORDES	AMOCO CHAMPLIN NO. 67D-1	LEASURE NO. 1
LOCATION	SEC. 7, T1S, R57W	SEC. 21, T2S, R63W	SEC. 24, T2S, R6W
OWNER	LION OIL CO.	AMOCO PRODUCTION CO.	PETROLEUM INC.
COMPLETED	05/11/55	07/18/75	11/11/65
SAMPLED	07/11/55	05/23/77	03/08/66
FORMATION	CRET-DAKOTA D	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5762	7606	6234
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	900
OPEN FLOW, MCFD	NOT GIVEN	3938	1998
COMPONENT, MOLE PCT			
METHANE	69.3	73.9	76.1
ETHANE	7.4	12.4	10.8
PROPANE	9.2	6.0	5.7
N-BUTANE	4.1	1.7	1.3
ISOBUTANE	1.6	0.7	1.0
N-PENTANE	1.0	0.5	0.3
ISOPENTANE	1.4	0.5	0.1
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.8	0.3	TRACE
NITROGEN	3.6	2.1	3.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.8	1.1
HELIUM	0.05	0.04	TRACE
HEATING VALUE*	1424	1269	1207
SPECIFIC GRAVITY	0.868	0.767	0.732

	INDEX 532 SAMPLE 10574	INDEX 533 SAMPLE 13488	INDEX 534 SAMPLE 13668
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	DEER TRAIL	HOLSTER	HOMBRE
WELL NAME	LEASURE NO. 1	STATE OF COLORADO A-B NO. 1	UPRR IO PAN AM D NO. 1
LOCATION	SEC. 24, T2S, R60W	SEC. 16, T2S, R66W	SEC. 33, T3S, R61W
OWNER	PETROLEUM, INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	11/11/65	04/03/72	02/06/73
SAMPLED	05/19/66	12/19/72	08/03/73
FORMATION	CRET-DAKOTA	CRET-MUDDY J	CRET-MUDDY J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6234	8362	6824
WELLHEAD PRESSURE,PSIG	950	1900	NOT GIVEN
OPEN FLOW, MCFD	1998	NOT GIVEN	2101
COMPONENT, MOLE PCT			
METHANE	73.2	73.4	73.5
ETHANE	11.8	14.2	7.8
PROPANE	6.6	6.6	8.4
N-BUTANE	1.8	1.5	2.1
ISOBUTANE	1.0	0.8	0.9
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.4	0.1	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.3	0.5	5.1
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	2.1	1.0
HELIUM	0.08	0.02	0.05
HEATING VALUE*	1267	1278	1238
SPECIFIC GRAVITY	0.767	0.763	0.767

	INDEX 535 SAMPLE 5151	INDEX 536 SAMPLE 13644	INDEX 537 SAMPLE 7094
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	LITTLE BEAVER	LONGBRANCH	MIDJAY
WELL NAME	SCRITSMIRE NO. 1	HOREL NO. A-1	MIDCAPP-RUGG
LOCATION	SEC. 1, T2S, R57W	SEC. 22, T25S, R62W	SEC. 19, T1S, R57W
OWNER	SNOWDEN-TUCKER ET AL.	MIDWEST OIL CORP.	ANCORA CORP.
COMPLETED	06/15/51	09/14/72	12/29/58
SAMPLED	08/10/51	07/11/73	06/13/59
FORMATION	CRET-	CRET-DAKOTA J	CRET-DAKOTA J 2ND BENCH
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5269	7117	5768
WELLHEAD PRESSURE,PSIG	760	1600	1180
OPEN FLOW, MCFD	1000	8300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	76.1	77.0
ETHANE	12.7	11.2	10.3
PROPANE	11.2	6.1	5.6
N-BUTANE	1.6	1.5	1.4
ISOBUTANE	1.0	0.7	0.8
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.7	2.0	3.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	1.5	0.8
HELIUM	0.05	0.04	0.05
HEATING VALUE*	1297	1244	1215
SPECIFIC GRAVITY	0.800	0.746	0.729

	INDEX 538 SAMPLE 13601	INDEX 539 SAMPLE 12415	INDEX 540 SAMPLE 14390
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	PYRAMID	RIMROCK	THIRD CREEK
WELL NAME	MURPHY NO. 1-8	UPPR-SAUTER NO. 1	STATE-A NO. 5
LOCATION	SEC. 8, T1S, R60W	SEC. 23, T2S, R60W	SEC. 36, T1S, R66W
OWNER	SUNDANCE OIL CO.	ENERGY MINERALS CORP.	ROCH EXPLORATION CO.
COMPLETED	09/01/72	12/24/69	05/02/74
SAMPLED	05/22/73	09/11/70	06/17/75
FORMATION	CRET-DAKOTA D	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6800	6360	8178
WELLHEAD PRESSURE,PSIG	1280	1600	NOT GIVEN
OPEN FLOW, MCFD	2375	1800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.0	75.1	71.3
ETHANE	6.8	11.5	15.1
PROPANE	7.1	6.3	6.7
N-BUTANE	2.0	1.7	1.6
ISOBUTANE	0.8	0.9	0.8
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	4.6	2.3	1.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	2.0
HELIUM	0.06	0.04	0.02
HEATING VALUE*	1211	1272	1301
SPECIFIC GRAVITY	0.743	0.756	0.781

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 541 SAMPLE 12838	INDEX 542 SAMPLE 5676	INDEX 543 SAMPLE 5678
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	TOTEM	WILDCAT	WILDCAT
WELL NAME	UPRR 48 PAN AM NO. 1	GEO. E. LEASURE NO. 1	UPRR-FLADER NO. A1
LOCATION	SEC. 17, T2S, R62W	SEC. 17, T2S, R59W	SEC. 27, T2S, R59W
OWNER	AMOCO PRODUCTION CO.	GINTHER WARREN & GINTHER	GINTHER WARREN & GINTHER
COMPLETED	01/13/71	NOT GIVEN	NOT GIVEN
SAMPLED	05/25/71	08/03/54	08/03/54
FORMATION	CRET-MUDDY J	CRET-DAKOTA J	CRET-DAKOTA 2ND J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	7270	6255	6245
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	1500
OPEN FLOW, MCFD	3870	2800	2700
COMPONENT, MOLE PCT			
METHANE	74.3	64.4	77.6
ETHANE	11.7	8.2	10.7
PROPANE	6.5	7.1	4.9
N-BUTANE	1.5	4.7	1.2
ISOBUTANE	0.8	2.7	0.7
N-PENTANE	0.3	2.2	0.3
ISOPENTANE	0.2	3.2	0.4
CYCLOPENTANE	0.1	0.8	0.1
HEXANES PLUS	0.2	2.3	0.3
NITROGEN	3.2	3.6	2.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.6	0.8
HELIUM	0.05	0.04	0.06
HEATING VALUE*	1244	1612	1218
SPECIFIC GRAVITY	0.754	0.974	0.726

	INDEX 544 SAMPLE 3001	INDEX 545 SAMPLE 3579	INDEX 546 SAMPLE 12887
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ALAMOSA	ALAMOSA	ARAPAHOE
FIELD	NOT GIVEN	NOT GIVEN	LATIGO
WELL NAME	WATER WELL	CROW	VAN MATRE NO. 1
LOCATION	SEC. 32, T40N, R11E	SEC. 32, T39N, R11E	SEC. 24, T5S, R61W
OWNER	J. M. CROW	J. M. CROW	TEXACO INC.
COMPLETED	10/01/40	NOT GIVEN	03/25/71
SAMPLED	11/22/41	NOT GIVEN	06/16/71
FORMATION	NOT GIVEN	NOT GIVEN	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	560	560	540
DEPTH, FEET	540	NOT GIVEN	6750
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1450
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	16736
COMPONENT, MOLE PCT			
METHANE	95.6	90.7	73.0
ETHANE	0.0	0.5	11.7
PROPANE	---	---	6.8
N-BUTANE	---	---	1.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	2.5	6.2	4.9
OXYGEN	0.2	1.5	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.7	1.1	0.5
HELIUM	0.00	0.00	0.07
HEATING VALUE*	968	928	1241
SPECIFIC GRAVITY	0.582	0.601	0.758

	INDEX 547 SAMPLE 13602	INDEX 548 SAMPLE 12778	INDEX 549 SAMPLE 12706
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARAPAHOE	ARAPAHOE	ARAPAHOE
FIELD	PEACE PIPE	PEORIA	PEORIA N
WELL NAME	HERSKIND NO. 1	C. J. JOHNSON "B" NO. 4	PRICE NO. 1
LOCATION	SEC. 2, T5S, R62W	SEC. 20, T4S, R60W	SEC. 14, T4S, R60W
OWNER	BROWNLEE,WALLACE&ARMSTRONG	SUN OIL CO.	TOM VESSELS, JR.
COMPLETED	08/17/71	12/16/71	04/10/70
SAMPLED	05/29/73	04/15/71	03/09/71
FORMATION	CRET-DAKOTA J	CRET-J SAND	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	7200	6469	6334
WELLHEAD PRESSURE,PSIG	1600	1470	1480
OPEN FLOW, MCFD	7000	2002	2558
COMPONENT, MOLE PCT			
METHANE	75.4	71.5	71.3
ETHANE	11.4	11.2	10.9
PROPANE	5.6	6.0	6.6
N-BUTANE	1.6	1.4	1.7
ISOBUTANE	0.7	0.7	1.0
N-PENTANE	0.4	0.2	0.7
ISOPENTANE	0.4	0.6	0.4
CYCLOPENTANE	0.1	0.1	0.6
HEXANES PLUS	0.3	0.3	1.4
NITROGEN	2.5	6.9	4.8
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.0	0.6
HELIUM	0.05	0.06	0.06
HEATING VALUE*	1244	1205	1321
SPECIFIC GRAVITY	0.752	0.765	0.808

	INDEX 550 SAMPLE 4540	INDEX 551 SAMPLE 4541	INDEX 552 SAMPLE 9137
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARCHULETA	ARCHULETA	ARCHULETA
FIELD	CHROMO	CHROMO	SAN JUAN-CHAMA PROJECT
WELL NAME	YEAKLEY ECHLER NO. 1	YEAKLEY CRAWLEY NO. 1	TEST HOLE NO. 108
LOCATION	SEC. 10, T32S, R2E	SEC. 8, T32S, R2E	NOT GIVEN
OWNER	YEAKLEY OIL CO.	YEAKLEY OIL CO.	U.S. BUREAU OF RECLAMATION
COMPLETED	11/--/28	08/01/48	10/--/63
SAMPLED	08/--/48	08/--/48	10/22/63
FORMATION	CRET-MANCOS	NOT GIVEN	CRET-LEWIS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	407	1410	1027
WELLHEAD PRESSURE,PSIG	35	200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	83.8	88.0
ETHANE	16.8	12.4	2.5
PROPANE	---	---	1.5
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.9	2.9	4.7
OXYGEN	0.2	0.2	0.7
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.4	1.7
HELIUM	0.10	0.25	0.00
HEATING VALUE*	1113	1071	1006
SPECIFIC GRAVITY	0.654	0.631	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 553 SAMPLE 8180	INDEX 554 SAMPLE 8535	INDEX 555 SAMPLE 8875
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARCHULETA	BACA	BACA
FIELD	WILDCAT	FLANK	FLANK
WELL NAME	SCHOMBURG NO. 1	COLVIN NO. 1-8	PRIDEMORE NO. 1
LOCATION	SEC. 14, T34N, SO. UTE LINE	SEC. 8, T34S, R42W	SEC. 8, T34S, R42W
OWNER	BIG HORN-POWDER RIVER CORP.	SHELL OIL CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	NOT GIVEN	03/05/62	10/01/61
SAMPLED	08/22/61	05/04/62	02/13/63
FORMATION	CRET-LEWIS	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	580	360	360
DEPTH, FEET	NOT GIVEN	4102	4607
WELLHEAD PRESSURE,PSIG	50	825	NOT GIVEN
OPEN FLOW, MCFD	5	6	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.5	64.7	67.8
ETHANE	6.8	7.1	6.9
PROPANE	1.7	4.2	4.5
N-BUTANE	0.3	1.1	1.3
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	TRACE	0.3	0.4
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.2	21.1	17.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	0.44	0.70
HEATING VALUE*	1112	982	1039
SPECIFIC GRAVITY	0.621	0.759	0.755

	INDEX 556 SAMPLE 8876	INDEX 557 SAMPLE 8884	INDEX 558 SAMPLE 8578
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	FLANK	FLANK	FLANK, NORTHWEST
WELL NAME	PRIDEMORE NO. 2	GRIFFITH NO. 1	GRIFFIN NO. 1
LOCATION	SEC. 8, T34S, R42W	SEC. 9, T34S, R42W	SEC. 15, T33S, R43W
OWNER	KERR-MCGEE OIL IND., INC.	KERR-MCGEE OIL IND., INC.	HENRY FROST OIL PROP., LTD.
COMPLETED	01/21/62	10/23/61	06/01/62
SAMPLED	02/13/63	02/13/63	07/02/62
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4528	4504	3158
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	407
OPEN FLOW, MCFD	NOT GIVEN	7300	2400
COMPONENT, MOLE PCT			
METHANE	68.6	67.0	62.8
ETHANE	7.0	6.2	5.1
PROPANE	4.4	4.0	3.2
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	16.8	19.6	26.1
OXYGEN	0.1	0.6	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.60	0.70	0.60
HEATING VALUE*	1016	964	889
SPECIFIC GRAVITY	0.739	0.738	0.755

	INDEX 559 SAMPLE 5591	INDEX 560 SAMPLE 5616	INDEX 561 SAMPLE 5652
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	NEU NO. 1	C. A. NEWMAN NO. 1	SCHWEIZER NO. 1
LOCATION	SEC. 33, T32S, R41W	SEC. 12, T32S, R42W	SEC. 18, T32SS, R41W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	01/23/54	02/24/54	04/04/54
SAMPLED	01/30/54	04/05/54	07/22/54
FORMATION	PENN-TOPEKA	PENN-LANSING	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3106	3068	3150
WELLHEAD PRESSURE,PSIG	440	430	435
OPEN FLOW, MCFD	2900	2000	13000
COMPONENT, MOLE PCT			
METHANE	65.5	62.8	64.5
ETHANE	6.6	5.4	6.3
PROPANE	3.4	3.3	3.6
N-BUTANE	1.1	0.9	1.1
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	21.4	25.8	22.8
OXYGEN	0.2	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.51	0.63	0.56
HEATING VALUE*	943	877	940
SPECIFIC GRAVITY	0.744	0.746	0.751

	INDEX 562 SAMPLE 6537	INDEX 563 SAMPLE 7157	INDEX 564 SAMPLE 7908
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	R. H. PRIDE UNIT NO. 1	STATE HOLT NO. 1	WRIGHT NO. 1
LOCATION	SEC. 23, T33S, R42W	SEC. 15, T35S, R41W	SEC. 9, T33S, R41W
OWNER	AMERADA PETROLEUM CORP.	FRONTIER REFINING CO.	HORIZON OIL & GAS CO.
COMPLETED	12/31/58	06/08/59	01/07/61
SAMPLED	03/29/58	08/--/59	03/15/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2985	2863	3003
WELLHEAD PRESSURE,PSIG	320	423	341
OPEN FLOW, MCFD	1426	1390	1550
COMPONENT, MOLE PCT			
METHANE	64.0	56.1	69.8
ETHANE	5.8	6.0	6.7
PROPANE	3.1	2.5	3.6
N-BUTANE	0.9	1.1	0.8
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.1	0.8	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	24.3	31.4	17.5
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.60	0.80	0.50
HEATING VALUE*	907	841	986
SPECIFIC GRAVITY	0.749	0.783	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 565 SAMPLE 7909	INDEX 566 SAMPLE 8774	INDEX 567 SAMPLE 8063
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	GREENWOOD	MIDWAY
WELL NAME	WATKINS A-1	MOORE A	BAUMAN A-1
LOCATION	SEC. 20, T32S, R41W	SEC. 24, T34S, R42W	SEC. 2, T33S, R42W
OWNER	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	01/07/61	11/15/62	04/09/61
SAMPLED	03/15/61	12/19/62	05/05/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3139	2770	3124
WELLHEAD PRESSURE,PSIG	289	406	396
OPEN FLOW, MCFD	1670	1550	5600
COMPONENT, MOLE PCT			
METHANE	65.0	67.7	63.8
ETHANE	5.2	5.9	6.5
PROPANE	3.8	3.8	3.7
N-BUTANE	0.5	1.2	1.0
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	22.5	19.2	23.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.40	0.50	0.40
HEATING VALUE*	932	987	940
SPECIFIC GRAVITY	0.743	0.744	0.758

	INDEX 568 SAMPLE 4052	INDEX 569 SAMPLE 4197	INDEX 570 SAMPLE 4198
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BORE HOLE NO. F614	INGLE NO. 1	INGLE NO. 1
LOCATION	SEC. 20, T29S, R50W	SEC. 27, T29S, R50W	NOT GIVEN
OWNER	SKELLY OIL CO.	J. M. HUBER CORP.	SHARPLES CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/25/45	01/--/47	02/11/47
FORMATION	JURA-EXETER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	210	4466	4332
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	1.9	0.0
ETHANE	0.0	0.0	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	7.0	0.3
OXYGEN	0.0	0.0	1.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	99.4	91.0	97.3
HELIUM	TRACE	0.13	0.05
HEATING VALUE*	0	19	22
SPECIFIC GRAVITY	1.526	1.470	1.515

	INDEX 571 SAMPLE 4199	INDEX 572 SAMPLE 8061	INDEX 573 SAMPLE 9878
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	NOT GIVEN	NOT GIVEN	PLAYA
WELL NAME	JACOBSON NO. 1	COGBURN NO. 1	EASTHAM NO. 1-4
LOCATION	NOT GIVEN	SEC. 22, T33S, R42W	SEC. 4, T32S, R44W
OWNER	SHARPLES CORP.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	NOT GIVEN	07/28/60	12/09/64
SAMPLED	02/11/47	02/17/61	04/29/65
FORMATION	NOT GIVEN	PENN-MORROW U	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4666	3354
WELLHEAD PRESSURE,PSIG	NOT GIVEN	965	416
OPEN FLOW, MCFD	NOT GIVEN	7000	788
COMPONENT, MOLE PCT			
METHANE	2.1	68.0	59.3
ETHANE	0.0	7.2	5.3
PROPANE	---	4.2	3.7
N-BUTANE	---	0.8	1.0
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	6.6	18.2	26.8
OXYGEN	1.3	0.0	TRACE
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	90.0	0.1	1.8
HELIUM	0.02	0.60	0.71
HEATING VALUE*	21	988	8730
SPECIFIC GRAVITY	1.466	0.733	0.780

	INDEX 574 SAMPLE 10796	INDEX 575 SAMPLE 6517	INDEX 576 SAMPLE 6558
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	PLAYA	PRAIRIE DOG	PRAIRIE DOG
WELL NAME	ELLIS NO. 1-1	FEDERAL LAND BANK NO. 1	COPENHAVER NO. 1
LOCATION	SEC. 1, T32S, R44W	SEC. 31, T34S, R44W	SEC. 6, T35N, R44W
OWNER	HORIZON OIL & GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	09/06/66	NOT GIVEN	04/20/58
SAMPLED	11/30/66	02/02/58	05/--/58
FORMATION	PENN-TOPEKA	PENN-CHEROKEE	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3221	4256	4049
WELLHEAD PRESSURE,PSIG	400	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	17200	NOT GIVEN	2200
COMPONENT, MOLE PCT			
METHANE	61.5	63.2	63.0
ETHANE	5.5	7.3	7.9
PROPANE	3.8	3.1	3.9
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	26.4	22.9	22.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.2
HELIUM	0.70	0.40	0.40
HEATING VALUE*	890	930	958
SPECIFIC GRAVITY	0.760	0.758	0.763

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 577 SAMPLE 10819	INDEX 578 SAMPLE 10622	INDEX 579 SAMPLE 10922
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	PRAIRIE DOG	VILAS	VILAS
WELL NAME	OLIVE F. LANTZ D NO. 1-12	OLIVER NO. 1-18	STATE ST. JOHN NO. 1-36
LOCATION	SEC. 12, T35S, R45W	SEC. 18, T31S, R44W	SEC. 36, T30S, R45W
OWNER	W. C. MCBRIDE, INC.	DAVIS DRILLING COMPANY	W. C. MCBRIDE, INC.
COMPLETED	11/07/66	05/26/66	NOT GIVEN
SAMPLED	12/15/66	06/16/66	04/14/67
FORMATION	PENN-CHEROKEE	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8204	3234	3294
WELLHEAD PRESSURE,PSIG	460	420	440
OPEN FLOW, MCFD	3087	8900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.9	55.9	43.5
ETHANE	6.3	5.4	5.7
PROPANE	3.1	3.7	3.7
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.2	0.5	0.7
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.5	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	31.0	32.1	42.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.48	0.90	1.15
HEATING VALUE*	445	822	742
SPECIFIC GRAVITY	0.778	0.777	0.846

	INDEX 580 SAMPLE 11076	INDEX 581 SAMPLE 7870	INDEX 582 SAMPLE 7916
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	VILAS	WALSH	WALSH
WELL NAME	ROLLINS-RUTHERFORD B NO.1-20	BURCHFIELD NO. 1	GRIFFIN ESTATE NO. 1
LOCATION	SEC. 20, T31S, R44W	SEC. 4, T32S, R43W	SEC. 17, T32S, R43W
OWNER	W. C. MCBRIDE, INC.	KEITH L. RISING	GERMANY INVESTMENT CO.
COMPLETED	05/18/67	02/14/61	04/15/61
SAMPLED	08/26/67	02/14/61	04/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	3245	3252
WELLHEAD PRESSURE,PSIG	440	427	440
OPEN FLOW, MCFD	6160	1625	6000
COMPONENT, MOLE PCT			
METHANE	57.5	56.3	63.0
ETHANE	5.3	5.9	5.9
PROPANE	3.5	3.8	3.7
N-BUTANE	1.1	1.2	1.1
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	30.0	30.5	24.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.81	0.80	0.60
HEATING VALUE*	854	859	925
SPECIFIC GRAVITY	0.779	0.785	0.759

	INDEX 583 SAMPLE 8055	INDEX 584 SAMPLE 8665	INDEX 585 SAMPLE 7915
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	WALSH	WALSH	WILDCAT
WELL NAME	KOELSCH	HOLT NO. 1-3	BURCHFIELD NO. 1
LOCATION	SEC. 20, T32S, R43W	SEC. 3, T32S, R43W	SEC. 4, T32S, R43W
OWNER	DAVIS DRILLING INC.	DAVIS DRILLING CO.	GERMANY INVESTMENT CO.
COMPLETED	06/30/61	NOT GIVEN	02/24/61
SAMPLED	06/20/61	08/27/62	04/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3265	NOT GIVEN	3245
WELLHEAD PRESSURE,PSIG	430	NOT GIVEN	425
OPEN FLOW, MCFD	1500	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	58.9	56.1	67.1
ETHANE	5.4	5.4	6.9
PROPANE	3.6	3.7	4.6
N-BUTANE	1.3	1.1	1.5
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	28.3	31.1	17.4
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.80	0.69	0.80
HEATING VALUE*	882	833	1037
SPECIFIC GRAVITY	0.776	0.783	0.757

	INDEX 586 SAMPLE 8773	INDEX 587 SAMPLE 5926	INDEX 588 SAMPLE 8906
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BENT	BENT
FIELD	WILDCAT	BENTS FORT	HASTY
WELL NAME	MOORE A	CORDES & OBERLANDER NO. 1	USA NO. 1-16
LOCATION	SEC. 24, T34S, R42W	SEC. 21, T21S, R51W	SEC. 16, T23S, R50W
OWNER	HORIZON OIL & GAS CO.	STANSBURY OIL CO.	FRANKFORT OIL CO.
COMPLETED	11/15/62	06/18/55	11/20/62
SAMPLED	10/16/62	08/30/55	03/25/63
FORMATION	PERM-RED CAVE	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	450	450
DEPTH, FEET	1214	5208	4677
WELLHEAD PRESSURE,PSIG	330	1000	1288
OPEN FLOW, MCFD	NOT GIVEN	2500	1120
COMPONENT, MOLE PCT			
METHANE	23.3	72.3	66.1
ETHANE	1.1	12.9	10.3
PROPANE	0.8	5.7	5.7
N-BUTANE	0.4	1.6	1.3
ISOBUTANE	0.3	1.1	0.7
N-PENTANE	0.1	0.5	0.3
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	71.2	4.1	14.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.2
HELIUM	2.1%	0.15	0.28
HEATING VALUE*	314	1283	1095
SPECIFIC GRAVITY	0.870	0.775	0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 589 SAMPLE 6137	INDEX 590 SAMPLE 8581	INDEX 591 SAMPLE 15331
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BENT	BENT	CHEYENNE
FIELD	LUBERS	MCCLAVE	ARAPAHOE
WELL NAME	EARL A NO. 1	WALLERT STATE UNIT NO. 1	CHAMPLIN FUNK NO. 1
LOCATION	SEC. 15, T22S, R49W	SEC. 5, T21S, R48W	SEC. 23, T14S, R42W
OWNER	HARRINGTON, MARSH & WAGNER	FRANKFORT OIL CO.	TEXAS OIL & GAS CORP.
COMPLETED	09/02/56	01/29/62	07/03/77
SAMPLED	08/31/56	06/16/62	07/20/78
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4331	4654	5063
WELLHEAD PRESSURE,PSIG	NOT GIVEN	790	866
OPEN FLOW, MCFD	NOT GIVEN	725	8399
COMPONENT, MOLE PCT			
METHANE	64.5	68.5	26.5
ETHANE	12.3	13.6	2.1
PROPANE	5.4	7.1	1.5
N-BUTANE	1.4	1.6	0.6
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	14.1	7.4	63.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.2
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	1.3
HELIUM	0.21	0.18	2.46
HEATING VALUE*	1135	1226	417
SPECIFIC GRAVITY	0.783	0.774	0.881

	INDEX 592 SAMPLE 15477	INDEX 593 SAMPLE 2759	INDEX 594 SAMPLE 2348
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	DELTA	DELTA
FIELD	CHEYENNE WELLS	BLACK CANYON	NOT GIVEN
WELL NAME	CHAMPLIN-PELTON B NO. 1	NO. 1	NOT GIVEN
LOCATION	SEC. 3, T14S, R44W	SEC. 6, T15S, R94W	SEC. 13, T15S, R96W
OWNER	MULL DRILLING CO., INC.	BILLSTROM BROTHERS	HOLLY SUGAR CO.
COMPLETED	NOT GIVEN	04/--/36	01/01/25
SAMPLED	11/03/78	12/--/36	05/01/31
FORMATION	MISS-ST. LOUIS	JURA-MORRISON	-SHALE
GEOLOGIC PROVINCE CODE	450	595	595
DEPTH, FEET	5397	375	152
WELLHEAD PRESSURE,PSIG	NOT GIVEN	35	35
OPEN FLOW, MCFD	NOT GIVEN	280	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	9.9	0.0	87.5
ETHANE	1.3	2.0	10.4
PROPANE	2.1	---	---
N-BUTANE	1.9	---	---
ISOBUTANE	1.2	---	---
N-PENTANE	1.0	---	---
ISOPENTANE	1.0	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.8	---	---
NITROGEN	66.1	14.3	1.2
OXYGEN	0.2	0.1	0.3
ARGON	1.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.8	82.3	0.6
HELIUM	11.40	1.26	0.00
HEATING VALUE*	417	36	1073
SPECIFIC GRAVITY	0.943	1.421	0.618

	INDEX 595 SAMPLE 2821	INDEX 596 SAMPLE 8755	INDEX 597 SAMPLE 8761
STATE	COLORADO	COLORADO	COLORADO
COUNTY	DELTA	DOLORES	DOLORES
FIELD	NOT GIVEN	DOE CANYON	DOE CANYON
WELL NAME	GAS SEEPAGE	DOE CANYON NO. 1	DOE CANYON NO. 1
LOCATION	SEC. 29, T14, R98W	SEC. 13, T40N, R18W	SEC. 13, T40N, R18W
OWNER	CHARLOTTE RAMBO	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	12/02/62	12/02/62
SAMPLED	07/02/39	11/06/62	11/11/62
FORMATION	NOT GIVEN	MISS-	MISS-
GEOLOGIC PROVINCE CODE	595	585	585
DEPTH, FEET	NOT GIVEN	8366	8366
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2560
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5690
COMPONENT, MOLE PCT			
METHANE	56.3	1.1	1.5
ETHANE	1.1	0.1	0.1
PROPANE	---	0.1	0.1
N-BUTANE	---	TRACE	0.0
ISOBUTANE	---	TRACE	0.0
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	34.6	5.2	6.8
OXYGEN	2.5	0.0	TRACE
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.5	92.6	90.4
HELIUM	TRACE	0.65	0.88
HEATING VALUE*	590	21	20
SPECIFIC GRAVITY	0.770	1.480	1.462

	INDEX 598 SAMPLE 7927	INDEX 599 SAMPLE 6462	INDEX 600 SAMPLE 12285
STATE	COLORADO	COLORADO	COLORADO
COUNTY	DOLORES	DOLORES	ELBERT
FIELD	GLADE CANYON	WILDCAT	IRON HORSE
WELL NAME	GLADE CANYON UNIT NO. 1	GLADE NO. 1	SABO 13-20
LOCATION	SEC. 13, T40N, R17W	SEC. 11, T41N, R17W	SEC. 20, T6S, R62W
OWNER	SINCLAIR OIL & GAS CO.	CARTER OIL CO.	SHELL OIL CO., ET AL.
COMPLETED	NOT GIVEN	NOT GIVEN	04/20/70
SAMPLED	04/07/61	12/11/57	06/04/70
FORMATION	MISS-DEVO	PENN-PARADOX	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	585	585	540
DEPTH, FEET	9140	NOT GIVEN	7638
WELLHEAD PRESSURE,PSIG	1445	NOT GIVEN	1502
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	1.0	98.4	70.6
ETHANE	0.2	0.3	11.9
PROPANE	0.0	TRACE	7.2
N-BUTANE	TRACE	TRACE	1.8
ISOBUTANE	0.0	0.0	0.8
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.0	0.7
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	2.5	0.9	4.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	95.8	0.0	1.8
HELIUM	0.30	0.01	0.04
HEATING VALUE*	14	1011	1256
SPECIFIC GRAVITY	1.497	0.563	0.782

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 601 SAMPLE 7516	INDEX 602 SAMPLE 7518	INDEX 603 SAMPLE 15988
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BAXTER PASS S	BAXTER PASS S	BAXTER PASS S
WELL NAME	GOVERNMENT BUTTRAM NO. 1	NO. 2-20	UNIT NO. 2-20
LOCATION	SEC. 30, T 5S, R102W	SEC. 20, T5S, R102W	SEC. 20, T 5S, R102W
OWNER	ARGO OIL CORP.	ARGO OIL CORP.	ARCO OIL & GAS CO.
COMPLETED	12/23/58	10/27/59	10/26/59
SAMPLED	04/20/60	04/20/60	06/17/80
FORMATION	JURA-MORRISON	JURA-MORRISON	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5934	6959	6959
WELLHEAD PRESSURE,PSIG	1609	1481	1280
OPEN FLOW, MCFD	1000	2075	933
COMPONENT, MOLE PCT			
METHANE	63.1	62.1	61.1
ETHANE	3.4	2.9	3.1
PROPANE	2.3	2.1	1.0
N-BUTANE	0.4	0.3	0.4
ISOBUTANE	TRACE	0.0	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	26.9	28.7	28.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	2.8	3.8
HELIUM	0.80	0.90	0.84
HEATING VALUE*	783	755	751
SPECIFIC GRAVITY	0.741	0.742	0.757

	INDEX 604 SAMPLE 15989	INDEX 605 SAMPLE 15943	INDEX 606 SAMPLE 6400
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BAXTER PASS S	BRIDLE	CANYON S
WELL NAME	GOVERNMENT BUTTRAM NO. 1	FEDERAL NO. 6-13	SOUTH CANYON FED. NO. 2
LOCATION	SEC. 30, T 5S, R102W	SEC. 6, T8S, R104W	SEC. 35, T6S, R104W
OWNER	ARCO OIL & GAS CO.	TENNECO OIL EXPL. & PROD.	GULF OIL CORP.
COMPLETED	12/22/58	05/19/79	04/22/57
SAMPLED	06/17/80	04/15/80	08/15/57
FORMATION	JURA-MORRISON	CRET-DAKOTA & JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5934	3724	3938
WELLHEAD PRESSURE,PSIG	1537	NOT GIVEN	736
OPEN FLOW, MCFD	1000	3752	2520
COMPONENT, MOLE PCT			
METHANE	59.9	80.5	72.1
ETHANE	3.3	4.8	1.4
PROPANE	1.2	1.5	0.0
N-BUTANE	0.5	0.3	0.1
ISOBUTANE	0.3	0.4	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	27.9	10.1	16.2
OXYGEN	TRACE	0.5	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.3	0.7	8.4
HELIUM	0.86	0.44	0.90
HEATING VALUE*	755	1001	776
SPECIFIC GRAVITY	0.774	0.672	0.714

	INDEX 607 SAMPLE 6565	INDEX 608 SAMPLE 6538	INDEX 609 SAMPLE 6903
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	CANYON S	CASTLE	DIVIDE CREEK
WELL NAME	SOUTH CANYON FEDERAL NO. 3	NICHOLS FEDERAL NO. 1	DIVIDE CREEK UNIT NO. 5
LOCATION	SEC. 7, T7S, R103W	SEC. 14, T7S, R99W	SEC. 10, T8S, R91W
OWNER	GULF OIL CORP.	EL PASO NATURAL GAS CO.	SUN OIL CO.
COMPLETED	12/31/57	12/14/57	NOT GIVEN
SAMPLED	04/25/58	04/01/58	12/12/58
FORMATION	JURA-BUCKHORN	EOCE-WASATCH	CRET-MESAVERDE & MANCOS
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3840	854	4734
WELLHEAD PRESSURE,PSIG	457	325	1550
OPEN FLOW, MCFD	1440	4900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.7	94.7	96.4
ETHANE	3.2	2.4	1.0
PROPANE	1.1	0.8	0.8
N-BUTANE	0.4	0.4	0.1
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	12.7	0.7	0.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.5	0.1	1.7
HELIUM	0.70	0.02	TRACE
HEATING VALUE*	826	1074	1024
SPECIFIC GRAVITY	0.759	0.601	0.588

	INDEX 610 SAMPLE 7598	INDEX 611 SAMPLE 8764	INDEX 612 SAMPLE 10581
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	DIVIDE CREEK	DIVIDE CREEK	DIVIDE CREEK
WELL NAME	OWEN BOULTON NO. 1	BOULTON NO. 1	DIVIDE CREEK UNIT 12L
LOCATION	SEC. 22, T7S, R91W	SEC. 22, T7S, R91W	SEC. 9, T8S, R91W
OWNER	MOUNTAIN STATES DRILLING CO.	SUN OIL & MTN. STATES DRLG.	SUN OIL CO.
COMPLETED	NOT GIVEN	09/22/60	08/12/65
SAMPLED	07/07/60	11/05/62	05/25/66
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-DIVIDE CREEK L
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	7526	7525	4947
WELLHEAD PRESSURE,PSIG	3000	850	1500
OPEN FLOW, MCFD	NOT GIVEN	1125	600
COMPONENT, MOLE PCT			
METHANE	94.1	93.5	95.5
ETHANE	1.7	1.5	1.6
PROPANE	0.7	0.2	0.8
N-BUTANE	0.5	0.1	0.2
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.2	0.0	TRACE
HEXANES PLUS	0.3	0.0	0.1
NITROGEN	0.0	2.7	0.1
OXYGEN	TRACE	0.6	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.4	1.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1064	983	1035
SPECIFIC GRAVITY	0.613	0.594	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 613 SAMPLE 10582	INDEX 614 SAMPLE 15878	INDEX 615 SAMPLE 1162
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	DIVIDE CREEK	DOUGLAS CREEK	GARMESA
WELL NAME	DIVIDE CREEK UNIT 12U	FEDERAL NO. 1-15	NOT GIVEN
LOCATION	SEC. 9, T8S, R91W	SEC. 15, T8S, R105W	SEC. 5, T8S, R102W
OWNER	SUN OIL CO.	TENNECO OIL CO.	GYPSY OIL CO.
COMPLETED	08/12/65	06/09/79	09/--/25
SAMPLED	05/25/66	01/08/80	10/12/25
FORMATION	CRET-DIVIDE CREEK U	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4651	3738	3130
WELLHEAD PRESSURE,PSIG	1500	910	900
OPEN FLOW, MCFD	600	740	18893
COMPONENT, MOLE PCT			
METHANE	96.6	90.8	65.0
ETHANE	0.8	4.6	4.2
PROPANE	0.5	1.4	---
N-BUTANE	0.1	0.3	---
ISOBUTANE	0.0	0.3	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	0.1	1.2	10.4
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.9	0.8	20.0
HELIUM	TRACE	0.10	0.26
HEATING VALUE*	1009	1077	734
SPECIFIC GRAVITY	0.584	0.621	0.816

	INDEX 616 SAMPLE 1326	INDEX 617 SAMPLE 2214	INDEX 618 SAMPLE 6194
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARMESA	GARMESA	GARMESA
WELL NAME	GARMESA NO. 1	GARMESA NO. 1	YOUNG NO. 1
LOCATION	SEC. 5, T8S, R102W	SEC. 8, T8S, R102W	SEC. 6, T8S, R102W
OWNER	GYPSY OIL CO.	FULTON PETROLEUM CO.	STANDARD URANIUM CORP.
COMPLETED	10/--/26	09/25/30	10/06/56
SAMPLED	11/19/26	10/07/30	11/25/56
FORMATION	JURA-MCELMO	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3760	2857	3085
WELLHEAD PRESSURE,PSIG	1250	825	865
OPEN FLOW, MCFD	22000	18000	18000
COMPONENT, MOLE PCT			
METHANE	19.7	49.8	93.6
ETHANE	4.4	2.1	1.1
PROPANE	---	---	0.0
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	14.3	12.1	2.3
OXYGEN	0.3	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	61.1	35.6	2.3
HELIUM	0.30	0.31	0.11
HEATING VALUE*	278	542	980
SPECIFIC GRAVITY	1.232	0.961	0.595

	INDEX 619 SAMPLE 8867	INDEX 620 SAMPLE 8868	INDEX 621 SAMPLE 10386
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARMESA	GARMESA	MAM CREEK AREA
WELL NAME	NATIONAL NO. 1	GARMESA NO. 1	JAKE SHAFFER NO. 1
LOCATION	SEC. 6, T8S, R102W	SEC. 8, T8S, R102W	SEC. 12, T7S, R93W
OWNER	KERR-MCGEE OIL IND., INC.	KERR-MCGEE OIL IND., INC.	CHEVRON OIL CO.
COMPLETED	11/14/56	10/12/48	02/01/66
SAMPLED	02/14/63	02/14/63	02/01/66
FORMATION	JURA-ENTRADA	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6778
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	700
COMPONENT, MOLE PCT			
METHANE	20.5	70.4	86.6
ETHANE	0.7	1.0	6.8
PROPANE	0.3	0.3	2.0
N-BUTANE	0.2	0.1	0.3
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.6	7.0	0.0
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	57.6	20.8	3.9
HELIUM	0.46	0.21	TRACE
HEATING VALUE*	245	752	1074
SPECIFIC GRAVITY	1.209	0.799	0.656

	INDEX 622 SAMPLE 8040	INDEX 623 SAMPLE 14233	INDEX 624 SAMPLE 7325
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	PRAIRIE CANYON	PRAIRIE CANYON	PRAIRIE CANYON NW
WELL NAME	NO. 1	P. C. FEDERAL NO. 1	GOVERNMENT NO. 2
LOCATION	SEC. 19, T7S, R104W	SEC. 17, T7S, R104W	SEC. 31, T7S, R104W
OWNER	HONOLULU OIL CORP.	BELCO PETROLEUM CORP.	AMERICAN METAL CLIMAX, INC.
COMPLETED	NOT GIVEN	11/27/73	10/07/58
SAMPLED	06/21/61	11/20/74	12/21/59
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-DAKOTA BASAL
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	4810	3880
WELLHEAD PRESSURE,PSIG	860	853	860
OPEN FLOW, MCFD	1083	2122	1070
COMPONENT, MOLE PCT			
METHANE	90.4	85.3	89.8
ETHANE	4.8	5.0	4.4
PROPANE	1.8	1.9	0.9
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.3	0.7	0.4
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.1
NITROGEN	1.2	3.5	2.6
OXYGEN	0.3	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.7	0.9
HELIUM	0.10	0.28	0.20
HEATING VALUE*	1088	1091	1049
SPECIFIC GRAVITY	0.624	0.669	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 625 SAMPLE 14678	INDEX 626 SAMPLE 8689	INDEX 627 SAMPLE 8692
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ROCK CANYON	RULISON	RULISON
WELL NAME	NO. 1-14	JUHAN-FEDERAL NO. 1	GROSS-HAHNEWALD NO. 1
LOCATION	SEC. 14, T5S, R102W	SEC. 35, T6S, R94W	SEC. 8, T7S, R94W
OWNER	SWEET PEA OIL & GAS CO.	SOUTHERN UNION PROD. CO.	SOUTHERN UNION PROD. CO.
COMPLETED	06/14/73	06/29/57	12/08/60
SAMPLED	05/--/76	09/20/62	09/20/62
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6601	4624	6180
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2386	1778
OPEN FLOW, MCFD	540	1064	6253
COMPONENT, MOLE PCT			
METHANE	80.7	95.1	91.7
ETHANE	6.3	3.4	4.4
PROPANE	2.5	0.8	1.1
N-BUTANE	0.7	0.2	0.2
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	5.1	0.0	0.8
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.1	0.8
HELIUM	0.44	0.01	0.01
HEATING VALUE*	1068	1063	1075
SPECIFIC GRAVITY	0.692	0.588	0.616

	INDEX 628 SAMPLE 8693	INDEX 629 SAMPLE 11790	INDEX 630 SAMPLE 15110
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	RULISON	RULISON	SOUTH CANYON
WELL NAME	JUHAN NO. 1	HAYWARD NO. 25-95	PALMER NO. 2-23
LOCATION	SEC. 26, T6S, R94W	SEC. 25, T7S, R95W	SEC. 23, T7S, R104W
OWNER	SOUTHERN UNION PROD. CO.	AUSTRAL OIL CO.	PALMER OIL & GAS CO.
COMPLETED	09/26/56	05/06/68	02/--/77
SAMPLED	09/20/62	NOT GIVEN	09/27/77
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5066	7302	3900
WELLHEAD PRESSURE,PSIG	2200	NOT GIVEN	635
OPEN FLOW, MCFD	1937	15	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.4	90.1	76.3
ETHANE	6.6	4.6	3.6
PROPANE	1.9	1.2	1.1
N-BUTANE	0.5	0.2	0.3
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	0.1	11.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.8	6.2
HELIUM	0.01	0.01	0.64
HEATING VALUE*	1121	1066	897
SPECIFIC GRAVITY	0.632	0.634	0.701

	INDEX 631 SAMPLE 15111	INDEX 632 SAMPLE 15113	INDEX 633 SAMPLE 15114
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOUTH CANYON	SOUTH CANYON	SOUTH CANYON
WELL NAME	PALMER NO. 23-12	PALMER NO. 27-11	PALMER NO. 27-8
LOCATION	SEC. 23, T7S, R104W	SEC. 27, T7S, R104W	SEC. 27, T7S, R104W
OWNER	PALMER OIL & GAS CO.	PALMER OIL & GAS CO.	PALMER OIL & GAS CO.
COMPLETED	03/--/77	06/--/77	04/--/76
SAMPLED	09/27/77	09/27/77	09/27/77
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3700	3700	3700
WELLHEAD PRESSURE,PSIG	840	840	830
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.6	70.0	71.2
ETHANE	3.6	3.2	3.4
PROPANE	1.2	1.0	1.0
N-BUTANE	0.5	0.3	0.3
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	10.1	10.8	11.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.6	13.4	10.7
HELIUM	0.63	0.59	0.57
HEATING VALUE*	885	823	849
SPECIFIC GRAVITY	0.755	0.767	0.756

	INDEX 634 SAMPLE 16130	INDEX 635 SAMPLE 5274	INDEX 636 SAMPLE 5744
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOUTH CANYON	TWIN BUTTES	TWIN BUTTES
WELL NAME	FEDERAL NO. 9-6	FEDERAL NO. 1	TWIN BUTTES NO. 4
LOCATION	SEC. 9, T7S, R104W	SEC. 24, T5S, R102W	SEC. 13, T5S, R102W
OWNER	TENNECO OIL CO.	GREENBRIER OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	NOT GIVEN	10/18/51	09/02/54
SAMPLED	11/06/80	07/29/52	12/14/54
FORMATION	CRET-DAKOTA	JURA-ENTRADA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6320	7136	2385
WELLHEAD PRESSURE,PSIG	900	1780	1640
OPEN FLOW, MCFD	3000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.4	87.1	91.6
ETHANE	3.8	1.3	2.1
PROPANE	1.0	0.4	0.7
N-BUTANE	0.3	0.0	0.1
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	24.1	4.2	3.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	4.7	6.4	1.5
HELIUM	0.42	0.32	0.30
HEATING VALUE*	777	919	987
SPECIFIC GRAVITY	0.737	0.646	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 637 SAMPLE 663	INDEX 638 SAMPLE 1052	INDEX 639 SAMPLE 14909
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GUNNISON	HUERFANO	HUERFANO
FIELD	NOT GIVEN	NOT GIVEN	SHEEP MOUNTAIN
WELL NAME	WAUNITA HOT SPRINGS	LA VITA	SHEEP MOUNTAIN UNIT NO. 7-9
LOCATION	NOT GIVEN	SEC. 10, T29S, R69W	SEC. 9, T27S, R70W
OWNER	STITZER BROS.	PANNCO EXPLORATION CO.	ATLANTIC RICHFIELD CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/--/76
SAMPLED	09/16/21	05/05/25	02/15/77
FORMATION	-RADIOACTIVE HOT WATER	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	455	455
DEPTH, FEET	NOT GIVEN	1165	3380
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	739
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	11500
COMPONENT, MOLE PCT			
METHANE	0.0	77.7	24.5
ETHANE	0.0	17.7	0.6
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	99.0	3.5	10.9
OXYGEN	0.5	0.7	0.2
ARGON	---	---	0.3
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.4	62.9
HELIUM	0.11	0.05	0.54
HEATING VALUE*	0	1104	259
SPECIFIC GRAVITY	0.969	0.664	1.216

	INDEX 640 SAMPLE 14962	INDEX 641 SAMPLE 15072	INDEX 642 SAMPLE 15073
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	HUERFANO
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	SHEEP MOUNTAIN
WELL NAME	SHEEP MOUNTAIN UNIT NO. 7	SHEEP MOUNTAIN NO. 12	SHEEP MOUNTAIN NO. 7
LOCATION	SEC. 9, T27S, R70W	SEC. 15, T27S, R70W	SEC. 9, T27S, R70W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	02/--/76	01/05/77	02/--/76
SAMPLED	04/07/77	08/03/77	07/21/77
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	3380	3078	3380
WELLHEAD PRESSURE,PSIG	680	696	680
OPEN FLOW, MCFD	11500	8000	11500
COMPONENT, MOLE PCT			
METHANE	17.6	1.8	6.1
ETHANE	0.5	0.2	0.3
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	6.5	0.2	2.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.2	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	74.8	97.7	91.1
HELIUM	0.41	0.03	0.12
HEATING VALUE*	187	24	70
SPECIFIC GRAVITY	1.313	1.509	1.454

	INDEX 643 SAMPLE 15074	INDEX 644 SAMPLE 14434	INDEX 645 SAMPLE 1352
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	JACKSON
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN AREA	MCCALLUM N
WELL NAME	SHEEP MOUNTAIN NO. 7	KOSCOVE NO. 1	GLENWOOD SPRINGS NO. 1
LOCATION	SEC. 9, T27S, R70W	SEC. 15, T27S, R70W	SEC. 12, T9N, R79W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	CONTINENTAL OIL CO.
COMPLETED	02/--/76	07/11/74	NOT GIVEN
SAMPLED	07/23/77	08/02/75	02/23/27
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	455	455	545
DEPTH, FEET	3380	3344	5113
WELLHEAD PRESSURE,PSIG	680	700	NOT GIVEN
OPEN FLOW, MCFD	11500	46000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	3.4	1.8	2.7
ETHANE	0.2	0.2	1.9
PROPANE	0.1	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.1	0.6	2.9
OXYGEN	0.1	0.0	0.6
ARGON	0.1	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	95.0	97.3	91.8
HELIUM	0.08	0.03	0.13
HEATING VALUE*	41	24	61
SPECIFIC GRAVITY	1.488	1.507	1.473

	INDEX 646 SAMPLE 1863	INDEX 647 SAMPLE 1824	INDEX 648 SAMPLE 2716
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCCALLUM N	MCCALLUM S	MCCALLUM S
WELL NAME	SHERMAN NO. 1	HOYE NO. 1	HOYE NO. 3
LOCATION	SEC. 12, T9N, R79W	SEC. 34, T9N, R76S	SEC. 34, T9N, R78W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	12/--/26	DRILL STEM TEST	NOT GIVEN
SAMPLED	09/19/29	08/03/29	11/12/35
FORMATION	CRET-DAKOTA	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	545	545	545
DEPTH, FEET	5113	4985	5079
WELLHEAD PRESSURE,PSIG	1000	800	600
OPEN FLOW, MCFD	20000	NOT GIVEN	6500
COMPONENT, MOLE PCT			
METHANE	0.5	0.0	4.9
ETHANE	4.0	0.0	1.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	2.6	1.9
OXYGEN	0.1	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	92.1	97.5	91.3
HELIUM	0.14	0.08	0.32
HEATING VALUE*	77	0	78
SPECIFIC GRAVITY	1.486	1.516	1.459

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 649 SAMPLE 6857	INDEX 650 SAMPLE 9033	INDEX 651 SAMPLE 10225
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	JACKSON	KIOWA
FIELD	NOT GIVEN	WILDCAT	BRANDON
WELL NAME	BALLINGER FEDERAL NO. 1	GOVT. LANMON NO. 1-A	HARRISON NO. 1
LOCATION	SEC. 8, T9N, R78W	SEC. 4, T9N, R80W	SEC. 9, T19S, R45W
OWNER	GULF OIL CORP.	TEXACO INC.	FREMONT PETROLEUM CO.
COMPLETED	10/25/58	05/12/63	09/01/65
SAMPLED	10/29/58	06/04/63	09/25/65
FORMATION	CRET-MUDDY,DAKOTA&LAKOTA	CRET-LAKOTA	MISS-LIME
GEOLOGIC PROVINCE CODE	545	545	450
DEPTH, FEET	5111	5717	4780
WELLHEAD PRESSURE,PSIG	910	NOT GIVEN	892
OPEN FLOW, MCFD	14450	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	4.1	0.3	16.7
ETHANE	0.3	0.3	3.7
PROPANE	0.6	0.2	7.9
N-BUTANE	0.1	0.0	3.8
ISOBUTANE	0.0	0.0	1.1
N-PENTANE	TRACE	0.0	3.1
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	2.5
NITROGEN	4.1	2.5	42.7
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.6
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	90.4	96.3	14.2
HELIUM	0.20	0.10	2.94
HEATING VALUE*	60	19	898
SPECIFIC GRAVITY	1.462	1.509	1.169

	INDEX 652 SAMPLE 10279	INDEX 653 SAMPLE 10623	INDEX 654 SAMPLE 10624
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	BRANDON	BRANDON	BRANDON
WELL NAME	HARRISON NO. 1	DAWSON NO. 1	DAWSON NO. 1
LOCATION	SEC. 9, T19S, R45W	SEC. 4, T19S, R45W	SEC. 4, T19S, R45W
OWNER	FREMONT PETROLEUM CO.	FREMONT PETROLEUM CO.	FREMONT PETROLEUM CO.
COMPLETED	09/01/65	DRILL STEM TEST NO. 3	DRILL STEM TEST NO. 8
SAMPLED	11/09/65	NOT GIVEN	NOT GIVEN
FORMATION	MISS-WARSAW	MISS-ST. LOUIS	MISS-
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4774	4552	4566
WELLHEAD PRESSURE,PSIG	892	718	580
OPEN FLOW, MCFD	NOT GIVEN	1450	440
COMPONENT, MOLE PCT			
METHANE	16.0	24.3	24.1
ETHANE	2.6	3.0	3.1
PROPANE	3.5	2.9	2.9
N-BUTANE	2.2	1.2	1.4
ISOBUTANE	0.7	1.1	0.9
N-PENTANE	1.2	0.4	0.7
ISOPENTANE	2.0	0.2	0.3
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	2.3	0.4	0.4
NITROGEN	56.6	60.6	60.5
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.2	0.2
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.1	1.7	1.6
HELIUM	4.63	3.90	3.78
HEATING VALUE*	664	503	519
SPECIFIC GRAVITY	1.058	0.909	0.916

	INDEX 655 SAMPLE 13187	INDEX 656 SAMPLE 13188	INDEX 657 SAMPLE 11846
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	CAVALRY	CAVALRY	CHIVINGTON W
WELL NAME	WEAR-KITCH NO. 1	WEAR-KITCH NO. 1	MERRICK E NO. 1
LOCATION	SEC. 34, T18S, R45W	SEC. 34, T18S, R45W	SEC. 33, T1AS, R47W
OWNER	INEXCO OIL CO.	INEXCO OIL CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	04/04/72	04/04/72	02/13/69
SAMPLED	04/13/72	04/13/72	04/30/69
FORMATION	MISS-	MISS-	PENN-KEYES
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4663	4663	4964
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	837
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1850
COMPONENT, MOLE PCT			
METHANE	28.7	28.7	68.7
ETHANE	3.8	4.0	9.7
PROPANE	3.6	3.9	4.3
N-BUTANE	1.7	1.9	1.3
ISOBUTANE	0.9	1.0	1.0
N-PENTANE	0.7	0.7	0.6
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	0.5	0.4
NITROGEN	54.6	54.7	12.4
OXYGEN	0.6	0.0	0.0
ARGON	0.2	0.2	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.8	0.6
HELIUM	2.59	2.00	0.78
HEATING VALUE*	411	446	1117
SPECIFIC GRAVITY	0.919	0.939	0.762

	INDEX 658 SAMPLE 5287	INDEX 659 SAMPLE 6161	INDEX 660 SAMPLE 6276
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	MCCLAVE
WELL NAME	STATE MCCLAVE	LYNN A NO. 1	M. H. MORSE A-1
LOCATION	SEC. 11, T20S, R49W	SEC. 13, T20S, R49W	SEC. 28, T20S, R48W
OWNER	CONTINENTAL OIL CO.	D. D. HARRINGTON	D. D. HARRINGTON
COMPLETED	NOT GIVEN	NOT GIVEN	02/28/57
SAMPLED	10/07/52	10/12/56	03/03/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4872	4834	4728
WELLHEAD PRESSURE,PSIG	1015	880	890
OPEN FLOW, MCFD	NOT GIVEN	5000	5010
COMPONENT, MOLE PCT			
METHANE	72.0	73.2	73.8
ETHANE	11.2	10.7	12.1
PROPANE	4.4	5.8	4.1
N-BUTANE	0.8	1.0	0.8
ISOBUTANE	0.7	0.5	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	9.4	7.6	7.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.0	0.5
HELIUM	0.39	0.39	0.25
HEATING VALUE*	1126	1170	1140
SPECIFIC GRAVITY	0.732	0.735	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 661 SAMPLE 6297	INDEX 662 SAMPLE 7468	INDEX 663 SAMPLE 7469
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	MCCLAVE
WELL NAME	STATE A-1	STATE NO. 1-16	NEGLEY NO. 1
LOCATION	SEC. 34, T19S, R48W	SEC. 16, T20S, R48W	SEC. 30, T20S, R48W
OWNER	D. O. HARRINGTON	FRANKFORT OIL CO.	FRANKFORT OIL CO.
COMPLETED	03/30/57	07/01/59	12/18/59
SAMPLED	03/29/57	06/--/60	03/29/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4711	4725	4835
WELLHEAD PRESSURE, PSIG	970	NOT GIVEN	873
OPEN FLOW, MCFD	887	5450	1590
COMPONENT, MOLE PCT			
METHANE	70.5	74.2	74.2
ETHANE	11.5	11.2	11.4
PROPANE	5.3	4.0	3.9
N-BUTANE	1.2	0.8	0.7
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	8.9	8.0	8.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.48	0.30	0.40
HEATING VALUE*	1163	1121	1119
SPECIFIC GRAVITY	0.747	0.713	0.712

	INDEX 664 SAMPLE 7645	INDEX 665 SAMPLE 7646	INDEX 666 SAMPLE 11128
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	MCCLAVE
WELL NAME	STATE-PYLES NO. 1	GOFF UNIT NO. 1	WEISENBERGER A NO. 1
LOCATION	SEC. 12, T20S, R49W	SEC. 21, T20S, R48W	SEC. 29, T19S, R48W
OWNER	FRANKFORT OIL CO.	FRANKFORT OIL CO.	CABOT CORP.
COMPLETED	05/19/60	12/21/59	05/18/67
SAMPLED	08/14/60	08/16/60	09/22/67
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4835	4745	4629
WELLHEAD PRESSURE, PSIG	900	900	991
OPEN FLOW, MCFD	20000	1700	1050
COMPONENT, MOLE PCT			
METHANE	72.5	72.6	65.7
ETHANE	11.7	11.7	10.5
PROPANE	4.6	4.6	6.5
N-BUTANE	1.0	1.1	2.0
ISOBUTANE	0.5	0.5	1.1
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	0.2	0.2	1.1
CYCLOPENTANE	0.1	TRACE	0.4
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	8.0	8.0	10.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.40	0.40	0.37
HEATING VALUE*	1145	1146	1246
SPECIFIC GRAVITY	0.730	0.730	0.821

	INDEX 667 SAMPLE 6219	INDEX 668 SAMPLE 6514	INDEX 669 SAMPLE 9707
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIT CARSON
FIELD	WILDCAT	WILDCAT	SMOKY HILL
WELL NAME	WAGNER NO. 1	ERRAMUSPE NO. A-1	LOWE NO. 2
LOCATION	SEC. 31, T23S, R49W	SEC. 34, T20S, R48W	SEC. 1, T11S, R46W
OWNER	D. O. HARRINGTON	D. O. HARRINGTON	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	01/18/65
SAMPLED	09/05/56	02/23/58	01/18/65
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	540
DEPTH, FEET	4990	4761	5477
WELLHEAD PRESSURE, PSIG	NOT GIVEN	871	780
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	69.5	73.8	19.6
ETHANE	4.3	11.3	1.9
PROPANE	1.3	4.3	1.1
N-BUTANE	0.3	0.9	0.6
ISOBUTANE	0.0	0.7	0.2
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	23.4	7.7	70.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.3
HYDROGEN	0.3	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.8
HELIUM	0.52	0.20	4.28
HEATING VALUE*	443	1147	3150
SPECIFIC GRAVITY	0.694	0.729	0.883

	INDEX 670 SAMPLE 6354	INDEX 671 SAMPLE 6464	INDEX 672 SAMPLE 4660
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	ALKALI GULCH	ALKALI GULCH	BARKER CREEK
WELL NAME	CATER F NO. II-32	BUTLER NO. 44-28	DELHI NO. 2
LOCATION	SEC. 32, T34N, R12W	SEC. 28, T34N, R12W	SEC. 3, T32N, R13W
OWNER	GENERAL PETROLEUM CORP.	GENERAL PETROLEUM CORP.	DELHI OIL CORP.
COMPLETED	05/17/57	11/13/57	NOT GIVEN
SAMPLED	07/20/57	12/23/57	04/05/49
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	9420	9526	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3187	NOT GIVEN
OPEN FLOW, MCFD	36000	23000	125000
COMPONENT, MOLE PCT			
METHANE	94.3	93.4	84.1
ETHANE	0.1	0.1	1.1
PROPANE	0.0	0.0	0.4
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.0	0.4	1.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.2	0.5
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	5.0	5.5	11.6
HELIUM	0.17	0.20	0.22
HEATING VALUE*	957	952	894
SPECIFIC GRAVITY	0.601	0.609	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 673 SAMPLE 4785	INDEX 674 SAMPLE 3635	INDEX 675 SAMPLE 6254
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	BARKER DOME	BONDAD	BONDAD E
WELL NAME	DELHI NO. 3	SPATTER BONDAD NO. 1	SOUTHERN UTE 33-10 NO. 2-35
LOCATION	SEC. 2, T32N, R14W	SEC. 31, T33N, R9W	SEC. 35, T33N, R10W
OWNER	DELHI OIL CORP.	NICK SPATTER	U.S. SMELT., REF. & MINING
COMPLETED	08/30/49	NOT GIVEN	10/05/56
SAMPLED	09/10/49	04/09/43	02/15/57
FORMATION	PENN-PARADOX	CRET-PICTURED CLIFFS	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	9654	NOT GIVEN	5092
WELLHEAD PRESSURE,PSIG	2700	NOT GIVEN	796
OPEN FLOW, MCFD	172	NOT GIVEN	8724
COMPONENT, MOLE PCT			
METHANE	84.0	95.7	95.3
ETHANE	1.2	0.5	2.2
PROPANE	0.4	---	0.5
N-BUTANE	0.2	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.0	---	TRACE
NITROGEN	1.4	0.0	0.2
OXYGEN	0.1	0.3	0.1
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	12.1	3.5	1.6
HELIUM	0.21	TRACE	TRACE
HEATING VALUE*	903	978	1018
SPECIFIC GRAVITY	0.694	0.593	0.587

	INDEX 676 SAMPLE 5792	INDEX 677 SAMPLE 5063	INDEX 678 SAMPLE 5257
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	FRUITLAND	IGNACIO	IGNACIO
WELL NAME	PURCO UTE NO. 1	UTE INDIANS B NO. 2	HELTON NO. 1
LOCATION	SEC. 9, T33N, R9W	SEC. 21, T33N, R7W	SEC. 18, T33N, R8W
OWNER	PURCO DEVELOPMENT, INC.	STANOLIND OIL & GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	11/18/54	02/28/51	08/29/51
SAMPLED	03/16/55	06/27/51	06/27/52
FORMATION	CRET-FRUITLAND	CRET-PICTURED CLIFFS	CRET-DAKOTA BASAL
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2540	2465	7830
WELLHEAD PRESSURE,PSIG	1494	1494	2736
OPEN FLOW, MCFD	2438	2350	17000
COMPONENT, MOLE PCT			
METHANE	98.2	98.0	94.9
ETHANE	0.1	0.4	0.2
PROPANE	0.0	0.1	0.1
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.9	0.6
OXYGEN	TRACE	0.3	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.1	0.2	4.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	997	1008	971
SPECIFIC GRAVITY	0.565	0.566	0.600

	INDEX 679 SAMPLE 5440	INDEX 680 SAMPLE 7218	INDEX 681 SAMPLE 15928
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO	IGNACIO	IGNACIO BLANCO
WELL NAME	TIFFANY GAS UNIT B-1	ADA NO. 1	SOUTHERN UTE NO. 30-1
LOCATION	SEC. 35, T33N, R7W	SEC. 25, T33N, R11W	SEC. 30, T33N, R9W
OWNER	STANOLIND OIL & GAS CO.	MONSANTO CHEMICAL CO.	ARCO OIL & GAS CO.
COMPLETED	12/23/52	01/07/59	08/23/78
SAMPLED	04/02/53	09/11/59	03/31/80
FORMATION	CRET-FRUITLAND	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2346	4740	5109
WELLHEAD PRESSURE,PSIG	1450	1172	1106
OPEN FLOW, MCFD	2350	NOT GIVEN	2140
COMPONENT, MOLE PCT			
METHANE	95.9	89.7	95.2
ETHANE	0.3	3.9	1.8
PROPANE	0.0	0.5	0.2
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.0	0.5	TRACE
N-PENTANE	0.1	0.5	TRACE
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	2.8	0.1
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	1.9	0.0
CARBON DIOXIDE	3.1	TRACE	2.5
HELIUM	TRACE	0.20	TRACE
HEATING VALUE*	986	1030	1010
SPECIFIC GRAVITY	0.593	0.619	0.594

	INDEX 682 SAMPLE 15929	INDEX 683 SAMPLE 7737	INDEX 684 SAMPLE 8067
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO BLANCO	IGNACIO-BLANCO	IGNACIO-BLANCO
WELL NAME	SOUTHERN UTE NO. 30-1	SOUTHERN UTE NO. 2	COLORADO 32-7 NO. 2
LOCATION	SEC. 30, T33N, R9W	SEC. 16, T32N, R7W	SEC. 10, T32N, R7W
OWNER	ARCO OIL & GAS CO.	W. E. BAKKE	EL PASO NATURAL GAS CO.
COMPLETED	08/23/78	10/03/60	05/02/61
SAMPLED	03/31/80	10/23/60	07/11/61
FORMATION	CRET-PICTURED CLIFF	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2868	7718	5452
WELLHEAD PRESSURE,PSIG	1333	2800	1184
OPEN FLOW, MCFD	269	NOT GIVEN	3645
COMPONENT, MOLE PCT			
METHANE	90.6	93.6	94.5
ETHANE	4.5	0.1	2.8
PROPANE	1.2	0.0	0.5
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.2	0.8	0.0
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	5.1	2.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1071	951	1027
SPECIFIC GRAVITY	0.634	0.607	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 685 SAMPLE 8729	INDEX 686 SAMPLE 5291	INDEX 687 SAMPLE 5721
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO-BLANCO	LA PLATA	NOT GIVEN
WELL NAME	NO. 32-7 1-11	UTE NO. 1	VIRBETH LAND NO. 1
LOCATION	SEC. 11, T32N, R7W	SEC. 15, T32N, R11W	SEC. 22, T32N, R11W
OWNER	ASPEN CRUDE PURCHASING CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	11/06/59	05/08/52	09/03/54
SAMPLED	10/18/62	08/29/52	10/--/54
FORMATION	CRET-MESAVERDE	CRET-POINT LOOKOUT	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5430	4530	5295
WELLHEAD PRESSURE,PSIG	800	972	NOT GIVEN
OPEN FLOW, MCFD	2758	1710	3000
COMPONENT, MOLE PCT			
METHANE	95.0	85.8	87.7
ETHANE	2.5	7.8	7.0
PROPANE	0.4	2.9	2.0
N-BUTANE	0.1	0.6	0.5
ISOBUTANE	TRACE	0.5	0.5
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	0.1	0.5	0.2
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.7	1.2	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1021	1152	1123
SPECIFIC GRAVITY	0.588	0.667	0.648

	INDEX 688 SAMPLE 8801	INDEX 689 SAMPLE 5310	INDEX 690 SAMPLE 8678
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	RED MESA	WILDCAT	WILDCAT
WELL NAME	DUDLEY NO. 1	HARMON NO. 1	ANIMAS NO. 2-11
LOCATION	SEC. 23, T33N, R12W	SEC. 17, T33N, R8W	SEC. 11, T33N, R10W
OWNER	HATHAWAY CO.	EL PASO NATURAL GAS CO.	COMPASS EXPLORATION, INC.
COMPLETED	03/01/61	05/28/52	03/09/62
SAMPLED	12/03/62	11/07/52	09/27/62
FORMATION	CRET-MESAVERDE	CRET-U	CRET-FRUITLAND
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	900	2605	2133
WELLHEAD PRESSURE,PSIG	500	1300	1248
OPEN FLOW, MCFD	200	100	399
COMPONENT, MOLE PCT			
METHANE	98.3	96.4	96.6
ETHANE	0.1	0.2	0.6
PROPANE	TRACE	0.0	0.1
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	0.3	0.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	3.1	2.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	998	980	996
SPECIFIC GRAVITY	0.566	0.587	0.582

	INDEX 691 SAMPLE 13227	INDEX 692 SAMPLE 2143	INDEX 693 SAMPLE 2192
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LARIMER	LARIMER
FIELD	WILDCAT	BERTHOUD	BERTHOUD
WELL NAME	UTE NO. 1	STATE NO. 2	FAGAN NO. 1
LOCATION	SEC. 24, T33N, R14W	SEC. 16, T4N, R69W	SEC. 17, T4N, R69W
OWNER	NORRIS OIL CO.	FIVE SQUARE OIL & GAS CO.	FIVE SQUARE OIL & GAS CO.
COMPLETED	03/01/72	07/01/29	07/04/26
SAMPLED	06/07/72	09/15/30	09/06/30
FORMATION	PENN-HERMOSA	NOT GIVEN	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	580	540	540
DEPTH, FEET	9766	3750	2910
WELLHEAD PRESSURE,PSIG	2565	125	1300
OPEN FLOW, MCFD	3500	450	850
COMPONENT, MOLE PCT			
METHANE	82.7	63.7	76.7
ETHANE	0.4	31.5	21.9
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.7	4.2	0.8
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	5.9	---	---
CARBON DIOXIDE	9.2	0.2	0.4
HELIUM	0.17	0.03	0.04
HEATING VALUE*	913	1210	1169
SPECIFIC GRAVITY	0.698	0.731	0.671

	INDEX 694 SAMPLE 855	INDEX 695 SAMPLE 1783	INDEX 696 SAMPLE 1093
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LARIMER	LARIMER	LAS ANIMAS
FIELD	WELLINGTON	WELLINGTON	GARCIA
WELL NAME	DISCOVERY	MITCHELL NO. 1	SANDOVAL RANCH
LOCATION	SEC. 31, T10N, R68W	SEC. 6, T9N, R68W	SEC. 9, T34S, R62W
OWNER	UNION OIL CO. OF CALIF.	CONTINENTAL OIL CO.	CARLOS SANDOVAL
COMPLETED	NOT GIVEN	07/19/24	--/--/26
SAMPLED	03/20/24	05/20/29	07/03/25
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-APISHAPA
GEOLOGIC PROVINCE CODE	540	540	455
DEPTH, FEET	4275	4216	NOT GIVEN
WELLHEAD PRESSURE,PSIG	165	975	NOT GIVEN
OPEN FLOW, MCFD	85000	67000	50
COMPONENT, MOLE PCT			
METHANE	86.1	84.3	53.5
ETHANE	9.8	14.3	37.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	0.4	6.7
OXYGEN	0.2	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.7	0.9	2.3
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1048	1110	1209
SPECIFIC GRAVITY	0.628	0.636	0.790

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 697 SAMPLE 1094	INDEX 698 SAMPLE 1889	INDEX 699 SAMPLE 1914
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	GARCIA	MODEL	MODEL
WELL NAME	SANDOVAL RANCH	COWDREY NOS. 1 & 2	HUFF NO. 1
LOCATION	SEC. --, T34S, R62W	SEC. 35, T29S, R60W	SEC. 35, T29S, R60W
OWNER	MOUNTAIN STATES OIL CORP.	HELIUM CO.	HELIUM CO.
COMPLETED	NOT GIVEN	09/--/29	09/--/29
SAMPLED	07/03/25	11/02/29	12/21/29
FORMATION	CRET-APISHAPA	-RED BEDS	PERM-
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	450	900	1004
WELLHEAD PRESSURE,PSIG	NOT GIVEN	13	10
OPEN FLOW, MCFD	100000	1000	1000
COMPONENT, MOLE PCT			
METHANE	28.6	0.0	0.0
ETHANE	68.5	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	---	79.7	77.4
OXYGEN	0.3	0.9	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.6	12.2	14.2
HELIUM	TRACE	7.18	8.34
HEATING VALUE*	1517	0	0
SPECIFIC GRAVITY	0.920	0.977	0.979

	INDEX 700 SAMPLE 3108	INDEX 701 SAMPLE 3109	INDEX 702 SAMPLE 3110
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	MODEL	MODEL	MODEL
WELL NAME	VAN VLIET NO. 1	COWDREY NO. 1	COWDREY NO. 2
LOCATION	SEC. 1, T30S, R60W	SEC. 35, T29S, R60W	SEC. 35, T29S, R60W
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/06/42	03/06/42	03/05/42
FORMATION	JURA-	JURA-	JURA-
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	950	855	941
WELLHEAD PRESSURE,PSIG	11	11	11
OPEN FLOW, MCFD	75	270	183
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	0.1
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	77.9	75.7	72.1
OXYGEN	0.3	2.7	1.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	13.9	13.9	14.3
HELIUM	7.83	7.59	7.93
HEATING VALUE*	1	1	1
SPECIFIC GRAVITY	0.981	0.986	0.945

	INDEX 703 SAMPLE 3111	INDEX 704 SAMPLE 8676	INDEX 705 SAMPLE 5488
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	MODEL	MODEL	NINA VIEW
WELL NAME	COWDREY NO. 3	HOFF HEIRS NO. 2	WELL NO. 2
LOCATION	SEC. 35, T29S, R60W	SEC. 35, T29S, R60W	SEC. 7, T28S, R52W
OWNER	U.S. BUREAU OF MINES	ROBERT E. THORPE, SR.	NELSON-MOORE DEVEL. CO.
COMPLETED	NOT GIVEN	05/15/62	NOT GIVEN
SAMPLED	03/05/42	09/27/62	03/30/53
FORMATION	JURA-	PERM-LYONS	NOT GIVEN
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	1091	980	485
WELLHEAD PRESSURE,PSIG	11	10	NOT GIVEN
OPEN FLOW, MCFD	480	50	3500
COMPONENT, MOLE PCT			
METHANE	0.2	TRACE	0.2
ETHANE	0.0	TRACE	0.1
PROPANE	---	0.2	0.0
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	76.6	75.8	3.0
OXYGEN	1.7	0.6	TRACE
ARGON	---	0.7	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	14.8	15.4	96.6
HELIUM	6.70	7.19	0.11
HEATING VALUE*	2	5	4
SPECIFIC GRAVITY	0.996	0.998	1.508

	INDEX 706 SAMPLE 5489	INDEX 707 SAMPLE 5490	INDEX 708 SAMPLE 2449
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	NINA VIEW	NINA VIEW	NOT GIVEN
WELL NAME	WELL NO. 3	WELL NO. 4	BRUMLEY NO. 1
LOCATION	SEC. 7, T28S, R52W	SEC. 7, T28S, R52W	SEC. 6, T29S, R51W
OWNER	NELSON-MOORE DEVEL. CO.	NELSON-MOORE DEVEL. CO.	C. W. BRUMLEY
COMPLETED	09/--/52	09/--/52	--/--/34
SAMPLED	03/30/53	03/30/53	04/24/31
FORMATION	NOT GIVEN	NOT GIVEN	PERM-GLORIETTA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	480	819	425
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	627	76A	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	TRACE	TRACE	0.0
PROPANE	0.0	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	3.0	2.2	1.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	96.7	97.6	98.8
HELIUM	0.13	0.06	TRACE
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	1.509	1.515	1.522

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 709 SAMPLE 2450	INDEX 710 SAMPLE 15817	INDEX 711 SAMPLE 1735
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	NOT GIVEN	NOT GIVEN	SAN FRANCISCO CREEK
WELL NAME	KING NO. 1	MOBIL CT-79-8-9C	SANDOVAL NO. 2
LOCATION	SEC. 1, T28S, R53W	SEC. 9, T33S, R65W	SEC. 4, T34S, R62W
OWNER	NOT GIVEN	MOBIL OIL CORP.	MOUNTAIN STATES OIL CORP.
COMPLETED	--/--/16	NOT GIVEN	NOT GIVEN
SAMPLED	04/24/31	10/--/79	04/06/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	125	1192	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	93.7	15.1
ETHANE	0.0	TRACE	75.5
PROPANE	---	TRACE	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	3.8	4.6	3.7
OXYGEN	0.2	0.4	0.6
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	95.9	1.1	3.1
HELIUM	0.08	TRACE	TRACE
HEATING VALUE*	0	949	1506
SPECIFIC GRAVITY	1.505	0.587	0.966

	INDEX 712 SAMPLE 1160	INDEX 713 SAMPLE 8950	INDEX 714 SAMPLE 5566
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	SAN FRANCISCO STRUCTURE	STRATIGRAPHIC TEST	WILDCAT
WELL NAME	NO. 1	GOVERNMENT TRUE NO. 1	MOCK NO. 1
LOCATION	SEC. 4, T34S, R62W	SEC. 30, T28S, R56W	SEC. 29, T34S, R59W
OWNER	MOUNTAIN STATES OIL CORP.	TEXACO INC.	BAKER & TAYLOR DRILLING CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	NOT GIVEN
SAMPLED	09/26/25	04/29/63	11/20/53
FORMATION	NOT GIVEN	PERM-LYONS	NOT GIVEN
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	1300	1015	2390
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	200
OPEN FLOW, MCFD	NOT GIVEN	3	50
COMPONENT, MOLE PCT			
METHANE	44.5	0.0	0.1
ETHANE	38.5	0.0	1.5
PROPANE	---	0.0	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	12.7	75.7	88.3
OXYGEN	1.5	0.0	0.2
ARGON	---	0.9	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	2.8	14.6	7.7
HELIUM	TRACE	8.80	2.20
HEATING VALUE*	1141	0	28
SPECIFIC GRAVITY	0.833	0.980	0.993

	INDEX 715 SAMPLE 11542	INDEX 716 SAMPLE 5016	INDEX 717 SAMPLE 6243
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	AMBER	ARMSTRONG	ARMSTRONG
WELL NAME	ROBERTS NO. 1	T. P. LINDE NO. 1	LINDE NO. 1
LOCATION	SEC. 30, T11N, R53W	SEC. 23, T11N, R53W	SEC. 23, T11N, R53W
OWNER	FRANK WALSH	BRITISH AMERICAN OIL PROD.	BRITISH AMERICAN OIL PROD.
COMPLETED	01/15/68	12/15/50	09/19/50
SAMPLED	06/14/68	02/14/51	01/25/57
FORMATION	CRET-DAKOTA D	CRET-U	CRET-L
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5060	5256	5256
WELLHEAD PRESSURE,PSIG	950	1242	NOT GIVEN
OPEN FLOW, MCFD	2600	4500	2882
COMPONENT, MOLE PCT			
METHANE	78.2	79.9	79.1
ETHANE	5.4	7.3	7.5
PROPANE	6.4	5.0	4.9
N-BUTANE	1.9	1.4	1.5
ISOBUTANE	1.0	0.5	0.8
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	5.0	4.2	4.2
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.1	0.9	1.1
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1202	1160	1176
SPECIFIC GRAVITY	0.744	0.706	0.720

	INDEX 718 SAMPLE 6244	INDEX 719 SAMPLE 5789	INDEX 720 SAMPLE 5455
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	ARMSTRONG	COYOTE	DALE
WELL NAME	EDMOND STRANGE NO. 1	STATE 694 A-1	BREWER A NO. 1
LOCATION	SEC. 24, T11N, R53W	SEC. 12, T6N, R53W	SEC. 15, T8N, R53W
OWNER	BRITISH AMERICAN OIL PROD.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/26/51	01/01/55	NOT GIVEN
SAMPLED	01/25/57	03/07/55	04/14/53
FORMATION	CRET-DAKOTA	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5221	4525	4656
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1070	NOT GIVEN
OPEN FLOW, MCFD	1550	2250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.7	89.8	79.1
ETHANE	7.6	2.5	6.6
PROPANE	4.6	1.5	4.8
N-BUTANE	1.6	0.6	2.0
ISOBUTANE	0.9	0.6	0.7
N-PENTANE	0.3	0.2	0.5
ISOPENTANE	0.4	0.3	0.6
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	4.4	2.5	4.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.4	0.6
HELIUM	0.08	0.03	0.07
HEATING VALUE*	1161	1070	1210
SPECIFIC GRAVITY	0.725	0.639	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 721 SAMPLE 5460	INDEX 722 SAMPLE 7491	INDEX 723 SAMPLE 5456
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	DALE	HADFIELD	LUFT
WELL NAME	J. KNIETON A NO. 1	EISENACH NO. 1	C. LUFT, JR. NO. 1-6
LOCATION	SEC. 23, T8N, R53W	SEC. 7, T7N, R52W	SEC. 17, T8N, R53W
OWNER	SHELL OIL CO.	PETROLEUM, INC.	SHELL OIL CO.
COMPLETED	NOT GIVEN	05/09/59	NOT GIVEN
SAMPLED	04/15/53	04/07/60	04/15/53
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-MUDDY
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4756	4378	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	350	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.3	86.5	73.5
ETHANE	9.3	4.0	7.8
PROPANE	5.4	3.9	7.4
N-BUTANE	1.6	1.6	3.5
ISOBUTANE	0.7	0.6	1.1
N-PENTANE	0.5	0.1	0.8
ISOPENTANE	0.3	1.1	0.9
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.3	0.4	0.4
NITROGEN	3.9	0.4	3.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.7
HELIUM	0.06	0.03	0.05
HEATING VALUE*	1221	1206	1332
SPECIFIC GRAVITY	0.736	0.699	0.806

	INDEX 724 SAMPLE 5152	INDEX 725 SAMPLE 5458	INDEX 726 SAMPLE 5459
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	MOUNT HOPE	MOUNT HOPE	MOUNT HOPE
WELL NAME	GREEN A NO. 5	GREEN A NO. 8	GREEN A NO. 20
LOCATION	SEC. 30, T9N, R53W	SEC. 30, T9N, R53W	SEC. 30, T9N, R53W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	05/01/51	NOT GIVEN	NOT GIVEN
SAMPLED	08/10/51	04/07/53	04/07/53
FORMATION	CRET-	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4863	4865	4935
WELLHEAD PRESSURE,PSIG	290	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	173	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.5	74.9	73.2
ETHANE	6.7	7.7	7.9
PROPANE	8.0	8.3	7.4
N-BUTANE	3.0	2.7	3.0
ISOBUTANE	0.9	0.9	1.4
N-PENTANE	0.4	0.7	0.9
ISOPENTANE	0.6	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.6
NITROGEN	4.1	3.1	3.9
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.7
HELIUM	0.06	0.03	0.04
HEATING VALUE*	1297	1306	1331
SPECIFIC GRAVITY	0.775	0.783	0.806

	INDEX 727 SAMPLE 5145	INDEX 728 SAMPLE 13210	INDEX 729 SAMPLE 5454
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PADRONI	PEAVY	SPRINGDALE
WELL NAME	GOULD NO. 1	PEAVY NO. 1	I. G. CHRISTNER NO. 1
LOCATION	SEC. 20, T9N, R52W	SEC. 30, T12N, R55W	SEC. 15, T8N, R53W
OWNER	TEXAS CO.	RAYMOND OIL CO., INC.	SHELL OIL CO.
COMPLETED	07/08/51	NOT GIVEN	NOT GIVEN
SAMPLED	08/08/51	05/10/72	04/22/53
FORMATION	CRET-DAKOTA	CRET-DAKOTA D	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4625	5958	4830
WELLHEAD PRESSURE,PSIG	1125	830	94
OPEN FLOW, MCFD	4000	3500	2902
COMPONENT, MOLE PCT			
METHANE	78.4	77.8	79.7
ETHANE	7.7	5.9	8.7
PROPANE	5.2	6.8	4.3
N-BUTANE	1.3	1.9	1.1
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	5.8	4.7	4.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.7	0.6
HELIUM	0.07	0.11	0.10
HEATING VALUE*	1159	1181	1156
SPECIFIC GRAVITY	0.708	0.738	0.701

	INDEX 730 SAMPLE 5461	INDEX 731 SAMPLE 5950	INDEX 732 SAMPLE 13599
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	SPRINGDALE	STERLING	TWIN MILLS
WELL NAME	H. HAAS JR. NO. 1	STATE NO. 1	STATE-LUFT NO. 1
LOCATION	SEC. 10, T8N, R53W	SEC. 2, T7N, R52W	SEC. 19, T7N, R51W
OWNER	SHELL OIL CO.	DIETLER & OLESON	SOTEXCO, INC.
COMPLETED	NOT GIVEN	05/26/55	09/08/71
SAMPLED	04/15/53	10/17/55	05/21/73
FORMATION	CRET-MUDDY	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4768	4504	4591
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1068	910
OPEN FLOW, MCFD	NOT GIVEN	1921	6000
COMPONENT, MOLE PCT			
METHANE	78.8	91.3	91.0
ETHANE	7.0	3.0	2.2
PROPANE	5.9	0.3	0.2
N-BUTANE	2.2	0.1	TRACE
ISOBUTANE	0.7	0.3	0.4
N-PENTANE	0.5	0.0	TRACE
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	3.9	3.3	5.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.3	0.6
HELIUM	0.07	0.05	0.05
HEATING VALUE*	1228	1009	989
SPECIFIC GRAVITY	0.741	0.608	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 733 SAMPLE 13362	INDEX 734 SAMPLE 5149	INDEX 735 SAMPLE 5871
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	VAQUERO	WALKER	WILDCAT
WELL NAME	POSPICIL NO. 1	C. F. GREEN NO. 1	BRACHTENBACH NO. 1
LOCATION	SEC. 4, T7N, R52W	SEC. 20, T9N, R53W	SEC. 26, T8N, R54W
OWNER	PATRICK A. DOHENY	BRITISH AMERICAN OIL PROD.	J. W. BRADEN OIL CO.
COMPLETED	08/20/72	01/--/51	05/13/55
SAMPLED	08/24/72	08/29/51	07/09/55
FORMATION	CRET-DAKOTA J	CRET-	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4432	4949	5110
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	1170
OPEN FLOW, MCFD	1940	3670	7850
COMPONENT, MOLE PCT			
METHANE	90.4	79.9	78.6
ETHANE	4.2	8.2	7.8
PROPANE	0.3	4.4	4.9
N-BUTANE	TRACE	1.1	1.3
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.5	4.3	5.1
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	0.6	0.6
HELIUM	0.05	0.07	0.08
HEATING VALUE*	1022	1159	1168
SPECIFIC GRAVITY	0.611	0.702	0.715

	INDEX 736 SAMPLE 7076	INDEX 737 SAMPLE 8921	INDEX 738 SAMPLE 13643
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	AMEN-DERMER NO. 1	FEDERAL NO. 1	SHERMAN NO. 1
LOCATION	SEC. 7, T7N, R52W	SEC. 4, T6N, R52W	SEC. 8, T7N, R51W
OWNER	PETROLEUM, INC.	PATRICK A. DOHENY	THOMAS B. BURNS
COMPLETED	03/16/59	12/27/62	05/01/73
SAMPLED	05/19/59	04/08/63	07/--/73
FORMATION	CRET-DAKOTA	CRET-DAKOTA D	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4398	4468	4560
WELLHEAD PRESSURE,PSIG	850	560	1094
OPEN FLOW, MCFD	500	1350	4800
COMPONENT, MOLE PCT			
METHANE	86.1	85.5	93.1
ETHANE	3.3	3.4	2.1
PROPANE	3.4	3.1	0.2
N-BUTANE	1.7	1.6	0.0
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.4	0.3	0.0
ISOPENTANE	0.6	0.7	0.3
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.5	0.3	0.1
NITROGEN	1.5	4.0	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.3	1.5
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1180	1140	1021
SPECIFIC GRAVITY	0.694	0.681	0.605

	INDEX 739 SAMPLE 4817	INDEX 740 SAMPLE 15818	INDEX 741 SAMPLE 15820
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	ASBURY CREEK	CORE NO. 2	CORE NO. 3
WELL NAME	ASBURY CREEK UNIT WELL NO. 1	VEGA UNIT NO. 3	VEGA UNIT NO. 3
LOCATION	SEC. 14, T9S, R101W	SEC. 10, T10S, R93W	SEC. 10, T10S, R93W
OWNER	AMERADA PETROLEUM CORP.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	12/13/49	NOT GIVEN	NOT GIVEN
SAMPLED	11/08/49	08/--/79	08/--/79
FORMATION	CRET-BURRO CANYON	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2915	7587	7592
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	31	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.2	82.1	85.9
ETHANE	1.1	5.3	4.6
PROPANE	0.3	0.3	0.3
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	6.0	4.6	2.3
OXYGEN	0.1	0.2	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	6.7	7.3	6.8
HELIUM	0.36	TRACE	TRACE
HEATING VALUE*	894	942	960
SPECIFIC GRAVITY	0.654	0.680	0.655

	INDEX 742 SAMPLE 7596	INDEX 743 SAMPLE 8315	INDEX 744 SAMPLE 5504
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	DIVIDE CREEK	FRUITA	GARMESA
WELL NAME	DIVIDE CREEK NO. 9	CHRISTIANA NO. 1	GARMESA NO. 1
LOCATION	SEC. 22, T8, R91W	SEC. 9, T9S, R101W	SEC. 8, T8S, R102W
OWNER	SUN OIL CO.	FRONTIER REFINING CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	07/01/60	03/08/61	11/--/49
SAMPLED	07/08/60	12/07/61	06/01/53
FORMATION	CRET-MESAVERDE	CRET-BUCKHORN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4622	2599	2870
WELLHEAD PRESSURE,PSIG	1550	825	526
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	95.1	83.3	70.0
ETHANE	0.9	0.9	1.0
PROPANE	0.5	0.8	0.0
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.0	1.1	7.8
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	13.4	20.4
HELIUM	0.01	0.23	0.20
HEATING VALUE*	1005	884	742
SPECIFIC GRAVITY	0.598	0.704	0.795

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 745 SAMPLE 8409	INDEX 746 SAMPLE 4816	INDEX 747 SAMPLE 5136
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	MOLINA	NOT GIVEN	NOT GIVEN
WELL NAME	NICHOLS B NO. 1	ASBURY CREEK UNIT NO. 1	GEORGE UNFRED NO. 1
LOCATION	SEC. 13, T10S, R96W	SEC. 14, T9S, R101W	NOT GIVEN
OWNER	APACHE CORP.	AMERADA PETROLEUM CORP.	NOT GIVEN
COMPLETED	12/17/61	12/13/49	NOT GIVEN
SAMPLED	02/14/62	11/05/49	01/25/52
FORMATION	CRET-CORCORAN	CRET-U	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3760	2836	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	25	NOT GIVEN
OPEN FLOW, MCFD	1500	2429	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.5	82.4	96.0
ETHANE	3.3	1.4	0.3
PROPANE	0.9	0.4	0.2
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	0.8	2.4
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.8	14.5	0.6
HELIUM	0.01	0.06	0.00
HEATING VALUE*	1050	877	991
SPECIFIC GRAVITY	0.614	0.713	0.577

	INDEX 748 SAMPLE 15819	INDEX 749 SAMPLE 7091	INDEX 750 SAMPLE 9208
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	NOT GIVEN	PLATEAU	ROBERTS CANYON
WELL NAME	VEGA UNIT NO. 3	GEORGE B. CURRIER NO. 1	ROBERTS CANYON NO. 1
LOCATION	SEC. 10, T10S, R93W	SEC. 19, T10S, R95W	SEC. 5, T10S, R97W
OWNER	EXXON CO., U.S.A.	TENNESSEE GAS & OIL CO.	TEXACO INC.
COMPLETED	NOT GIVEN	02/13/59	10/11/63
SAMPLED	08/--/79	06/10/59	12/17/63
FORMATION	CRET-MESAVERDE	CRET-COZZETTE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	7592	4225	6704
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	2090
OPEN FLOW, MCFD	NOT GIVEN	500	5200
COMPONENT, MOLE PCT			
METHANE	78.3	93.0	91.0
ETHANE	3.1	3.4	1.4
PROPANE	0.2	1.3	0.8
N-BUTANE	0.0	0.4	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	9.9	TRACE	4.7
OXYGEN	1.8	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.6	1.3	1.7
HELIUM	TRACE	0.01	0.30
HEATING VALUE*	854	1068	968
SPECIFIC GRAVITY	0.688	0.610	0.605

	INDEX 751 SAMPLE 5241	INDEX 752 SAMPLE 9715	INDEX 753 SAMPLE 5965
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	SALT WASH W	SHIRE GULCH	WILDCAT
WELL NAME	HIGHLINE CANAL UNIT NO. 1	31-2	GUNDERSON NO. 1
LOCATION	SEC. 2, T9S, R103W	SEC. 2, T10S, R97W	SEC. 17, T9S, R93W
OWNER	AMERADA PETROLEUM CORP.	PACIFIC NAT. GAS EXPL. CO.	VICTOR DRLG. COBUNION OIL
COMPLETED	12/12/51	05/23/64	NOT GIVEN
SAMPLED	04/29/52	02/01/65	11/03/55
FORMATION	CRET-DAKOTA	PENN-CHEROKEE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2008	7456	6560
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	2175
OPEN FLOW, MCFD	1329	221	300
COMPONENT, MOLE PCT			
METHANE	87.1	92.6	87.9
ETHANE	1.0	0.6	5.5
PROPANE	0.1	0.3	1.8
N-BUTANE	0.1	0.0	0.4
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	6.6	0.5	0.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	4.6	5.9	3.6
HELIUM	0.22	0.07	0.00
HEATING VALUE*	913	9570	1080
SPECIFIC GRAVITY	0.637	0.619	0.654

	INDEX 754 SAMPLE 7193	INDEX 755 SAMPLE 7337	INDEX 756 SAMPLE 7586
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MICHELSON GOVT. NO. 1	SKYLINE MITTLE NO. 1	BUZZARD CREEK UNIT NO. 1
LOCATION	SEC. 15, T11S, R94W	SEC. 12, T10S, R96W	SEC. 12, T9S, R93W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	01/31/58	05/30/58	10/20/59
SAMPLED	08/25/59	01/09/60	06/19/60
FORMATION	CRET-MESAVERDE	CRET-MORAPOS	CRET-COZZETTE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4482	4400	8554
WELLHEAD PRESSURE,PSIG	425	1300	3850
OPEN FLOW, MCFD	1420	3982	4200
COMPONENT, MOLE PCT			
METHANE	88.8	94.0	95.7
ETHANE	6.2	2.8	0.7
PROPANE	2.9	1.0	0.4
N-BUTANE	0.6	0.3	0.8
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.4	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.2	0.2	0.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.2	2.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1134	1057	1035
SPECIFIC GRAVITY	0.641	0.600	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 757 SAMPLE 8210	INDEX 758 SAMPLE 8211	INDEX 759 SAMPLE 8212
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FEDERAL C NO. 1	FEDERAL C NO. 1	FEDERAL C NO. 1
LOCATION	SEC. 35, T9S, R99W	SEC. 35, T9S, R99W	SEC. 35, T9S, R99W
OWNER	AMBASSADOR OIL CORP.	AMBASSADOR OIL CORP.	AMBASSADOR OIL CORP.
COMPLETED	09/17/61	09/18/61	09/22/61
SAMPLED	09/17/61	09/18/61	09/22/61
FORMATION	JURA-MORRISON U	CRET-DAKOTA L	CRET-DAKOTA U
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6399	6320	6222
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	1500
OPEN FLOW, MCFD	NOT GIVEN	8900	800
COMPONENT, MOLE PCT			
METHANE	93.6	93.7	89.9
ETHANE	1.2	1.5	2.0
PROPANE	0.2	0.3	0.6
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	2.8	2.2	3.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.0	3.4
HELIUM	0.21	0.18	0.21
HEATING VALUE*	975	987	977
SPECIFIC GRAVITY	0.591	0.594	0.622

	INDEX 760 SAMPLE 8562	INDEX 761 SAMPLE 9318	INDEX 762 SAMPLE 13665
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOVT WILLIAMS NO. 1	KENNON NO. 1	FEDERAL NO. 1-1
LOCATION	SEC. 1, T10S, R97W	SEC. 15, T8S, R96W	SEC. 1, T1N, R1W
OWNER	MCCULLOCH OIL CORP.	DON M. ROUNDS CO.	MITCHELL ENERGY&DEVELOPMENT
COMPLETED	11/21/61	02/11/64	07/07/73
SAMPLED	05/18/62	04/24/64	07/29/73
FORMATION	CRET-COZZETTE & CORCORAN	EOCE-WASATCH	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2944	1908	2565
WELLHEAD PRESSURE,PSIG	900	520	710
OPEN FLOW, MCFD	1500	5750	3244
COMPONENT, MOLE PCT			
METHANE	90.4	93.0	92.5
ETHANE	4.9	4.4	2.3
PROPANE	1.7	0.9	1.5
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	TRACE	0.8	2.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	0.1	0.2
HELIUM	0.01	0.01	0.25
HEATING VALUE*	1082	1066	1042
SPECIFIC GRAVITY	0.632	0.599	0.603

	INDEX 763 SAMPLE 13666	INDEX 764 SAMPLE 13667	INDEX 765 SAMPLE 14314
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FEDERAL NO. 15-1	FEDERAL NO. 9-1	FEDERAL NO. 15-1
LOCATION	SEC. 15, T2N, R2W	SEC. 9, T10S, R100W	SEC. 15, T2N, R2W
OWNER	MITCHELL ENERGY&DEVELOPMENT	MITCHELL ENERGY&DEVELOPMENT	MITCHELL ENERGY CORP.
COMPLETED	06/18/73	12/02/72	08/--/73
SAMPLED	07/26/73	08/02/73	04/02/75
FORMATION	CRET-DAKOTA	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2072	2796	2078
WELLHEAD PRESSURE,PSIG	620	950	611
OPEN FLOW, MCFD	286	3250	3856
COMPONENT, MOLE PCT			
METHANE	79.4	91.1	86.6
ETHANE	0.8	1.4	0.7
PROPANE	0.2	0.3	0.2
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	9.4	5.9	3.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.7	0.3	9.0
HELIUM	0.18	0.59	0.19
HEATING VALUE*	827	967	895
SPECIFIC GRAVITY	0.695	0.595	0.659

	INDEX 766 SAMPLE 8822	INDEX 767 SAMPLE 8823	INDEX 768 SAMPLE 8825
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	ACE	ACE	ACE
WELL NAME	UNIT NO. 5	UNIT NO. 2	UNIT NO. 1
LOCATION	SEC. 28, T12N, R97W	SEC. 3, T11N, R97W	SEC. 34, T12N, R97W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	05/08/55	03/30/54	01/26/54
SAMPLED	01/07/63	01/07/63	01/07/63
FORMATION	EOCE-WASATCH	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2802	8188	8133
WELLHEAD PRESSURE,PSIG	880	575	570
OPEN FLOW, MCFD	1040	594	458
COMPONENT, MOLE PCT			
METHANE	91.1	88.5	88.7
ETHANE	3.8	6.1	5.9
PROPANE	2.4	2.5	2.4
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.2	0.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.9	1.3	1.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1099	1119	1112
SPECIFIC GRAVITY	0.627	0.645	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 769 SAMPLE 2130	INDEX 770 SAMPLE 14397	INDEX 771 SAMPLE 8683
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BELL ROCK	BELL ROCK	BIG GULCH
WELL NAME	NO. 1	FEDERAL-DOLEZAL NO.4-1	ALPHA STATE NO. 1-16
LOCATION	SEC. 4, T6N, R92W	SEC. 4, T6N, R92W	SEC. 16, T7N, R93W
OWNER	MIDWEST REFINING CO.	FUELCO	INTEX OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/01/60
SAMPLED	09/16/30	06/18/75	09/28/62
FORMATION	CRET-MESAVERDE	NOT GIVEN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2455	NOT GIVEN	3695
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1510
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8400
COMPONENT, MOLE PCT			
METHANE	91.0	98.0	96.9
ETHANE	0.0	0.3	0.6
PROPANE	---	0.1	0.3
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	6.3	1.2	0.6
OXYGEN	1.3	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.4	0.4	1.4
HELIUM	0.08	0.04	0.03
HEATING VALUE*	922	1001	1000
SPECIFIC GRAVITY	0.601	0.566	0.575

	INDEX 772 SAMPLE 8684	INDEX 773 SAMPLE 8685	INDEX 774 SAMPLE 13378
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BIG GULCH	BIG GULCH	BIG HOLE
WELL NAME	ALPH STATE NO. 1-16	BETA STATE NO. 1-22	GOVERNMENT NO. 15-1
LOCATION	SEC. 16, T7N, R93W	SEC. 22, T7N, R93W	SEC. 15, T10N, R94W
OWNER	INTEX OIL CO.	INTEX OIL CO.	KEMMERER COAL CO.
COMPLETED	07/01/60	09/01/60	12/15/71
SAMPLED	09/28/62	09/28/62	09/09/72
FORMATION	CRET-FRONTIER	CRET-MESAVERDE	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8598	642	7760
WELLHEAD PRESSURE,PSIG	3460	300	2650
OPEN FLOW, MCFD	2800	5200	1000
COMPONENT, MOLE PCT			
METHANE	92.8	97.0	75.0
ETHANE	2.9	0.2	9.7
PROPANE	0.8	TRACE	8.0
N-BUTANE	0.2	TRACE	2.8
ISOBUTANE	0.3	0.0	2.3
N-PENTANE	0.1	0.0	0.8
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	0.0	0.4
HEXANES PLUS	0.2	0.0	0.4
NITROGEN	1.1	2.5	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	0.5
HELIUM	0.08	0.02	0.01
HEATING VALUE*	1052	987	1384
SPECIFIC GRAVITY	0.612	0.566	0.798

	INDEX 775 SAMPLE 15723	INDEX 776 SAMPLE 8677	INDEX 777 SAMPLE 10015
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BLUE GRAVEL	BUCK PEAK	BUCK PEAK
WELL NAME	FEDERAL NO. 1	VOLOSHIN NO. 1	VOLOSHIN NO. 2
LOCATION	SEC. 23, T9N, R91W	SEC. 25, T6N, R90W	SEC. 25, T6N, R90W
OWNER	C & K PETROLEUM, INC.	HONDO OIL & GAS CO.	THE ATLANTIC REFINING CO.
COMPLETED	01/24/75	08/03/58	07/27/65
SAMPLED	08/07/79	09/25/62	07/27/65
FORMATION	CRET-LEWIS	CRET-MANCOS	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3855	6275	1805
WELLHEAD PRESSURE,PSIG	1480	50	NOT GIVEN
OPEN FLOW, MCFD	3000	220	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	79.0	95.0
ETHANE	6.0	9.3	0.6
PROPANE	2.7	5.8	0.1
N-BUTANE	0.7	2.1	0.0
ISOBUTANE	0.6	1.0	0.0
N-PENTANE	0.2	0.5	0.0
ISOPENTANE	0.2	0.7	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.6	0.5	3.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.1
HELIUM	0.01	0.02	0.06
HEATING VALUE*	1146	1208	976C
SPECIFIC GRAVITY	0.650	0.744	0.576

	INDEX 778 SAMPLE 15695	INDEX 779 SAMPLE 10700	INDEX 780 SAMPLE 6860
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	COTTONWOOD GULCH	CRAIG DOME	CRAIG N
WELL NAME	FEDERAL NO. A-1	CRAIG DOME NO. 1	FEDERAL WINDER NO. 1
LOCATION	SEC. 25, T8N, R91W	SEC. 9, T6N, R91W	SEC. 33, T7N, R90W
OWNER	AMADARKO PRODUCTION CO.	VAUGHN PETROLEUM INC.	U.S. SMELT. REFIN. & MINING
COMPLETED	02/14/79	06/16/66	10/23/56
SAMPLED	07/10/79	08/24/66	11/02/58
FORMATION	CRET-LEWIS	CRET-FRONTIER	CRET-LANCE BASAL
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3533	7466	2840
WELLHEAD PRESSURE,PSIG	1200	2890	1198
OPEN FLOW, MCFD	6700	1148	14
COMPONENT, MOLE PCT			
METHANE	89.9	91.6	91.3
ETHANE	5.2	2.6	5.0
PROPANE	1.5	0.8	1.6
N-BUTANE	0.5	0.2	0.4
ISOBUTANE	0.3	0.1	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.7	3.4	0.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.1
HELIUM	0.01	0.07	0.02
HEATING VALUE*	1101	1028	1109
SPECIFIC GRAVITY	0.632	0.610	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 781 SAMPLE 363	INDEX 782 SAMPLE 7381	INDEX 783 SAMPLE 15483
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	DEVIL HOLE	FOUR MILE CREEK	GREAT DIVIDE
WELL NAME	OREGON NO. 1	UNIT NO. 2	BRUDER NO. 1
LOCATION	W OF AXIAL	SEC. 33, T12N, R91W	SEC. 4, T9N, R93W
OWNER	RICHMOND PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.	NORTHWEST EXPLORATION CO.
COMPLETED	06/--/19	01/05/60	09/20/78
SAMPLED	06/17/20	02/03/60	11/06/78
FORMATION	CRET-MANCOS	CRET-LANCE BASAL	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2380	3573	7526
WELLHEAD PRESSURE,PSIG	20	1210	1658
OPEN FLOW, MCFD	NOT GIVEN	11000	1600
COMPONENT, MOLE PCT			
METHANE	86.5	98.6	68.6
ETHANE	11.1	0.1	11.8
PROPANE	---	0.2	10.0
N-BUTANE	---	TRACE	2.7
ISOBUTANE	---	TRACE	2.7
N-PENTANE	---	0.0	0.8
ISOPENTANE	---	0.0	1.3
CYCLOPENTANE	---	0.0	0.3
HEXANES PLUS	---	0.0	0.8
NITROGEN	1.9	0.8	0.4
OXYGEN	0.2	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1075	1006	1490
SPECIFIC GRAVITY	0.620	0.562	0.868

	INDEX 784 SAMPLE 1829	INDEX 785 SAMPLE 1893	INDEX 786 SAMPLE 2131
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA	HIAWATHA	HIAWATHA
WELL NAME	STATE-REITER-FOSTER NO. 1	BERLIN NO. 1	NO. 1
LOCATION	SEC. 16, T12N, R99W	SEC. 19, T12N, R100W	SEC. 19, T12N, R100W
OWNER	MOUNTAIN FUEL SUPPLY CO.	TEXAS PRODUCTION CO.	TEXAS PRODUCTION CO.
COMPLETED	05/25/29	DRILL STEM TEST	07/01/30
SAMPLED	08/04/29	11/13/29	09/17/30
FORMATION	EOCE-FORT UNION	TERT-	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3550	1520	2002
WELLHEAD PRESSURE,PSIG	1250	600	NOT GIVEN
OPEN FLOW, MCFD	3145	36000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.8	86.7	65.8
ETHANE	18.2	7.0	9.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	5.7	19.2
OXYGEN	1.1	0.5	4.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.2	0.5
HELIUM	0.02	0.03	0.00
HEATING VALUE*	1114	1004	837
SPECIFIC GRAVITY	0.668	0.618	0.712

	INDEX 787 SAMPLE 2132	INDEX 788 SAMPLE 5249	INDEX 789 SAMPLE 8794
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA	HIAWATHA	HIAWATHA E
WELL NAME	NO. 1	HIAWATHA UNIT NO. 1	UNIT NO. 1
LOCATION	SEC. 19, T12N, R100W	SEC. 14, T12N, R100W	SEC. 14, T12N, R100W
OWNER	TEXAS PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	07/01/30	02/--/52	02/27/52
SAMPLED	09/17/30	06/17/52	11/28/63
FORMATION	TERT-	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2570	4885	4885
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	682
OPEN FLOW, MCFD	3000	21000	11000
COMPONENT, MOLE PCT			
METHANE	84.3	91.9	92.8
ETHANE	13.7	2.7	3.0
PROPANE	---	1.0	1.1
N-BUTANE	---	0.2	0.3
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.6	2.1	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	1.5	1.7
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1099	1029	1060
SPECIFIC GRAVITY	0.632	0.612	0.615

	INDEX 790 SAMPLE 8797	INDEX 791 SAMPLE 8795	INDEX 792 SAMPLE 8796
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA E	HIAWATHA W	HIAWATHA W
WELL NAME	K. S. WHITFORD NO. 1	DYER E NO. 1	H. W. OBERNE NO. 1
LOCATION	SEC. 16, T12N, R100W	SEC. 35, T12N, R101W	SEC. 24, T12N, R101W
OWNER	MOUNTAIN FUEL SUPPLY CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	05/19/48	01/20/59	08/12/57
SAMPLED	11/28/62	11/28/62	11/28/62
FORMATION	EOCE-WASATCH	CRET-LANCE	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3192	4140	4665
WELLHEAD PRESSURE,PSIG	740	1400	1595
OPEN FLOW, MCFD	3310	300	4730
COMPONENT, MOLE PCT			
METHANE	88.7	89.4	91.4
ETHANE	5.5	5.5	3.9
PROPANE	2.5	2.5	0.9
N-BUTANE	0.6	0.6	0.1
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.1	0.1	1.0
NITROGEN	0.7	0.3	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1136	1132	1139
SPECIFIC GRAVITY	0.644	0.642	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 793 SAMPLE 15330	INDEX 794 SAMPLE 6794	INDEX 795 SAMPLE 9015
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	LITTLE BUCK MOUNTAIN	LITTLE SNAKE	MOFFAT
WELL NAME	VILLARD NO. 1	WISDOM GOVERNMENT NO. 1	WICK NO. 13
LOCATION	SEC. 27, T10N, R90W	SEC. 14, T12N, R95W	SEC. 10, T4N, R91W
OWNER	ANADARKO PRODUCTION CO.	UNION OIL CO. OF CALIFORNIA	TEXACO INC.
COMPLETED	02/22/78	04/04/58	NOT GIVEN
SAMPLED	07/25/78	08/13/58	06/07/63
FORMATION	CRET-LEWIS	EOCE-WASATCH	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4657	4124	9482
WELLHEAD PRESSURE,PSIG	1100	1500	NOT GIVEN
OPEN FLOW, MCFD	2087	3700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.1	93.2	0.1
ETHANE	4.9	3.6	0.1
PROPANE	1.4	1.1	TRACE
N-BUTANE	0.9	0.4	TRACE
ISOBUTANE	1.0	0.6	0.0
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.4	0.3	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	4.3	0.5	0.9
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	98.4
HELIUM	0.02	0.01	0.10
HEATING VALUE*	1141	1094	3
SPECIFIC GRAVITY	0.681	0.612	1.515

	INDEX 796 SAMPLE 7057	INDEX 797 SAMPLE 3848	INDEX 798 SAMPLE 10822
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	MUD SPRING	NOT GIVEN	POLE GULCH
WELL NAME	KIRBY NO. 1	HANAWALT NO. 1	POLE GULCH UNIT NO. 2
LOCATION	SEC. 3, T11N, R91W	SEC. 4, T6N, R92W	SEC. 16, T12N, R92W
OWNER	PAN AMERICAN PETROLEUM CORP.	STANOLIND OIL & GAS CO.	DEVELOPMENT SERVICE CORP.
COMPLETED	11/19/58	NOT GIVEN	06/01/65
SAMPLED	05/01/59	NOT GIVEN	12/04/66
FORMATION	CRET-LANCE	NOT GIVEN	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3685	NOT GIVEN	4640
WELLHEAD PRESSURE,PSIG	1475	NOT GIVEN	1800
OPEN FLOW, MCFD	10000	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	98.4	92.2	78.6
ETHANE	0.2	2.8	6.5
PROPANE	0.1	---	7.7
N-BUTANE	0.1	---	1.3
ISOBUTANE	0.0	---	2.0
N-PENTANE	TRACE	---	0.5
ISOPENTANE	0.0	---	0.8
CYCLOPENTANE	0.1	---	0.3
HEXANES PLUS	0.2	---	0.6
NITROGEN	0.3	2.4	1.4
OXYGEN	0.0	0.4	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	2.1	0.1
HELIUM	0.01	0.09	0.02
HEATING VALUE*	1021	984	1321
SPECIFIC GRAVITY	0.570	0.600	0.767

	INDEX 799 SAMPLE 3051	INDEX 800 SAMPLE 5227	INDEX 801 SAMPLE 13478
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	POWDER WASH	POWDER WASH	POWDER WASH
WELL NAME	MUSSER NO. 2	HAL W. STEWART NO. 1	INEXCO STATE NO. 1
LOCATION	SEC. 4, T11N, R97W	SEC. 32, T12N, R97W	SEC. 16, T12N, R97W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	KENNETH L. LUFF
COMPLETED	02/--/41	04/--/52	NOT GIVEN
SAMPLED	11/27/41	06/17/52	11/28/72
FORMATION	EOCE-WASATCH	EOCE-FORT UNION	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2161	6312	NOT GIVEN
WELLHEAD PRESSURE,PSIG	625	2020	1225
OPEN FLOW, MCFD	9000	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	97.3	84.2	81.6
ETHANE	0.1	6.8	9.0
PROPANE	---	4.2	5.6
N-BUTANE	---	1.4	1.1
ISOBUTANE	---	1.2	0.9
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.6	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	TRACE
NITROGEN	1.8	0.7	0.8
OXYGEN	0.4	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	987	1224	1214
SPECIFIC GRAVITY	0.568	0.700	0.697

	INDEX 802 SAMPLE 5838	INDEX 803 SAMPLE 5595	INDEX 804 SAMPLE 12144
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	SHELL CREEK	SUGAR LOAF	SUGAR LOAF
WELL NAME	GOVERNMENT NO. 1	SUGAR LOAF GOVERNMENT NO. 1	GOVERNMENT NO. 12
LOCATION	SEC. 1, T11N, R100W	SEC. 9, T11N, R101W	SEC. 10, T11N, R101W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	03/09/55	10/16/53	09/29/69
SAMPLED	05/11/55	02/13/54	12/12/69
FORMATION	EOCE-FORT UNION	CRET-MESAVERDE	EOCE-FT UNION & CRET-MESAVD.
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5349	5145	4886
WELLHEAD PRESSURE,PSIG	1845	1800	1525
OPEN FLOW, MCFD	7	2800	5800
COMPONENT, MOLE PCT			
METHANE	84.6	88.1	93.4
ETHANE	8.1	6.3	2.5
PROPANE	3.3	2.5	0.8
N-BUTANE	0.8	0.5	0.3
ISOBUTANE	1.1	0.6	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	1.0	0.3	1.3
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	0.3
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1192	1135	1073
SPECIFIC GRAVITY	0.682	0.652	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 805 SAMPLE 2733	INDEX 806 SAMPLE 5069	INDEX 807 SAMPLE 8715
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBERG	THORNBERG	THORNBERG
WELL NAME	HENDERSON NO. 1	LEWIN NO. 1	HENDERSON NO. 1
LOCATION	SEC. 16, T3N, R91W	SEC. 17, T3N, R91W	SEC. 16, T3N, R91W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	03/17/51	02/16/27
SAMPLED	09/25/36	06/11/51	10/15/62
FORMATION	JURA-NUGGET	PENN-WEBER	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2550	4005	2605
WELLHEAD PRESSURE,PSIG	900	1800	725
OPEN FLOW, MCFD	2571	12800	2400
COMPONENT, MOLE PCT			
METHANE	99.5	93.4	94.9
ETHANE	0.0	0.2	0.1
PROPANE	---	0.2	0.1
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.2	TRACE
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.0	0.6	0.4
OXYGEN	0.3	0.1	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	4.9	4.0
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1008	980	979
SPECIFIC GRAVITY	0.558	0.622	0.601

	INDEX 808 SAMPLE 8717	INDEX 809 SAMPLE 13604	INDEX 810 SAMPLE 1035
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBERG	THORNBERG	THORNBURG
WELL NAME	THORNBERG NO. 1	THORNBERG NO. 19	WYMORE NO. 1
LOCATION	SEC. 17, T3N, R91W	SEC. 17, T3N, R91W	SEC. 16, T3N, R91W
OWNER	CONTINENTAL OIL CO.	FUELCO	MARLAND OIL CO.
COMPLETED	03/10/51	07/27/72	NOT GIVEN
SAMPLED	10/15/62	05/23/73	04/20/25
FORMATION	PENN-WEBER	TRIA-SHINARUMP	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4005	3340	2050
WELLHEAD PRESSURE,PSIG	1575	1065	800
OPEN FLOW, MCFD	11800	3700	45000
COMPONENT, MOLE PCT			
METHANE	92.5	82.4	96.5
ETHANE	0.1	0.1	1.7
PROPANE	0.1	0.1	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	0.3	12.8	0.5
OXYGEN	TRACE	3.2	0.4
ARGON	0.0	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	6.7	0.9	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	953	851	1008
SPECIFIC GRAVITY	0.627	0.641	0.577

	INDEX 811 SAMPLE 1361	INDEX 812 SAMPLE 11610	INDEX 813 SAMPLE 8808
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBURG	UNNAMED	WILLIAMS FORK
WELL NAME	NO. 1	COLORADO FEDERAL C NO. 1	GOVERNMENT HELMKE NO. 2
LOCATION	SEC. 16, T 3N, R91W	SEC. 22, T10N, R94W	SEC. 18, T5N, R91W
OWNER	MARLAND OIL CO.	SKELLY OIL CO.	TEXACO INC.
COMPLETED	NOT GIVEN	02/24/68	NOT GIVEN
SAMPLED	03/08/27	07/31/68	12/14/62
FORMATION	CRET-DAKOTA	CRET-LEWIS	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	1983	7536	5365
WELLHEAD PRESSURE,PSIG	725	2325	NOT GIVEN
OPEN FLOW, MCFD	23000	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	86.9	87.3
ETHANE	2.7	6.8	5.7
PROPANE	---	3.3	1.5
N-BUTANE	---	0.9	0.3
ISOBUTANE	---	0.5	1.0
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.3	0.8
CYCLOPENTANE	---	0.1	0.9
HEXANES PLUS	---	0.2	0.9
NITROGEN	1.3	0.7	1.3
OXYGEN	0.6	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.3	0.2	0.2
HELIUM	0.00	0.01	0.05
HEATING VALUE*	991	1166	1184
SPECIFIC GRAVITY	0.599	0.662	0.678

	INDEX 814 SAMPLE 8832	INDEX 815 SAMPLE 9253	INDEX 816 SAMPLE 9586
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	WILLIAMS FORK	WILLIAMS FORK	WILLIAMS FORK
WELL NAME	GOVERNMENT HELMKE NO. 2	WINN NO. 1	WINN NO. 1
LOCATION	SEC. 18, T5N, R91W	SEC. 17, T5N, R91W	SEC. 17, T5N, R91W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	07/01/64
SAMPLED	12/16/62	03/06/64	09/17/64
FORMATION	PENN-WEBER	CRET-FRONTIER	JURA-MORRISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7834	5514	6830
WELLHEAD PRESSURE,PSIG	3005	NOT GIVEN	2210
OPEN FLOW, MCFD	17	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	53.9	87.6	86.8
ETHANE	15.5	6.2	4.0
PROPANE	10.2	2.5	1.4
N-BUTANE	3.4	0.8	0.4
ISOBUTANE	3.5	0.5	0.3
N-PENTANE	1.0	0.1	0.1
ISOPENTANE	1.0	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	10.0	1.5	6.4
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.13	0.05	0.14
HEATING VALUE*	1451	1133	1028
SPECIFIC GRAVITY	0.940	0.650	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 817 SAMPLE 7241	INDEX 818 SAMPLE 8800	INDEX 819 SAMPLE 10969
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MONTEZUMA	MONTEZUMA
FIELD	WINTER VALLEY	CLODINE PARK	GOODMAN POINT
WELL NAME	GOVERNMENT 7-2	OHIO GOVT. NO. 3	BRINKERHOFF FEDERAL NO. 1
LOCATION	SEC. 7, T4N, R98W	SEC. 15, T35N, R20W	SEC. 6, T36N, R18W
OWNER	CONTINENTAL OIL CO.	MARATHON OIL CO.	BRINKERHOFF DRILLING CO.
COMPLETED	09/10/59	08/--/61	05/26/67
SAMPLED	09/19/59	11/20/62	05/23/67
FORMATION	CRET-DAKOTA	PENN-ISMAY	PENN-
GEOLOGIC PROVINCE CODE	535	585	585
DEPTH, FEET	5500	5702	5289
WELLHEAD PRESSURE,PSIG	1900	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	39000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	74.6	78.6
ETHANE	3.3	12.6	10.8
PROPANE	0.3	6.2	4.1
N-BUTANE	0.1	2.0	1.1
ISOBUTANE	0.1	0.9	0.8
N-PENTANE	0.0	0.5	0.3
ISOPENTANE	0.6	0.5	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.5
NITROGEN	1.7	2.0	3.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	0.10	0.05	0.05
HEATING VALUE*	1047	1297	1220
SPECIFIC GRAVITY	0.602	0.763	0.718

	INDEX 820 SAMPLE 6550	INDEX 821 SAMPLE 2094	INDEX 822 SAMPLE 2216
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	HOVENWEEP	MANCOS DIVIDE	MANCOS DIVIDE
WELL NAME	HATHAWAY-BIG HORN USC NO. 3	HALLER NO. 1	HALLAR NO. 1
LOCATION	SEC. 11, T37N, R20W	SEC. 29, T36N, R14W	SEC. 29, T36N, R14W
OWNER	BIG HORN-POWDER RIVER CORP.	NOT GIVEN	F. C. HALLAR
COMPLETED	NOT GIVEN	07/01/30	07/02/30
SAMPLED	03/29/58	08/21/30	10/08/30
FORMATION	PENN-PARADOX	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5467	702	700
WELLHEAD PRESSURE,PSIG	3429	NOT GIVEN	40
OPEN FLOW, MCFD	578	160	160
COMPONENT, MOLE PCT			
METHANE	70.8	91.8	98.5
ETHANE	16.5	2.8	0.7
PROPANE	7.9	---	---
N-BUTANE	2.1	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	0.0	4.1	0.2
OXYGEN	TRACE	0.7	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.7	0.6
HELIUM	0.02	0.00	0.01
HEATING VALUE*	1388	980	1010
SPECIFIC GRAVITY	0.793	0.596	0.565

	INDEX 823 SAMPLE 4492	INDEX 824 SAMPLE 4865	INDEX 825 SAMPLE 9387
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO	MCELMO	MCELMO
WELL NAME	SCHMIDT NO. 1	MACINTOSH NO. 1	DEAN DUDLEY NO. 2
LOCATION	SEC. 24, T36N, R18W	SEC. 25, T36N, R18W	SEC. 13, T36N, R18W
OWNER	BYRD-FROST, INC.	BYRD-FROST INC. ET AL.	DELHI-TAYLOR OIL CORP.
COMPLETED	NOT GIVEN	08/28/48	03/07/64
SAMPLED	05/27/48	03/25/50	06/04/64
FORMATION	MISS-DEVO	TRIA-SHINARUMP	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6745	1515	6608
WELLHEAD PRESSURE,PSIG	750	600	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	500	5120
COMPONENT, MOLE PCT			
METHANE	0.3	57.9	0.2
ETHANE	0.8	5.0	0.3
PROPANE	---	1.6	0.0
N-BUTANE	---	0.4	0.0
ISOBUTANE	---	0.6	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.4	0.0
NITROGEN	15.4	32.2	3.2
OXYGEN	1.0	0.1	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	81.9	0.4	96.2
HELIUM	0.55	1.12	0.10
HEATING VALUE*	17	781	7
SPECIFIC GRAVITY	1.423	0.760	1.506

	INDEX 826 SAMPLE 10204	INDEX 827 SAMPLE 3855	INDEX 828 SAMPLE 15744
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO	MCELMO CANYON	MCELMO DOME
WELL NAME	DUDLEY NO. 2	SCHMIDT NO. 1	MOQUI UNIT NO. 2
LOCATION	SEC. 13, T36N, R18W	SEC. 24, T36N, R18W	SEC. 12, T37N, R19W
OWNER	TENNECO OIL CO.	STANOLIND OIL & GAS CO.	MOBIL OIL CORP.
COMPLETED	03/07/64	NOT GIVEN	04/18/79
SAMPLED	10/12/65	07/07/44	08/27/79
FORMATION	MISS-	PENN-HERMOSA	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6940	4756	8000
WELLHEAD PRESSURE,PSIG	815	NOT GIVEN	685
OPEN FLOW, MCFD	6000	NOT GIVEN	300000
COMPONENT, MOLE PCT			
METHANE	0.3	64.1	0.2
ETHANE	0.0	31.0	TRACE
PROPANE	0.0	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	3.3	3.9	1.7
OXYGEN	0.1	0.5	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	9.6	0.5	97.9
HELIUM	0.28	TRACE	0.09
HEATING VALUE*	3300	1205	2
SPECIFIC GRAVITY	0.182	0.732	1.515

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 829 SAMPLE 4638	INDEX 830 SAMPLE 8722	INDEX 831 SAMPLE 5754
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	NOT GIVEN	TOWAOC	WILDCAT
WELL NAME	DRISKOLL NO. 1	UTE MOUNTAIN TRIBE NO. 1	J. A. FULKS NO. 1
LOCATION	SEC. 3, T38, R19W	SEC. 21, T33N, R20W	SEC. 27, T37N, R17W
OWNER	WESTERN NATURAL ET AL.	TEXACO INC.	GULF OIL CORP.
COMPLETED	NOT GIVEN	02/01/59	NOT GIVEN
SAMPLED	12/02/48	10/23/62	01/02/55
FORMATION	PENN-	PENN-HERMOSA	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5910	5850	7768
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	10000		1300
COMPONENT, MOLE PCT			
METHANE	66.3	56.4	0.1
ETHANE	32.2	18.8	0.1
PROPANE	---	12.9	0.0
N-BUTANE	---	4.7	0.0
ISOBUTANE	---	2.2	0.0
N-PENTANE	---	1.0	0.0
ISOPENTANE	---	1.3	0.0
CYCLOPENTANE	---	0.2	0.0
HEXANES PLUS	---	0.5	0.0
NITROGEN	0.8	1.7	1.9
OXYGEN	0.5	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	97.7
HELIUM	0.02	0.02	0.10
HEATING VALUE*	1249	1607	3
SPECIFIC GRAVITY	0.722	0.949	1.515

	INDEX 832 SAMPLE 5755	INDEX 833 SAMPLE 5756	INDEX 834 SAMPLE 5779
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	J. A. FULKS NO. 1	J. A. FULKS NO. 1	J. A. FULKS NO. 1
LOCATION	SEC. 27, T37N, R17W	SEC. 27, T37N, R17W	SEC. 27, T37N, R17W
OWNER	GULF OIL CORP.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/31/54	01/07/55	02/08/55
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	DEVO-ELBERT
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7690	7797	8364
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2570
OPEN FLOW, MCFD	6520	72	627
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	0.2
ETHANE	0.1	0.1	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.1	1.8	2.1
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	97.5	97.8	97.5
HELIUM	0.10	0.09	0.10
HEATING VALUE*	3	3	2
SPECIFIC GRAVITY	1.514	1.514	1.513

	INDEX 835 SAMPLE 15123	INDEX 836 SAMPLE 15126	INDEX 837 SAMPLE 6571
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTROSE
FIELD	WILDCAT	WILDCAT	MONTROSE DOME
WELL NAME	HOVENWEEP FEDERAL NO. 1	HOVENWEEP FEDERAL NO. 1	KIRBY GOV. NO. 1
LOCATION	SEC. 19, T38N, R18W	SEC. 19, T38N, R18W	SEC. 4, T45N, R16W
OWNER	MOBIL OIL CORP.	MOBIL R & D CORP.	KIRBY PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	01/12/58
SAMPLED	09/25/77	10/14/77	04/23/58
FORMATION	MISS-	MISS-	PERM-RICO
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8357	8284	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	290	133
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	75
COMPONENT, MOLE PCT			
METHANE	0.2	0.2	85.2
ETHANE	TRACE	0.1	2.8
PROPANE	0.0	TRACE	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.2	1.0	11.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.5	98.6	TRACE
HELIUM	0.09	0.08	0.10
HEATING VALUE*	2	4	927
SPECIFIC GRAVITY	1.519	1.520	0.618

	INDEX 838 SAMPLE 1806	INDEX 839 SAMPLE 9087	INDEX 840 SAMPLE 7719
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTROSE	MONTROSE	MONTROSE
FIELD	PARADOX ANTICLINE	WILDCAT	WRAY MESA
WELL NAME	WILCOX NO. 1 - ABANDONED	PURE OIL CO. NO. 3	WRAY MESA NO. 1
LOCATION	SEC. 35, T48N, R19W	SEC. 6, T46N, R19W	SEC. 21, T47N, R19W
OWNER	GENERAL PETROLEUM CORP.	PURE OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	NOT GIVEN
SAMPLED	07/06/29	09/23/63	09/21/60
FORMATION	NOT GIVEN	PENN-HERMOSA	PERM-CUTLER
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	8166	4650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	228	1500
COMPONENT, MOLE PCT			
METHANE	81.5	83.9	32.1
ETHANE	16.8	7.9	0.9
PROPANE	---	2.0	0.2
N-BUTANE	---	0.5	0.2
ISOBUTANE	---	0.6	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.3	0.2
NITROGEN	0.9	4.5	63.9
OXYGEN	0.2	TRACE	0.8
ARGON	---	TRACE	0.2
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.03	0.05	1.50
HEATING VALUE*	1127	1109	371
SPECIFIC GRAVITY	0.641	0.662	0.838

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 841 SAMPLE 11179	INDEX 842 SAMPLE 8894	INDEX 843 SAMPLE 5887
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	ADENA	BIJOU S	BRUSH S
WELL NAME	CRONE NO. 3	REID NO. 1	TOMKY NO. 84-20
LOCATION	SEC. 13, T1N, R58W	SEC. 20, T4N, R59W	SEC. 20, T2N, R55W
OWNER	MONSANTO CO.	MONSANTO CHEMICAL CO.	SUPERIOR OIL CO.
COMPLETED	NOT GIVEN	04/24/62	06/10/55
SAMPLED	10/20/67	03/19/63	07/29/55
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5685	6056	4948
WELLHEAD PRESSURE,PSIG	150	1431	1050
OPEN FLOW, MCFD	NOT GIVEN	3100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	81.0	56.7
ETHANE	6.5	8.2	15.4
PROPANE	5.9	5.0	14.6
N-BUTANE	2.4	1.6	4.5
ISOBUTANE	0.8	0.6	1.9
N-PENTANE	0.4	0.2	0.6
ISOPENTANE	1.1	0.5	2.3
CYCLOPENTANE	0.2	0.1	0.5
HEXANES PLUS	0.4	0.1	0.9
NITROGEN	6.1	1.1	1.9
OXYGEN	0.3	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.5	0.7
HELIUM	0.07	0.04	0.05
HEATING VALUE*	1228	1210	1634
SPECIFIC GRAVITY	0.772	0.715	0.976

	INDEX 844 SAMPLE 8736	INDEX 845 SAMPLE 7313	INDEX 846 SAMPLE 4918
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	FORT MORGAN	LAMB	NOT GIVEN
WELL NAME	FORT MORGAN UNIT NO. 1	EISENACH NO. 1	GOUT SMITH NO. 1
LOCATION	SEC. 19, T3N, R57W	SEC. 21, T3N, R58W	SEC. 1, T2N, R57W
OWNER	NATURAL GAS PRODUCERS INC.	DUNN & BOREING	J. M. HUBER CORP.
COMPLETED	05/20/54	06/16/59	NOT GIVEN
SAMPLED	10/23/62	12/15/59	09/01/50
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5610	5681	5536
WELLHEAD PRESSURE,PSIG	791	1350	NOT GIVEN
OPEN FLOW, MCFD	4900	1310	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	80.8	81.3
ETHANE	8.4	8.1	7.5
PROPANE	5.5	6.0	1.7
N-BUTANE	1.8	1.6	0.5
ISOBUTANE	0.7	0.4	0.3
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	1.8	1.5	6.1
OXYGEN	TRACE	TRACE	1.2
ARGON	0.0	0.1	0.1
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.8	0.6
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1227	1209	1065
SPECIFIC GRAVITY	0.720	0.709	0.677

	INDEX 847 SAMPLE 13176	INDEX 848 SAMPLE 11970	INDEX 849 SAMPLE 13624
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	NOT GIVEN	PARK	RENEGADE
WELL NAME	STARK NO. 1	CASPER NO. 1	DILL NO. 1
LOCATION	SEC. 11, T3N, R58W	SEC. 19, T1N, R58W	SEC. 14, T3N, R58W
OWNER	MOUNTAIN PETROLEUM LTD.	STATES OIL CO.	MOUNTAIN PETROLEUM LTD.
COMPLETED	12/17/71	NOT GIVEN	10/18/72
SAMPLED	03/30/72	07/10/69	06/05/73
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5652	6000	5625
WELLHEAD PRESSURE,PSIG	960	640	1218
OPEN FLOW, MCFD	1700	1500	4400
COMPONENT, MOLE PCT			
METHANE	76.6	75.9	73.1
ETHANE	8.8	5.4	7.7
PROPANE	6.0	7.7	6.6
N-BUTANE	2.1	2.5	2.6
ISOBUTANE	0.6	0.9	1.1
N-PENTANE	0.2	0.6	0.7
ISOPENTANE	0.3	0.5	1.2
CYCLOPENTANE	TRACE	0.1	0.5
HEXANES PLUS	TRACE	0.4	0.8
NITROGEN	3.8	5.1	4.3
OXYGEN	0.5	0.1	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.7	0.9
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1202	1252	1315
SPECIFIC GRAVITY	0.736	0.771	0.809

	INDEX 850 SAMPLE 8404	INDEX 851 SAMPLE 11142	INDEX 852 SAMPLE 5714
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	RIVERSIDE	ROUNDUP	VALLERY
WELL NAME	QUIRK-PEALE NO. 1	JAMES O. LAYNE NO. 1	COLORADO STATE NO. 1
LOCATION	SEC. 20, T5N, R61W	SEC. 27, T2N, R60W	SEC. 16, T3N, R59W
OWNER	PLAINS EXPLORATION CO.	PAN AMERICAN PETROLEUM CORP.	STANOLIND OIL & GAS CO.
COMPLETED	01/29/62	08/06/67	08/14/54
SAMPLED	02/08/62	09/27/67	09/16/54
FORMATION	CRET-GRANEROS J	CRET-MUDDY J	CRET-MUDDY J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6701	6426	5971
WELLHEAD PRESSURE,PSIG	1572	1495	1360
OPEN FLOW, MCFD	3910	5621	2600
COMPONENT, MOLE PCT			
METHANE	86.1	79.9	72.7
ETHANE	4.1	7.1	9.9
PROPANE	1.5	4.3	7.5
N-BUTANE	0.2	1.2	3.2
ISOBUTANE	0.2	0.5	1.3
N-PENTANE	TRACE	0.3	0.6
ISOPENTANE	0.1	0.4	1.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	TRACE	0.2	0.6
NITROGEN	0.7	5.0	1.4
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	2.0	0.0	0.0
CARBON DIOXIDE	2.9	0.6	1.1
HELIUM	0.11	0.08	0.01
HEATING VALUE*	1074	1150	1384
SPECIFIC GRAVITY	0.648	0.705	0.820

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 853 SAMPLE 5996	INDEX 854 SAMPLE 7232	INDEX 855 SAMPLE 8307
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SAM NO. 1	CHALLIS NO. 1	PRICE STATE NO. 1
LOCATION	SEC. 7, T1N, R56W	SEC. 34, T4N, R59W	SEC. 18, T4N, R53W
OWNER	MONSANTO CHEMICAL CO.	SKELLY OIL CO.	KIMBARK EXPLORATION CO.
COMPLETED	08/21/55	07/31/59	09/21/61
SAMPLED	12/12/55	10/03/59	11/28/61
FORMATION	CRET-DAKOTA J	CRET-DAKOTA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5313	5954	6120
WELLHEAD PRESSURE,PSIG	1150	1410	810
OPEN FLOW, MCFD	NOT GIVEN	4380	450
COMPONENT, MOLE PCT			
METHANE	88.2	78.6	76.3
ETHANE	5.8	8.2	8.5
PROPANE	0.4	4.0	6.6
N-BUTANE	0.1	2.1	2.6
ISOBUTANE	0.5	1.2	1.1
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.3	1.2	0.7
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.3	2.6	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.9	2.0
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1060	1219	1292
SPECIFIC GRAVITY	0.630	0.742	0.777

	INDEX 856 SAMPLE 13581	INDEX 857 SAMPLE 5951	INDEX 858 SAMPLE 10327
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	PHILLIPS	PITKIN
FIELD	WILDCAT	HAXTUN	WOLF CREEK
WELL NAME	LARRICK ET AL NO. 1	EARL W. SCOTT NO. 1	WOLF CREEK NO. 3
LOCATION	SEC. 32, T4N, R59W	SEC. 31, T9N, R47W	SEC. 34, T8S, R90W
OWNER	FERGUSON OIL CO., INC.	STANOLIND OIL & GAS CO.	SUNRAY DX OIL CO.
COMPLETED	10/20/72	05/17/55	09/17/65
SAMPLED	04/--/73	10/17/55	12/09/65
FORMATION	CRET-DAKOTA J	CRET-MUDDY	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	540	540	555
DEPTH, FEET	6114	3972	4550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	670	1250
OPEN FLOW, MCFD	3502	506	1050
COMPONENT, MOLE PCT			
METHANE	83.8	93.8	86.1
ETHANE	8.9	1.9	0.7
PROPANE	2.8	TRACE	2.2
N-BUTANE	0.6	TRACE	0.2
ISOBUTANE	0.5	0.1	TRACE
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	1.1	3.7	0.0
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.3	0.4
HELIUM	0.03	0.05	0.05
HEATING VALUE*	1145	988	958
SPECIFIC GRAVITY	0.677	0.582	0.536

	INDEX 859 SAMPLE 10834	INDEX 860 SAMPLE 10121	INDEX 861 SAMPLE 14591
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PITKIN	PROWERS	PROWERS
FIELD	WOLF CREEK	BARRELL SPRINGS	BETA
WELL NAME	WOLF CREEK NO. 5	DUNCAN NO. 1	IDLER B NO. 1
LOCATION	SEC. 12, T9S, R90W	SEC. 28, T25S, R45W	SEC. 32, T22S, R47W
OWNER	SUNRAY DX OIL CO.	TOM BROWN DRILLING CO.	TEXAS OIL & GAS CORP.
COMPLETED	08/26/66	DRILL STEM TEST	07/13/75
SAMPLED	01/09/67	09/16/65	02/26/76
FORMATION	CRET-COZZETTE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	555	360	360
DEPTH, FEET	5002	4825	4528
WELLHEAD PRESSURE,PSIG	1200	1135	970
OPEN FLOW, MCFD	4000	5684	2000
COMPONENT, MOLE PCT			
METHANE	91.4	52.2	71.7
ETHANE	1.0	7.5	9.9
PROPANE	0.3	5.5	3.9
N-BUTANE	TRACE	1.4	0.8
ISOBUTANE	0.1	0.7	0.5
N-PENTANE	TRACE	0.4	0.1
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.9	30.6	11.6
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.9	0.1	0.9
HELIUM	0.04	0.91	0.23
HEATING VALUE*	960	9210	1071
SPECIFIC GRAVITY	0.628	0.823	0.728

	INDEX 862 SAMPLE 5396	INDEX 863 SAMPLE 6415	INDEX 864 SAMPLE 6416
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PROWERS	PROWERS	PROWERS
FIELD	NOT GIVEN	WATER WELL	WATER WELL
WELL NAME	JONES NO. 1	LAMSON FARM	SCHNEIDER FARM
LOCATION	SEC. 14, T23S, R46W	SEC. 33, T21S, R47W	SEC. 30, T21S, R47W
OWNER	LOTUS OIL CO.	LAMSON FARM	SCHNEIDER FARM
COMPLETED	02/13/53	--/--/47	--/--/47
SAMPLED	02/13/53	10/10/57	10/10/57
FORMATION	NOT GIVEN	CRET-BENTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4019	283	200
WELLHEAD PRESSURE,PSIG	650	15	15
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.4	43.8	68.8
ETHANE	8.2	0.2	0.2
PROPANE	4.1	0.0	0.0
N-BUTANE	1.1	TRACE	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	18.4	54.3	28.5
OXYGEN	0.0	0.0	1.8
ARGON	TRACE	0.7	0.4
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.0	0.3
HELIUM	0.43	0.02	0.03
HEATING VALUE*	1013	452	701
SPECIFIC GRAVITY	0.751	0.798	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 865 SAMPLE 5392	INDEX 866 SAMPLE 6913	INDEX 867 SAMPLE 7955
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PROWERS	PROWERS	PROWERS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	JONES NO. 1	BAILEY NO. 1	KERNS NO. 1
LOCATION	SEC. 14, T23S, R46W	SEC. 27, T25S, R45W	SEC. 5, T23S, R47W
OWNER	LOTUS OIL CO.	EXCELSIOR OIL CORP., ET AL.	FRANKFORT OIL CO.
COMPLETED	02/09/53	11/19/54	02/13/61
SAMPLED	02/11/53	12/13/58	05/08/61
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4019	4910	4558
WELLHEAD PRESSURE,PSIG	650	910	937
OPEN FLOW, MCFD	NOT GIVEN	6200	375
COMPONENT, MOLE PCT			
METHANE	66.5	49.8	71.6
ETHANE	9.0	7.2	9.8
PROPANE	4.6	5.0	3.5
N-BUTANE	1.0	1.2	0.6
ISOBUTANE	0.4	0.7	0.7
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.6	33.2	12.8
OXYGEN	TRACE	1.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.3
HELIUM	0.42	0.80	0.20
HEATING VALUE*	1024	849	1049
SPECIFIC GRAVITY	0.747	0.822	0.718

	INDEX 868 SAMPLE 7024	INDEX 869 SAMPLE 6888	INDEX 870 SAMPLE 15957
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PUEBLO	RIO BLANCO	RIO BLANCO
FIELD	WILDCAT	BAXTER PASS	BAXTER PASS
WELL NAME	PRICE LEASE NO. 1	GOVERNMENT SLOANE NO. 1	GOVERNMENT SLOANE NO. 2
LOCATION	SEC. 15, T21S, R68W	SEC. 27, T4S, R103W	SEC. 27, T4S, R103W
OWNER	J. M. SPANGLER ET AL.	ARGO OIL CO.	ARCO OIL & GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/03/77
SAMPLED	02/14/59	12/02/58	04/27/80
FORMATION	NOT GIVEN	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	540	595	560
DEPTH, FEET	491	6000	6820
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1611	1050
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	142
COMPONENT, MOLE PCT			
METHANE	95.7	74.2	74.9
ETHANE	0.1	3.4	4.3
PROPANE	0.1	1.6	1.8
N-BUTANE	0.0	0.4	0.6
ISOBUTANE	0.0	0.3	0.5
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	3.8	16.0	14.9
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.7	1.1
HELIUM	0.10	0.70	0.77
HEATING VALUE*	974	901	960
SPECIFIC GRAVITY	0.574	0.698	0.698

	INDEX 871 SAMPLE 7665	INDEX 872 SAMPLE 15868	INDEX 873 SAMPLE 3649
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	CATHEDRAL	CATHEDRAL	DOUGLAS CREEK
WELL NAME	CATHEDRAL NO. 1-A	FEDERAL 0-31	UNIT NO. 1
LOCATION	SEC. 20, T3S, R100W	SEC.31, T3S,R101W	SEC. 5, T3S, R101W
OWNER	UTEX EXPLORATION CO.	FUEL RESOURCES DEVELOPMENT	SUPERIOR OIL CO.
COMPLETED	05/--/60	NOT GIVEN	07/01/43
SAMPLED	09/06/60	12/10/79	06/12/43
FORMATION	CRET-EMERY	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3500	5698	4800
WELLHEAD PRESSURE,PSIG	700	1355	350
OPEN FLOW, MCFD	1912	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.0	57.8	63.2
ETHANE	5.7	2.8	16.4
PROPANE	2.1	1.0	---
N-BUTANE	0.6	0.3	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.3	34.0	11.2
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	2.9	8.2
HELIUM	0.01	0.38	0.70
HEATING VALUE*	1117	704	934
SPECIFIC GRAVITY	0.631	0.766	0.760

	INDEX 874 SAMPLE 8705	INDEX 875 SAMPLE 9551	INDEX 876 SAMPLE 9552
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK S	DOUGLAS CREEK S	DOUGLAS CREEK S
WELL NAME	GOVT. STRAT NO. 1	DOUGLAS CREEK UNIT NO. 6	S. DOUGLAS CREEK UNIT NO. 6
LOCATION	SEC. 1, T4S, R102W	SEC. 1, T4S, R102W	SEC. 1, T4S, R102W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	10/22/62	NOT GIVEN	NOT GIVEN
SAMPLED	10/--/62	08/21/64	08/18/64
FORMATION	CRET-MORAPOS	CRET-BUCKHORN	JURA-MORRISON C
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	1169	5158	5340
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4250	2500
COMPONENT, MOLE PCT			
METHANE	81.1	57.7	56.9
ETHANE	5.3	2.8	2.8
PROPANE	3.1	1.5	1.5
N-BUTANE	1.0	0.4	0.4
ISOBUTANE	0.6	0.1	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.6	16.6	18.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	19.6	18.6
HELIUM	0.34	0.75	0.80
HEATING VALUE*	1077	709	705
SPECIFIC GRAVITY	0.682	0.858	0.856

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 877 SAMPLE 9742	INDEX 878 SAMPLE 9751	INDEX 879 SAMPLE 7724
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK S	DOUGLAS CREEK S	DOUGLAS CREEK W
WELL NAME	UNIT NO. 7	UNIT NO. 7	NO. 18-3
LOCATION	SEC. 6, T4S, R101W	SEC. 6, T4S, R101W	SEC. 18, T2S, R102W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	BEARDMORE DRILLING CO. ET AL
COMPLETED	02/05/65	DRILL STEM TEST	06/16/60
SAMPLED	02/08/65	12/06/64	10/13/60
FORMATION	CRET-DAKOTA	CRET-BUCKHORN	CRET-EMERY
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5776	5887	2630
WELLHEAD PRESSURE,PSIG	1150	1540	468
OPEN FLOW, MCFD	400	108	2150
COMPONENT, MOLE PCT			
METHANE	61.9	61.1	87.3
ETHANE	2.6	2.5	6.4
PROPANE	1.2	1.2	3.0
N-BUTANE	0.3	0.2	0.8
ISOBUTANE	0.1	0.2	0.7
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	13.8	12.5	1.4
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.1	TRACE
HELIUM	0.70	0.70	0.10
HEATING VALUE*	7320	7130	1137
SPECIFIC GRAVITY	0.570	0.550	0.648

	INDEX 880 SAMPLE 12178	INDEX 881 SAMPLE 7659	INDEX 882 SAMPLE 8261
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK W	DRAGON TRAIL	DRAGON TRAIL
WELL NAME	WEST DOUGLAS CREEK NO. 8	DRAGONTRAIL NO. 1	NO. 8
LOCATION	SEC. 19, T2S, R102W	SEC. 16, T2S, R102W	SEC. 36, T2S, R102W
OWNER	CONTINENTAL OIL CO.	GULF OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	08/07/69	05/13/60	08/18/61
SAMPLED	01/26/70	08/08/60	10/27/61
FORMATION	CRET-MANCOS B	CRET-MANCOS	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2263	2568	2020
WELLHEAD PRESSURE,PSIG	394	425	400
OPEN FLOW, MCFD	1089	1180	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.1	87.7	87.5
ETHANE	6.4	5.4	6.0
PROPANE	3.3	2.7	2.3
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	1.8	2.3	2.0
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.09	0.20	0.11
HEATING VALUE*	1146	1104	1117
SPECIFIC GRAVITY	0.659	0.641	0.647

	INDEX 883 SAMPLE 9543	INDEX 884 SAMPLE 14679	INDEX 885 SAMPLE 15698
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DRAGON TRAIL	FOUNDATION CREEK	LITTLE FOUNDATION CREEK
WELL NAME	GOVT. NO. 1-B	STEELE NO. 1-35	FED NO. 1-36
LOCATION	SEC. 29, T2S, R101W	SEC. 35, T4S, R102W	SEC. 36, T4S, R102W
OWNER	CITIES SERVICE OIL CO.	SWEET PEA OIL & GAS CO.	COSEKA RESOURCES (U.S.A) LTD
COMPLETED	05/14/62	09/13/73	08/04/75
SAMPLED	08/16/64	05/19/76	05/14/75
FORMATION	CRET-MANCOS B	NOT GIVEN	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	1850	6161	3254
WELLHEAD PRESSURE,PSIG	411	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	175	890	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	49.2	80.4
ETHANE	3.5	1.9	7.5
PROPANE	1.7	0.6	6.3
N-BUTANE	0.5	0.3	1.9
ISOBUTANE	0.3	0.1	1.0
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.2	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.8	9.4	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	37.5	0.3
HELIUM	0.11	0.49	0.14
HEATING VALUE*	1080	575	1263
SPECIFIC GRAVITY	0.617	0.985	0.732

	INDEX 886 SAMPLE 8707	INDEX 887 SAMPLE 6793	INDEX 888 SAMPLE 13350
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	LOWER HORSE DRAW	NOT GIVEN	PARKER
WELL NAME	LOWER HORSE DRAW NO. 4	MANNEL NO. 1	OLDLAND NO. 2
LOCATION	SEC. 22, T2S, R103W	SEC. 27, T1N, R95W	SEC. 28, T2N, R97W
OWNER	ALAMO CORP.	PHILLIPS PETROLEUM CO.	AMERICAN RESOURCES MGMT.
COMPLETED	09/29/60	10/22/57	02/13/72
SAMPLED	10/11/60	08/13/58	07/12/72
FORMATION	CRET-MANCOS B	EOCE-FORT UNION	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2722	4043	1259
WELLHEAD PRESSURE,PSIG	476	1412	505
OPEN FLOW, MCFD	3520	7800	4500
COMPONENT, MOLE PCT			
METHANE	86.8	92.2	97.6
ETHANE	7.2	5.0	1.0
PROPANE	3.0	0.5	0.1
N-BUTANE	0.8	0.4	0.0
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	TRACE	0.3	0.0
NITROGEN	0.9	0.4	1.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	TRACE	0.01
HEATING VALUE*	1151	1099	1009
SPECIFIC GRAVITY	0.653	0.615	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 889 SAMPLE 13353	INDEX 890 SAMPLE 1864	INDEX 891 SAMPLE 8687
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PARKER	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	FRITZLAN ET AL NO. 1	NO. 1	ERIC CLUBINE NO. 2
LOCATION	SEC. 35, T2N, R97W	SEC. 9, T2S, R96W	SEC. 13, T96W, R3S
OWNER	AMERICAN RESOURCES MGMT.	WHITE EAGLE OIL CO.	EQUITY OIL CO.
COMPLETED	02/19/72	DRILL STEM TEST	05/--/55
SAMPLED	07/01/72	09/18/29	09/21/62
FORMATION	EOCE-WASATCH	EOCE-GREEN RIVER	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	1185	2661	2355
WELLHEAD PRESSURE,PSIG	535	NOT GIVEN	540
OPEN FLOW, MCFD	2700	2000	600
COMPONENT, MOLE PCT			
METHANE	94.2	90.3	92.3
ETHANE	2.8	3.2	0.5
PROPANE	0.6	---	0.4
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.3	---	0.1
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	TRACE
NITROGEN	1.8	1.5	0.7
OXYGEN	TRACE	1.0	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	4.1	5.5
HELIUM	0.01	0.04	0.02
HEATING VALUE*	1033	972	973
SPECIFIC GRAVITY	0.588	0.623	0.625

	INDEX 892 SAMPLE 8746	INDEX 893 SAMPLE 8747	INDEX 894 SAMPLE 8751
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	SO. SULPHUR NO. 2	SULPHUR CREEK NO. 5	SO. PICEANCE NO. 2
LOCATION	SEC. 7, T3S, R98W	SEC. 19, T2S, R97W	SEC. 13, T3S, R96W
OWNER	EQUITY OIL CO.	EQUITY OIL CO.	EQUITY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	11/04/62	11/04/62	11/04/62
FORMATION	EOCE-WASATCH & FORT UNION	CRET-MESAVERDE	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5596	8724	2360
WELLHEAD PRESSURE,PSIG	1400	2900	580
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	82.2	90.8
ETHANE	3.7	7.9	0.5
PROPANE	1.5	2.9	0.4
N-BUTANE	0.6	0.7	0.3
ISOBUTANE	0.4	0.8	0.2
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	0.5	0.1	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	4.0	6.6
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	1112	1155	974
SPECIFIC GRAVITY	0.626	0.709	0.644

	INDEX 895 SAMPLE 8752	INDEX 896 SAMPLE 8753	INDEX 897 SAMPLE 8758
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	FAWN CREEK GOVT. NO. 1	SCANDARD DRAW NO. 1	SHANNON NO. 1
LOCATION	SEC. 14, T3S, R98W	SEC. 22, T3S, R97W	SEC. 13, T6S, R98W
OWNER	EQUITY OIL CO.	EQUITY OIL CO.	EQUITY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	11/04/62	11/04/62	11/04/62
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6480	9524	5660
WELLHEAD PRESSURE,PSIG	2500	3800	1325
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.9	83.6	93.4
ETHANE	7.6	8.6	4.0
PROPANE	2.8	3.0	1.0
N-BUTANE	0.5	0.6	0.2
ISOBUTANE	0.5	0.9	0.2
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.2	0.0	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.3	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1131	1170	1080
SPECIFIC GRAVITY	0.660	0.690	0.605

	INDEX 898 SAMPLE 10946	INDEX 899 SAMPLE 11537	INDEX 900 SAMPLE 11538
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	TS2-196	T44-20G	T44-20G
LOCATION	SEC. 19, T2S, R96W	SEC. 20, T2S, R96W	SEC. 20, T2S, R96W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	DRILL STEM TEST	09/16/67	09/18/67
SAMPLED	09/18/67	06/05/68	06/05/68
FORMATION	CRET-MESAVERDE	EOCE-WASATCH G	EOCE-WASATCH A & D
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	9423	5696	2626
WELLHEAD PRESSURE,PSIG	3829	1424	706
OPEN FLOW, MCFD	749	16200	10900
COMPONENT, MOLE PCT			
METHANE	89.9	92.0	92.3
ETHANE	6.8	4.2	4.1
PROPANE	1.6	1.3	1.4
N-BUTANE	0.3	0.5	0.4
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.0	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.3
HELIUM	0.01	0.04	0.01
HEATING VALUE*	1107	1101	1103
SPECIFIC GRAVITY	0.625	0.621	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 901 SAMPLE 2213	INDEX 902 SAMPLE 4393	INDEX 903 SAMPLE 4394
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	EMERALD NO. 2	MCLAUGHLIN NO. 1	FEE NO. 12
LOCATION	SEC. 31, T2N, R102W	SEC. 32, T2N, R102W	SEC. 28, T2N, R102W
OWNER	TEXAS PRODUCTION CO.	SHARPLES OIL CORP.	CALIFORNIA CO.
COMPLETED	01/01/28	09/25/44	02/28/46
SAMPLED	10/08/30	07/29/47	07/31/47
FORMATION	CRET-DAKOTA	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3001	5528	5845
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.8	50.4	21.6
ETHANE	12.4	24.5	59.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.4	24.1	17.5
OXYGEN	0.1	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.6
HELIUM	0.15	0.80	0.29
HEATING VALUE*	1071	950	1287
SPECIFIC GRAVITY	0.633	0.773	0.928

	INDEX 904 SAMPLE 4395	INDEX 905 SAMPLE 4396	INDEX 906 SAMPLE 4397
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	M. C. HAGOOD NO. 2	GRAY B-2	EMERALD NO. 3
LOCATION	SEC. 15, T2N, R103W	SEC. 18, T2N, R102W	SEC. 30, T2N, R102W
OWNER	STANOLIND OIL & GAS CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	10/14/46	06/13/45	04/22/46
SAMPLED	07/29/47	07/29/47	07/28/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6527	6155	5552
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	15.7	23.5	24.1
ETHANE	59.9	55.5	63.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.7	19.4	10.9
OXYGEN	0.4	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.0	0.9	0.8
HELIUM	0.28	0.33	0.10
HEATING VALUE*	1232	1233	1389
SPECIFIC GRAVITY	0.961	0.919	0.924

	INDEX 907 SAMPLE 4398	INDEX 908 SAMPLE 4399	INDEX 909 SAMPLE 4400
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	EMERALD NO. 4	EMERALD NO. 8	MCLAUGHLIN NO. 2
LOCATION	SEC. 36, T2N, R103W	SEC. 26, T2N, R103W	SEC. 23, T2N, R103W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	04/22/46	08/06/46	09/03/45
SAMPLED	07/29/47	07/28/47	07/28/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5640	5979	6105
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	27.3	26.4	25.4
ETHANE	50.5	53.2	52.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.5	18.7	19.6
OXYGEN	0.4	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.9	1.7
HELIUM	0.55	0.22	0.27
HEATING VALUE*	1182	1221	1202
SPECIFIC GRAVITY	0.895	0.906	0.913

	INDEX 910 SAMPLE 4401	INDEX 911 SAMPLE 4402	INDEX 912 SAMPLE 4403
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	CARNEY NO. 4-34	U P NO. 29-32	FEE NO. 22
LOCATION	SEC. 34, T2N, R102W	SEC. 32, T2N, R102W	SEC. 21, T2N, R102W
OWNER	TEXAS CO.	TEXAS CO.	CALIFORNIA CO.
COMPLETED	04/26/46	04/20/47	09/03/46
SAMPLED	07/30/47	07/30/47	07/29/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5691	5570	6228
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	30.4	34.7	16.2
ETHANE	49.8	47.5	62.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.5	16.4	20.4
OXYGEN	0.3	0.7	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.5	0.2
HELIUM	0.25	0.20	0.32
HEATING VALUE*	1200	1203	1286
SPECIFIC GRAVITY	0.884	0.865	0.951

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 913 SAMPLE 4404	INDEX 914 SAMPLE 4405	INDEX 915 SAMPLE 4406
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	FEE NO. 1	GRAY A NO. 12	U. P. 12-27
LOCATION	SEC. 30, T2N, R102W	SEC. 19, T2N, R102W	SEC. 27, T2N, R102W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	TEXAS CO.
COMPLETED	01/19/45	03/21/47	07/10/46
SAMPLED	07/28/47	07/28/47	07/30/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5557	5933	5906
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.5	18.3	32.2
ETHANE	60.5	61.3	45.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.1	19.0	21.4
OXYGEN	0.3	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.6	0.1
HELIUM	0.24	0.27	0.34
HEATING VALUE*	1322	1284	1147
SPECIFIC GRAVITY	0.921	0.944	0.870

	INDEX 916 SAMPLE 4407	INDEX 917 SAMPLE 4408	INDEX 918 SAMPLE 4409
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	FEE NO. 21	COLTHORP A NO. 1	MAGOR NO. 1
LOCATION	SEC. 27, T2N, R102W	SEC. 35, T2N, R102W	SEC. 14, T2N, R103W
OWNER	CALIFORNIA CO.	STANOLIND OIL & GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/19/46	08/10/46	04/08/46
SAMPLED	07/30/47	07/30/47	07/31/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6066	5624	6422
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	20.3	13.1	14.7
ETHANE	59.1	72.1	62.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.4	13.6	20.9
OXYGEN	0.3	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.7	1.2
HELIUM	0.26	0.15	0.26
HEATING VALUE*	1265	1425	1272
SPECIFIC GRAVITY	0.933	0.975	0.962

	INDEX 919 SAMPLE 4410	INDEX 920 SAMPLE 4411	INDEX 921 SAMPLE 4412
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	EMERALD NO. 14	FEE NO. 11	ROOTH NO. 1
LOCATION	SEC. 36, T2N, R103W	SEC. 28, T2N, R102W	SEC. 15, T2N, R103W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	CONTINENTAL OIL CO.
COMPLETED	06/16/47	09/19/45	03/28/46
SAMPLED	07/25/47	07/29/47	07/31/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5A93	5642	6580
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	20.9	44.4	27.4
ETHANE	61.9	32.7	47.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	21.6	23.0
OXYGEN	0.4	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.2	1.7
HELIUM	0.20	0.79	0.28
HEATING VALUE*	1321	1036	1125
SPECIFIC GRAVITY	0.935	0.806	0.900

	INDEX 922 SAMPLE 4413	INDEX 923 SAMPLE 4414	INDEX 924 SAMPLE 8700
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	L. N. HAGOOD NO. 1	U. P. NO. 6-21	EMERALD NO. 32
LOCATION	SEC. 23, T2N, R103W	SEC. 21, T2N, R102W	SEC. 30, T2N, R102W
OWNER	STANOLIND OIL & GAS CO.	TEXAS CO.	CALIFORNIA OIL CO.
COMPLETED	04/02/45	05/23/46	03/04/48
SAMPLED	07/29/47	07/30/47	10/10/62
FORMATION	PENN-	PENN-	PENN-WEBER
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5955	6088	5719
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	20.9	22.3	63.2
ETHANE	60.6	57.7	7.0
PROPANE	---	---	2.7
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	16.5	10.6	23.2
OXYGEN	0.6	0.2	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.2	0.9	0.8
HELIUM	0.18	0.32	0.42
HEATING VALUE*	1298	1260	936
SPECIFIC GRAVITY	0.937	0.925	0.765

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 925 SAMPLE 4008	INDEX 926 SAMPLE 14323	INDEX 927 SAMPLE 14671
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGLEY	ROCK CANYON	SOLDIER CANYON
WELL NAME	MCLAUGHLIN NO. 1	GOVERNMENT NO. 2-25	USA25-C-1
LOCATION	SEC. 32, T2N, R102W	SEC. 25, T4S, R102W	SEC. 25, T4S, R101W
OWNER	WASATCH OIL REFINING CO.	NORRIS OIL CO.	TIPPERARY OIL & GAS CORP.
COMPLETED	NOT GIVEN	03/06/75	09/19/75
SAMPLED	NOT GIVEN	04/28/75	05/14/76
FORMATION	NOT GIVEN	CRET-MANCOS B	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	3040	6896
WELLHEAD PRESSURE,PSIG	NOT GIVEN	470	2100
OPEN FLOW, MCFD	NOT GIVEN	2050	1400
COMPONENT, MOLE PCT			
METHANE	57.6	82.0	93.8
ETHANE	16.3	7.3	0.9
PROPANE	---	5.7	0.1
N-BUTANE	---	1.6	TRACE
ISOBUTANE	---	0.7	0.1
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.5	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	24.6	1.5	1.9
OXYGEN	0.5	0.0	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	2.6
HELIUM	0.78	0.15	0.04
HEATING VALUE*	876	1218	977
SPECIFIC GRAVITY	0.738	0.703	0.597

	INDEX 928 SAMPLE 13078	INDEX 929 SAMPLE 2212	INDEX 930 SAMPLE 6110
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	SULPHUR CREEK	THORNBURG	THORNBURG
WELL NAME	GOVERNMENT NO. 23-1	CLARK NO. 1	NO. 3
LOCATION	SEC. 23, T2S, R98W	SEC. 21, T3N, R91W	SEC. 21, T3N, R91W
OWNER	J. M. HUBER CORP.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	07/22/71	07/19/27	03/21/56
SAMPLED	10/02/71	10/04/30	07/19/56
FORMATION	EOCE-WASATCH	CRET-DAKOTA	PENN-WEBER & MORGAN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4688	1986	4380
WELLHEAD PRESSURE,PSIG	1228	800	NOT GIVEN
OPEN FLOW, MCFD	2310	20000	1068
COMPONENT, MOLE PCT			
METHANE	88.9	97.6	93.0
ETHANE	3.4	0.0	TRACE
PROPANE	1.0	---	0.0
N-BUTANE	0.2	---	TRACE
ISOBUTANE	0.2	---	0.1
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	4.2	0.8	0.3
OXYGEN	1.0	0.1	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	1.5	6.4
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1015	989	950
SPECIFIC GRAVITY	0.624	0.573	0.621

	INDEX 931 SAMPLE 11531	INDEX 932 SAMPLE 15696	INDEX 933 SAMPLE 15697
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THORNBURG	THUNDER	THUNDER
WELL NAME	THORNBERG UNIT NO. 18	7-F-21	4-RX-16
LOCATION	SEC. 21, T3N, R91W	SEC. 21, T4S, R102W	SEC. 16, T4S, R102W
OWNER	CONTINENTAL OIL CO.	COSEKA RESOURCES (U.S.A) LTD	COSEKA RESOURCES (U.S.A) LTD
COMPLETED	08/26/67	11/02/77	05/31/78
SAMPLED	06/11/68	05/14/79	05/14/79
FORMATION	PENN-WEBER	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4027	3223	3082
WELLHEAD PRESSURE,PSIG	1190	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4275	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	81.7	83.1
ETHANE	0.1	4.5	4.6
PROPANE	0.1	4.5	4.1
N-BUTANE	0.0	1.5	1.2
ISOBUTANE	0.0	0.9	0.7
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.5	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.5	5.3	5.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.6	0.3	0.2
HELIUM	0.01	0.21	0.21
HEATING VALUE*	942	1154	1129
SPECIFIC GRAVITY	0.623	0.704	0.684

	INDEX 934 SAMPLE 15699	INDEX 935 SAMPLE 15700	INDEX 936 SAMPLE 15701
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	THUNDER	THUNDER
WELL NAME	6-I-9	8-G-21	10-N-21
LOCATION	SEC. 9, T4S, R102W	SEC. 21, T4S, R102W	SEC. 21, T4S, R102W
OWNER	COSEKA RESOURCES (U.S.A) LTD	COSEKA RESOURCES (U.S.A) LTD	COSEKA RESOURCES (U.S.A) LTD
COMPLETED	03/02/79	01/11/78	06/08/78
SAMPLED	05/14/79	05/14/79	05/14/78
FORMATION	CRET-MANCOS	CRET-MANCOS	CRET-MANCOS
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3030	3098	2936
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.3	81.7	81.4
ETHANE	6.1	5.0	5.2
PROPANE	4.6	4.0	3.2
N-BUTANE	1.4	1.3	1.2
ISOBUTANE	0.9	0.7	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	7.2	5.3	6.1
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.6	0.4
HELIUM	0.21	0.20	0.20
HEATING VALUE*	1133	1132	1127
SPECIFIC GRAVITY	0.727	0.696	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 937 SAMPLE 15702	INDEX 938 SAMPLE 15703	INDEX 939 SAMPLE 362
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	THUNDER	WHITE RIVER DOME
WELL NAME	9-J-21	KIRBY-ROBERTSON NO. 3-21	NO. 2
LOCATION	SEC. 21, T4S, R102W	SEC. 21, T4S, R102W	SEC. 25, T2N, R97W
OWNER	COSEKA RESOURCES (U.S.A) LTD	COSEKA RESOURCES (U.S.A) LTD	WHITE RIVER OIL CO.
COMPLETED	01/14/78	11/11/78	--/--/20
SAMPLED	05/14/79	05/14/79	06/31/20
FORMATION	CRET-MANCOS	CRET-DAKOTA	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3037	5678	530
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	190
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	82.2	67.6	97.3
ETHANE	4.2	3.5	1.8
PROPANE	3.4	1.3	---
N-BUTANE	1.0	0.4	---
ISOBUTANE	0.6	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	7.1	17.5	0.6
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	8.0	0.2
HELIUM	0.32	0.79	TRACE
HEATING VALUE*	1085	836	1018
SPECIFIC GRAVITY	0.682	0.759	0.569

	INDEX 940 SAMPLE 807	INDEX 941 SAMPLE 2133	INDEX 942 SAMPLE 6647
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	WHITE RIVER DOME	WHITE RIVER DOME	WHITE RIVER DOME
WELL NAME	NO. 2	NO. 1	UNIT-GOVERNMENT NO. 3
LOCATION	NOT GIVEN	SEC. 30, T2N, R96W	SEC. 30, T2N, R96W
OWNER	WHITE RIVER OIL CO.	TEXAS PRODUCTION CO.	FRONTIER REFINING CO.
COMPLETED	NOT GIVEN	06/01/30	06/16/58
SAMPLED	07/14/23	09/16/30	06/15/58
FORMATION	EOCE-WASATCH	CRET-LARAMIE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	528	5560	5598
WELLHEAD PRESSURE,PSIG	180	1400	1674
OPEN FLOW, MCFD	600000	500	2350
COMPONENT, MOLE PCT			
METHANE	97.5	46.8	66.7
ETHANE	1.9	28.3	6.1
PROPANE	---	---	4.5
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.8
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	0.0	2.9	1.4
OXYGEN	0.2	0.2	0.9
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	21.8	18.3
HELIUM	0.00	TRACE	0.01
HEATING VALUE*	1022	981	979
SPECIFIC GRAVITY	0.566	0.920	0.854

	INDEX 943 SAMPLE 13351	INDEX 944 SAMPLE 10972	INDEX 945 SAMPLE 8756
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	WHITE RIVER DOME	WILDCAT	WILSON CREEK
WELL NAME	GOVERNMENT NO. 2	GOVERNMENT NO. 22X17	NO. 47
LOCATION	SEC. 34, T2N, R97W	SEC. 17, T2N, R97W	SEC. 3, T2N, R94W
OWNER	AMERICAN RESOURCES MGMT.	SHELL OIL CO.	TEXACO INC.
COMPLETED	02/19/72	DRILL STEM TEST	03/20/61
SAMPLED	08/04/72	NOT GIVEN	11/06/62
FORMATION	EOCE-WASATCH	PENN-WEBER	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	966	NOT GIVEN	6422
WELLHEAD PRESSURE,PSIG	515	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.2	80.6	69.8
ETHANE	2.5	9.7	9.7
PROPANE	0.7	3.8	8.1
N-BUTANE	0.2	0.9	2.9
ISOBUTANE	0.2	1.2	2.2
N-PENTANE	TRACE	0.2	0.8
ISOPENTANE	TRACE	0.4	0.8
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.6
NITROGEN	1.6	1.4	4.6
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.3	0.3
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1031	1196	1366
SPECIFIC GRAVITY	0.587	0.706	0.830

	INDEX 946 SAMPLE 8759	INDEX 947 SAMPLE 4786	INDEX 948 SAMPLE 992
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	ROUTT	ROUTT
FIELD	WILSON CREEK	PAGODA	TOW CREEK
WELL NAME	WILSON CREEK UNIT NO. 21	NO. 55-34-G	ADAIR NO. 1
LOCATION	SEC. 35, T3N, R94W	SEC. 34, T4N, R89W	SEC. 7, T6N, R85W
OWNER	TEXACO INC.	GENERAL PETROLEUM CORP.	TEXAS PRODUCTION CO.
COMPLETED	12/29/45	12/08/48	12/--/24
SAMPLED	11/06/62	09/07/49	01/27/25
FORMATION	JURA-SUNDANCE	TRIA-SHINARUMP	-SHALE
GEOLOGIC PROVINCE CODE	595	535	535
DEPTH, FEET	6757	3957	2085
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1300	300
OPEN FLOW, MCFD	NOT GIVEN	7850	12000
COMPONENT, MOLE PCT			
METHANE	21.9	95.7	79.2
ETHANE	7.8	0.3	16.3
PROPANE	10.8	0.4	---
N-BUTANE	16.0	0.4	---
ISOBUTANE	11.0	0.3	---
N-PENTANE	6.2	0.4	---
ISOPENTANE	7.4	0.4	---
CYCLOPENTANE	0.6	TRACE	---
HEXANES PLUS	3.9	0.0	---
NITROGEN	5.7	1.2	1.2
OXYGEN	0.1	0.2	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	0.9	3.1
HELIUM	0.02	0.05	0.10
HEATING VALUE*	2568	1033	1094
SPECIFIC GRAVITY	1.590	0.595	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 949 SAMPLE 2209	INDEX 950 SAMPLE 2210	INDEX 951 SAMPLE 379
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ROUTT	ROUTT	ROUTT
FIELD	TOW CREEK	TOW CREEK	WILLIAMS PARK ANTICLINE
WELL NAME	H. DENNIS NO. 3	CARSTARPHEN-IRWIN NO. 3	NO. 2
LOCATION	SEC. 18, T6N, R86W	SEC. 5, T7N, R86W	SEC. 36, T4N, R88W
OWNER	TEXAS PRODUCTION CO.	TEXAS PRODUCTION CO.	20 MILE OIL & GAS CO.
COMPLETED	11/08/28	12/05/29	10/--/19
SAMPLED	10/06/30	10/08/30	06/19/20
FORMATION	-SHALE	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2680	3580	453
WELLHEAD PRESSURE,PSIG	14	60	55
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	33.3	79.1	78.4
ETHANE	51.7	13.7	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	3.6	19.8
OXYGEN	0.2	0.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	14.1	3.5	0.2
HELIUM	0.07	0.08	1.04
HEATING VALUE*	1264	1047	794
SPECIFIC GRAVITY	0.953	0.672	0.636

	INDEX 952 SAMPLE 15108	INDEX 953 SAMPLE 7263	INDEX 954 SAMPLE 7295
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	ANDY'S MESA	MCINTYRE CANYON	MCINTYRE CANYON
WELL NAME	ANDY'S MESA UNIT NO. 10	S. E. LISBON NO. 1	SE LISBON USA NO. 1
LOCATION	SEC. 28, T44N, R16W	SEC. 8, T44N, R19W	SEC. 5, T44N, R19W
OWNER	UNION OIL CO. OF CALIFORNIA	PURE OIL CO.	PURE OIL CO.
COMPLETED	07/26/77	NOT GIVEN	NOT GIVEN
SAMPLED	09/20/77	10/25/59	11/29/59
FORMATION	-LA SAL	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7692	8861	8859
WELLHEAD PRESSURE,PSIG	1950	NOT GIVEN	800
OPEN FLOW, MCFD	2450	250	2500
COMPONENT, MOLE PCT			
METHANE	91.8	74.7	74.8
ETHANE	1.8	2.5	2.1
PROPANE	0.4	0.8	0.9
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.1	0.6	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.1	0.7	1.3
NITROGEN	5.0	9.5	9.2
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	9.5	9.7
HELIUM	0.07	0.80	0.80
HEATING VALUE*	996	913	929
SPECIFIC GRAVITY	0.600	0.745	0.755

	INDEX 955 SAMPLE 7495	INDEX 956 SAMPLE 7503	INDEX 957 SAMPLE 7628
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	MCINTYRE CANYON	MCINTYRE CANYON
WELL NAME	SE LISBON NO. 2	SE LISBON NO. 2	SE LISBON NO. 3
LOCATION	SEC. 8, T44N, R19W	SEC. 8, T44N, R19W	SEC. 16, T44N, R19W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/14/60	04/17/60	07/28/60
FORMATION	MISS-	MISS-	MISS-LIME
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8887	8821	8889
WELLHEAD PRESSURE,PSIG	150	160	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2534	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.7	71.7	68.0
ETHANE	3.7	3.9	5.1
PROPANE	4.1	0.7	3.1
N-BUTANE	0.7	0.6	1.1
ISOBUTANE	0.2	0.9	0.6
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.5
NITROGEN	10.5	12.0	12.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.5	8.2	6.8
HELIUM	0.90	1.00	0.90
HEATING VALUE*	962	911	978
SPECIFIC GRAVITY	0.755	0.751	0.778

	INDEX 958 SAMPLE 7763	INDEX 959 SAMPLE 7785	INDEX 960 SAMPLE 7997
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	MCINTYRE CANYON	MCINTYRE CANYON
WELL NAME	EGNAR NO. 1	EGNAR NO. 1	NO. 2
LOCATION	SEC. 30, T44N, R19W	SEC. 30, T44N, R19W	SEC. 8, T44N, R19W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	11/28/60	06/01/60
SAMPLED	10/30/60	11/29/60	06/09/61
FORMATION	MISS-	MISS-	MISS-DEVO
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9030	9100	8822
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	800
OPEN FLOW, MCFD	167	12000	10000
COMPONENT, MOLE PCT			
METHANE	69.6	69.2	71.3
ETHANE	3.8	4.1	3.7
PROPANE	1.7	1.8	1.5
N-BUTANE	1.1	0.6	0.6
ISOBUTANE	0.5	0.7	0.7
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.3	0.2
NITROGEN	10.4	11.8	11.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.6	10.0	9.3
HELIUM	1.00	0.90	1.00
HEATING VALUE*	931	897	894
SPECIFIC GRAVITY	0.785	0.769	0.754

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 961 SAMPLE 8703	INDEX 962 SAMPLE 10764	INDEX 963 SAMPLE 10947
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	WILDCAT	WILDCAT
WELL NAME	EGNAR NO. 1	GOVERNMENT NO. 1	ANDYS MESA FEDERAL NO. 1
LOCATION	NOT GIVEN	SEC. 14, T44N, R14W	SEC. 34, T44N, R16W
OWNER	BELCO PETROLEUM CORP.	JACK GRYNBERG & ASSOCIATES	UNION OIL CO. OF CALIF.
COMPLETED	12/03/60	10/20/66	03/09/67
SAMPLED	10/05/62	10/17/66	04/25/67
FORMATION	MISS-	PENN-HERMOSA	PENN-HONAKER TRAIL
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9120	6400	8509
WELLHEAD PRESSURE,PSIG	2202	NOT GIVEN	1912
OPEN FLOW, MCFD	11700	100	5300
COMPONENT, MOLE PCT			
METHANE	69.2	96.9	84.9
ETHANE	3.7	1.0	2.1
PROPANE	1.7	0.1	0.5
N-BUTANE	0.7	0.0	0.2
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.5	0.0	0.2
NITROGEN	11.9	1.8	11.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.1	0.2	0.1
HELIUM	0.04	0.04	0.16
HEATING VALUE*	909	1002	935
SPECIFIC GRAVITY	0.779	0.570	0.630

	INDEX 964 SAMPLE 13199	INDEX 965 SAMPLE 9320	INDEX 966 SAMPLE 5394
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SEDGWICK	WASHINGTON
FIELD	WILDCAT	WILDCAT	AKRON
WELL NAME	SLICKROCK NO. 1	SPRAGUE BROS. NO. 1	P. J. MOTT NO. 1
LOCATION	SEC. 8, T43N, R17W	SEC. 18, T10N, R47W	SEC. 23, T3N, R53W
OWNER	READ & STEVENS, INC.	CONTINENTAL OIL CO.	SOUTHERN PRODUCTION CO.
COMPLETED	10/15/71	03/02/64	11/02/52
SAMPLED	04/27/72	04/23/64	02/05/53
FORMATION	PENN-ISMAY	CRET-DAKOTA D	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	585	540	540
DEPTH, FEET	8398	3912	4844
WELLHEAD PRESSURE,PSIG	2140	805	1276
OPEN FLOW, MCFD	500	1550	6000
COMPONENT, MOLE PCT			
METHANE	97.9	89.9	85.6
ETHANE	0.3	2.7	5.5
PROPANE	0.1	0.5	1.5
N-BUTANE	0.0	0.1	0.4
ISOBUTANE	TRACE	0.2	1.0
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	1.3	5.3	4.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	1.2
HELIUM	0.01	0.08	0.02
HEATING VALUE*	1005	1000	1092
SPECIFIC GRAVITY	0.566	0.613	0.665

	INDEX 967 SAMPLE 8265	INDEX 968 SAMPLE 14115	INDEX 969 SAMPLE 13228
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	ARROW	BULLSEYE	CHILENO
WELL NAME	M. M. MITCHELL NO. 1	DANIELS NO. 1	PIEPER NO. 1
LOCATION	SEC. 33, T3N, R54W	SEC. 28, T3N, R51W	SEC. 23, T2N, R52W
OWNER	TEXACO INC.	PATRICK A. DOHENY	J. H. BANDER
COMPLETED	01/18/61	06/26/73	12/01/71
SAMPLED	10/28/61	07/22/74	06/06/72
FORMATION	CRET-DAKOTA J	CRET-DAKOTA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4777	4309	4400
WELLHEAD PRESSURE,PSIG	1200	700	985
OPEN FLOW, MCFD	1854	750	7800
COMPONENT, MOLE PCT			
METHANE	73.6	90.4	90.6
ETHANE	6.4	1.3	2.0
PROPANE	0.7	0.3	0.9
N-BUTANE	0.5	0.1	0.2
ISOBUTANE	0.9	1.5	1.2
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.7	0.6	0.5
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	13.3	5.3	3.8
OXYGEN	2.4	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.5
HELIUM	0.02	0.03	0.02
HEATING VALUE*	997	1031	1052
SPECIFIC GRAVITY	0.723	0.626	0.626

	INDEX 970 SAMPLE 14116	INDEX 971 SAMPLE 10809	INDEX 972 SAMPLE 11570
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	NOT GIVEN	OTIS	OTIS
WELL NAME	STEPHENSON	STATE NO. 1	HEISERMAN ESTATE NO. 1
LOCATION	SEC. 13, T3N, R52W	SEC. 36, T3N, R50W	SEC. 25, T3N, R50W
OWNER	PATRICK A. DOHENY	CLARK OIL & REFINING CORP.	DONZOIL, INC.
COMPLETED	11/21/73	09/--/65	05/25/68
SAMPLED	07/22/74	12/07/66	07/11/68
FORMATION	CRET-DAKOTA	CRET-DAKOTA D	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4509	3980	3958
WELLHEAD PRESSURE,PSIG	740	611	797
OPEN FLOW, MCFD	1000	NOT GIVEN	2798
COMPONENT, MOLE PCT			
METHANE	94.1	90.7	93.2
ETHANE	1.3	1.0	1.0
PROPANE	0.2	TRACE	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.6	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	2.0	7.3	5.4
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	0.0	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	TRACE
HELIUM	0.02	0.04	0.19
HEATING VALUE*	1028	946	965
SPECIFIC GRAVITY	0.601	0.599	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 973 SAMPLE 9271	INDEX 974 SAMPLE 7565	INDEX 975 SAMPLE 13659
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	PINTO	RUBY	WILDCAT
WELL NAME	THEURER NO. 1	JESSE NO. 1	SHOOK NO. 1A
LOCATION	SEC. 28, T3N, R52W	SEC. 22, T2N, R54W	SEC. 13, T3N, R52W
OWNER	UNION TEXAS PETROLEUM CORP.	PLAINS EXPLORATION CO.	PATRICK A. DOHENY
COMPLETED	01/09/64	08/12/59	06/07/73
SAMPLED	03/27/64	04/18/60	07/24/73
FORMATION	CRET-	CRET-DAKOTA D	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4668	4774	4534
WELLHEAD PRESSURE,PSIG	820	500	780
OPEN FLOW, MCFD	2020	5540	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	92.9	93.1
ETHANE	0.9	2.3	1.4
PROPANE	0.6	1.5	0.2
N-BUTANE	0.3	TRACE	0.0
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.5	0.3	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.7	1.0	3.2
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.3	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1046	1056	1000
SPECIFIC GRAVITY	0.617	0.613	0.598

	INDEX 976 SAMPLE 2254	INDEX 977 SAMPLE 14635	INDEX 978 SAMPLE 15329
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	GREASEWOOD LAKES	HAMBERT	HAMBERT
WELL NAME	NO. 1	LOUIS DINNER NO. 1	WARREN MCMILLEN NO. 1
LOCATION	SEC. 24, T6N, R61W	SEC. 13, T4N, R66W	SEC. 19, T4N, R65W
OWNER	PLATTE VALLEY PETROLEUM CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	12/14/30	01/06/76	05/11/76
SAMPLED	12/10/30	04/12/76	08/02/76
FORMATION	CRET-BENTON	CRET-SUSSEX	CRET-SUSSEX
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6638	4569	4389
WELLHEAD PRESSURE,PSIG	516	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	21.4	82.7	79.7
ETHANE	58.3	9.6	10.1
PROPANE	---	4.0	4.9
N-BUTANE	---	1.2	1.5
ISOBUTANE	---	0.6	1.1
N-PENTANE	---	0.2	0.5
ISOPENTANE	---	0.4	0.5
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.4
NITROGEN	16.0	0.9	0.8
OXYGEN	2.5	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	0.2	0.2
HELIUM	0.00	0.02	0.02
HEATING VALUE*	1262	1210	1270
SPECIFIC GRAVITY	0.940	0.691	0.728

	INDEX 979 SAMPLE 15478	INDEX 980 SAMPLE 15314	INDEX 981 SAMPLE 6362
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	HAMBERT	KIOWA CREEK	MCKENZIE
WELL NAME	WILLIAM EWING NO. 1	FRANSEN NO. 1	MCKENZIE-ROSE NO. 1
LOCATION	SEC. 11, T4N, R66W	SEC. 31, T2N, R61W	SEC. 19, T9N, R56W
OWNER	NIELSON ENTERPRISES, INC.	ENERGY MINERALS CORP.	PLAINS EXPLORATION CO.
COMPLETED	09/13/78	06/10/77	11/28/55
SAMPLED	11/01/78	07/11/78	08/12/57
FORMATION	CRET-SUSSEX	CRET-LAKOTA	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4572	7112	5890
WELLHEAD PRESSURE,PSIG	1420	1420	1510
OPEN FLOW, MCFD	3900	5100	2200
COMPONENT, MOLE PCT			
METHANE	81.6	76.9	77.5
ETHANE	9.1	7.1	9.1
PROPANE	4.5	4.4	4.8
N-BUTANE	1.3	1.5	1.6
ISOBUTANE	0.9	1.1	0.7
N-PENTANE	0.4	0.5	0.6
ISOPENTANE	0.4	0.7	0.3
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.3	0.9	0.5
NITROGEN	1.1	4.5	2.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.0	2.1
HELIUM	0.03	0.05	0.06
HEATING VALUE*	1234	1213	1222
SPECIFIC GRAVITY	0.709	0.759	0.747

	INDEX 982 SAMPLE 6395	INDEX 983 SAMPLE 1938	INDEX 984 SAMPLE 13376
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	MCKENZIE	NOT GIVEN	NOT GIVEN
WELL NAME	MCKENZIE NO. 1	NOT GIVEN	KING NO. 1
LOCATION	SEC. 13, T9N, R57W	SEC. 28, T 6N, R64W	SEC. 34, T1N, R61W
OWNER	NORTHERN NATURAL GAS CO.	J. S. DANLEY	FRANK H. WALSH
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/23/57	02/17/30	05/31/72
FORMATION	CRET-DAKOTA J	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5882	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	633	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	0.0	79.6
ETHANE	9.3	0.6	6.7
PROPANE	1.0	---	4.9
N-BUTANE	0.5	---	1.1
ISOBUTANE	1.0	---	0.6
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.6	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.3	---	0.1
NITROGEN	3.6	94.9	5.5
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	4.3	0.8
HELIUM	0.06	0.00	0.08
HEATING VALUE*	1133	11	1133
SPECIFIC GRAVITY	0.679	0.992	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 985 SAMPLE 9619	INDEX 986 SAMPLE 13225	INDEX 987 SAMPLE 12790
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	RIVERSIDE	ROGGEN SW	SLEEPER
WELL NAME	KUNSEMILLER NO. 1	ZIMBELMAN NO. 1-A	BUCZKOWSKYJ NO. 1X
LOCATION	SEC. 21, T5N, R61W	SEC. 23, T2N, R63W	SEC. 23, T12N, R56W
OWNER	TEXACO INC.	REDHORSE O+G, LTD.	EXETER DRILLING & EXPL. CO.
COMPLETED	NOT GIVEN	10/29/71	03/02/69
SAMPLED	10/23/64	06/--/72	04/24/71
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6740	7073	6183
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1585	75
OPEN FLOW, MCFD	2170	4000	34
COMPONENT, MOLE PCT			
METHANE	85.8	80.3	57.3
ETHANE	8.1	10.9	7.1
PROPANE	2.1	4.3	15.1
N-BUTANE	0.4	0.9	7.6
ISOBUTANE	0.1	0.5	2.5
N-PENTANE	0.2	0.1	2.1
ISOPENTANE	TRACE	0.2	1.8
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	0.2	0.1	0.9
NITROGEN	0.3	2.4	3.0
OXYGEN	TRACE	0.0	0.6
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	0.3	2.2
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1104	1186	1668
SPECIFIC GRAVITY	0.660	0.695	1.033

	INDEX 988 SAMPLE 14546	INDEX 989 SAMPLE 5929	INDEX 990 SAMPLE 14240
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	SPINDLE	STONEHAM	SURREY
WELL NAME	FOX NO. 1	GRABILL NO. 1	UPRR 43 PAN AM G NO. 3
LOCATION	SEC. 24, T2N, R68W	SEC. 29, T9N, R58W	SEC. 29, T1N, R67W
OWNER	PANHANDLE WESTERN GAS CO.	UTAH SOUTHERN OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	10/01/75	06/18/55	10/09/74
SAMPLED	12/15/75	09/06/55	12/05/74
FORMATION	CRET-SUSSEX	CRET-DAKOTA J	CRET-SUSSEX
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4427	NOT GIVEN	4880
WELLHEAD PRESSURE,PSIG	1248	1150	520
OPEN FLOW, MCFD	6919	1750	136
COMPONENT, MOLE PCT			
METHANE	83.0	79.6	73.2
ETHANE	6.1	9.4	12.0
PROPANE	5.1	4.2	8.0
N-BUTANE	1.4	1.3	2.4
ISOBUTANE	0.9	0.5	1.2
N-PENTANE	0.3	0.3	0.5
ISOPENTANE	0.3	0.4	0.8
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	2.4	2.2	1.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.5	0.2
HELIUM	0.05	0.06	0.01
HEATING VALUE*	1191	1188	1365
SPECIFIC GRAVITY	0.694	0.713	0.793

	INDEX 991 SAMPLE 11985	INDEX 992 SAMPLE 13121	INDEX 993 SAMPLE 13562
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	UNNAMED	WATTENBURG	WATTENBURG
WELL NAME	GOVERNMENT NO. 1	HART NO. 1	BAILEY NO. 1
LOCATION	SEC. 27, T8N, R58W	SEC. 27, T2N, R67W	SEC. 36, T3N, R68W
OWNER	DAVIDOR & DAVIDOR, INC.	ENERGY MINERALS CORP.	JOHN H. HILL
COMPLETED	05/05/69	09/15/71	02/05/72
SAMPLED	07/24/69	12/18/71	03/06/73
FORMATION	CRET-DAKOTA D	CRET-MUDDY	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6288	8100	7685
WELLHEAD PRESSURE,PSIG	1380	2300	2425
OPEN FLOW, MCFD	6400	2500	3600
COMPONENT, MOLE PCT			
METHANE	74.4	83.8	82.6
ETHANE	9.6	9.7	10.1
PROPANE	7.5	2.3	2.7
N-BUTANE	1.6	0.4	0.5
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.1	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	2.3	2.6
HELIUM	0.06	0.03	0.02
HEATING VALUE*	1239	1131	1139
SPECIFIC GRAVITY	0.758	0.673	0.682

	INDEX 994 SAMPLE 9549	INDEX 995 SAMPLE 10785	INDEX 996 SAMPLE 869
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	YUMA
FIELD	WILDCAT	WRANGLER	ARICKAREE
WELL NAME	BUCHLER-CARROLL NO. 1	EULALIA CERUI NO. 1	NO. 3
LOCATION	SEC. 30, T4N, R68W	SEC. 26, T10N, R56W	SEC 17, T2S, R43W
OWNER	TEXACO INC.	BRIGHT & SCHIFF	MIDFIELDS OIL CO.
COMPLETED	NOT GIVEN	09/01/65	NOT GIVEN
SAMPLED	08/21/64	11/21/66	04/22/24
FORMATION	CRET-NIOBRARA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5280	5714	400
WELLHEAD PRESSURE,PSIG	553	1000	400
OPEN FLOW, MCFD	NOT GIVEN	250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.1	74.2	94.8
ETHANE	12.2	6.2	1.7
PROPANE	10.4	7.8	---
N-BUTANE	5.1	2.2	---
ISOBUTANE	1.2	0.9	---
N-PENTANE	1.5	0.3	---
ISOPENTANE	1.7	1.1	---
CYCLOPENTANE	0.5	0.3	---
HEXANES PLUS	1.3	0.5	---
NITROGEN	1.0	4.7	3.0
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	1.5	0.1
HELIUM	0.01	0.07	0.09
HEATING VALUE*	1518	1266	991
SPECIFIC GRAVITY	0.922	0.708	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 997 SAMPLE 870	INDEX 998 SAMPLE 15547	INDEX 999 SAMPLE 13150
STATE	COLORADO	COLORADO	FLORIDA
COUNTY	YUMA	YUMA	SANTA ROSA
FIELD	ARICKAREE	BEECHER ISLAND	BLACKJACK
WELL NAME	NOT GIVEN	BEECHER ISLAND NO. 2	ST. REGIS PAPER CO. NO. 13-3
LOCATION	SEC. 20, T2S, R43W	SEC. 21, T2S, R43W	NOT GIVEN
OWNER	MIDFIELDS OIL CO.	MOUNTAIN PETROLEUM, LTD.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/22/24	12/30/78	01/03/72
FORMATION	CRET-DAKOTA	NOT GIVEN	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	540	540	210
DEPTH, FEET	400	NOT GIVEN	15790
WELLHEAD PRESSURE,PSIG	400	NOT GIVEN	3596
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1183
COMPONENT, MOLE PCT			
METHANE	94.3	93.6	62.1
ETHANE	1.8	1.2	11.7
PROPANE	---	0.4	3.4
N-BUTANE	---	0.1	1.1
ISOBUTANE	---	TRACE	1.2
N-PENTANE	---	TRACE	0.3
ISOPENTANE	---	TRACE	0.4
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	3.2	3.9	6.9
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	10.0
CARBON DIOXIDE	0.3	0.3	2.4
HELIUM	0.08	0.08	0.04
HEATING VALUE*	988	984	1113
SPECIFIC GRAVITY	0.580	0.582	0.816

	INDEX 1000 SAMPLE 13193	INDEX 1001 SAMPLE 15718	INDEX 1002 SAMPLE 12377
STATE	FLORIDA	FLORIDA	FLORIDA
COUNTY	SANTA ROSA	SANTA ROSA	SANTA ROSA
FIELD	BLACKJACK	JAY	JAY AREA
WELL NAME	ST. REGIS PAPER CO. NO. 13-3	ST. REGIS 1B	ST. REGIS ET AL, NO. 1
LOCATION	SEC. 13, T4N, R29W	SEC. 43, T5N, R29W	SEC. 9, T5N, R29W
OWNER	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.	HUMBLE OIL + REFINING CO.
COMPLETED	02/14/72	06/12/70	06/13/70
SAMPLED	01/26/72	07/30/79	06/13/70
FORMATION	JURA-NORPHLET	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	16120	15500	15470
WELLHEAD PRESSURE,PSIG	2994	1501	3775
OPEN FLOW, MCFD	75	3774	2145
COMPONENT, MOLE PCT			
METHANE	77.4	53.9	69.2
ETHANE	3.1	13.1	10.9
PROPANE	0.6	8.0	4.3
N-BUTANE	0.5	3.2	1.0
ISOBUTANE	0.7	2.2	0.7
N-PENTANE	0.7	1.2	0.4
ISOPENTANE	0.1	1.1	TRACE
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.9	0.9	0.2
NITROGEN	14.2	1.8	2.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	10.8	7.2
CARBON DIOXIDE	1.6	3.2	3.3
HELIUM	0.03	0.02	0.02
HEATING VALUE*	980	1396	1139
SPECIFIC GRAVITY	0.707	0.959	0.778

	INDEX 1003 SAMPLE 5492	INDEX 1004 SAMPLE 9609	INDEX 1005 SAMPLE 9610
STATE	GEORGIA	IDAHO	IDAHO
COUNTY	DECATUR	BONNEVILLE	BONNEVILLE
FIELD	NOT GIVEN	WILDCAT	WILDCAT
WELL NAME	J. R. SEALY NO. 1	T. J. WEBER NO. 1-A	T. J. WEBER NO. 1-A
LOCATION	LOT 247, LAND DIST. 21	SEC. 24, T2S, R44E	SEC. 24, T2S, R44E
OWNER	J. R. SEALY	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/10/53	10/22/64	10/23/64
FORMATION	CRET-EUTAW	MISS-BRAZER	MISS-BRAZER
GEOLOGIC PROVINCE CODE	130	615	615
DEPTH, FEET	3005	9085	9085
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	0.4	0.3
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	24.1	1.4	0.8
OXYGEN	0.2	0.1	0.1
ARGON	0.4	TRACE	TRACE
HYDROGEN	0.1	0.9	2.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	97.1	96.7
HELIUM	0.27	0.02	0.05
HEATING VALUE*	754	9	11
SPECIFIC GRAVITY	0.663	1.503	1.492

	INDEX 1006 SAMPLE 9617	INDEX 1007 SAMPLE 1630	INDEX 1008 SAMPLE 2700
STATE	IDAHO	IDAHO	IDAHO
COUNTY	BONNEVILLE	CANYON	CANYON
FIELD	WILDCAT	NOT GIVEN	NOT GIVEN
WELL NAME	T. J. WEBER NO. 1-A	NOT GIVEN	WATER WELL
LOCATION	SEC. 24, T2S, R44E	GREENLEAF	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	NOT GIVEN	JOHN JANSSEN
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/22/64	03/30/28	06/01/35
FORMATION	MISS-BRAZER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	615	610	610
DEPTH, FEET	9085	NOT GIVEN	278
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	0.0	0.0
ETHANE	0.1	1.4	0.0
PROPANE	0.2	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.7	96.4	96.1
OXYGEN	0.1	0.2	2.7
ARGON	TRACE	---	---
HYDROGEN	0.4	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	98.3	2.1	1.2
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	10	25	0
SPECIFIC GRAVITY	1.516	0.981	0.978

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1009 SAMPLE 1166	INDEX 1010 SAMPLE 1167	INDEX 1011 SAMPLE 1168
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CARIBOU	CARIBOU	CARIBOU
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	HOOPER SPRING	IRON SPRING, IDAHO	MOUND SPRING
LOCATION	SEC. 36, T 8S, R41E	SEC. 7, T 9S, R42E	SEC. 12, T 9S, R41E
OWNER	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/25	10/14/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	630	630	630
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	---	---	---
ETHANE	---	---	---
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.8	4.3	1.3
OXYGEN	---	---	---
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	96.2	95.7	98.7
HELIUM	0.00	0.00	0.00
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	1.508	1.505	1.522

	INDEX 1012 SAMPLE 1169	INDEX 1013 SAMPLE 1170	INDEX 1014 SAMPLE 1171
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CARIBOU	CARIBOU	CARIBOU
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	IDANHA SPRING	SODA MOUND SPRING	SULPHUR SPRING
LOCATION	SEC. 2, T 9S, R41E	SEC. 12, T 9S, R41E	SEC. 13, T 9S, R42E
OWNER	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/25	10/14/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	630	630	630
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	---	---	---
ETHANE	---	---	---
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	6.0	15.8
OXYGEN	---	---	---
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	92.5	94.0	84.2
HELIUM	0.00	0.00	0.00
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	1.487	1.495	1.440

	INDEX 1015 SAMPLE 1172	INDEX 1016 SAMPLE 2531	INDEX 1017 SAMPLE 4420
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CARIBOU	FRANKLIN	OWYHEE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MAMMOTH SPRING	WATER WELL	ARTESIAN WATER WELL
LOCATION	SEC. 23, T80S, R41E	SEC. 17, T14S, R39E	SEC. 182, T6S, R7E
OWNER	NOT GIVEN	J. N. LARSEN ET AL.	DONALD PANCOAST
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/25	08/03/32	02/11/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	630	625	615
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	---	72.6	84.2
ETHANE	---	0.6	1.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.0	16.8	13.4
OXYGEN	---	0.6	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	91.0	9.4	1.1
HELIUM	0.00	0.04	0.02
HEATING VALUE*	0	746	873
SPECIFIC GRAVITY	1.478	0.722	0.627

	INDEX 1018 SAMPLE 2748	INDEX 1019 SAMPLE 1356	INDEX 1020 SAMPLE 1649
STATE	IDAHO	IDAHO	IDAHO
COUNTY	PAYETTE	PAYETTE	PAYETTE
FIELD	BEACON HILL	PAYETTE	PAYETTE
WELL NAME	REIMS NO. 2	NO. 1	NOT GIVEN
LOCATION	SEC. 13, T4N, R4W	NOT GIVEN	NOT GIVEN
OWNER	BOISE PETROLEUM CORP.	IDAHO PETROLEUM CO.	NOT GIVEN
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/02/37	02/28/27	05/25/28
FORMATION	MIOC-PAYETTE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	615	615	615
DEPTH, FEET	1267	1400	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.5	72.9	67.6
ETHANE	0.0	25.2	26.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	0.0	4.8
OXYGEN	0.3	0.8	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	1.1	0.6
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1008	1190	1163
SPECIFIC GRAVITY	0.557	0.694	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1021 SAMPLE 2553	INDEX 1022 SAMPLE 2217	INDEX 1023 SAMPLE 2220
STATE	IDAHO	IDAHO	IDAHO
COUNTY	PAYETTE	WASHINGTON	WASHINGTON
FIELD	PAYETTE	CRYSTAL DOME	CRYSTAL DOME
WELL NAME	PATCH-SMITH ET AL, NO. 1	NO. 1-X	NO. 1-X
LOCATION	SEC. 2, T8N, R5W	SEC. 32, T10N, R4W	SEC. 32, T10N, R4W
OWNER	IDAHO GAS & UTILITIES CORP.	CRYSTAL DOME OIL & GAS CO.	CRYSTAL DOME OIL & GAS CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	09/30/32	10/22/30	NOT GIVEN
FORMATION	MIOC-PAYETTE	TERT-	TERT-
GEOLOGIC PROVINCE CODE	615	615	615
DEPTH, FEET	1285	1865	1865
WELLHEAD PRESSURE,PSIG	40	135	135
OPEN FLOW, MCFD	250	100	100
COMPONENT, MOLE PCT			
METHANE	99.3	98.7	98.8
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.4	0.3
OXYGEN	0.7	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.9	0.9
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1006	1001	1001
SPECIFIC GRAVITY	0.558	0.565	0.564

	INDEX 1024 SAMPLE 2255	INDEX 1025 SAMPLE 3392	INDEX 1026 SAMPLE 3393
STATE	IDAHO	ILLINOIS	ILLINOIS
COUNTY	WASHINGTON	BOND	BOND
FIELD	WEISER	AYERS	AYERS
WELL NAME	DANIEL NO. 2	ALICE PRICE NO. 1	E. A. MARY NO. 2
LOCATION	SEC. 32, T10N, R4W	SEC. 29, T6N, R3W	SEC. 20, T6N, R3W
OWNER	CRYSTAL DOME OIL & GAS CO.	BOND COUNTY GAS CO.	BOND COUNTY GAS CO.
COMPLETED	NOT GIVEN	07/05/40	01/15/38
SAMPLED	01/04/31	05/08/42	05/08/42
FORMATION	-KRAMLICH	MISS-BENOIST	MISS-BENOIST
GEOLOGIC PROVINCE CODE	615	315	315
DEPTH, FEET	1870	925	940
WELLHEAD PRESSURE,PSIG	300	185	185
OPEN FLOW, MCFD	NOT GIVEN	500	250
COMPONENT, MOLE PCT			
METHANE	97.4	92.7	91.5
ETHANE	0.0	0.2	1.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	6.3	6.6
OXYGEN	0.1	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.3	0.2
HELIUM	0.00	0.17	0.19
HEATING VALUE*	987	943	947
SPECIFIC GRAVITY	0.572	0.585	0.590

	INDEX 1027 SAMPLE 5143	INDEX 1028 SAMPLE 5345	INDEX 1029 SAMPLE 9761
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	CLINTON	CRAWFORD	GALLATIN
FIELD	FROGTOWN	RUBINSON S	FORK N
WELL NAME	WM. HOSTMEYER NO. 1	HUDSON NO. P-1	EDWARDS
LOCATION	SEC. 36, T3N, R4W	SEC. 6, T5N, R12W	SEC. 3, T8S, R8E
OWNER	GULF REFINING CO.	SKILES OIL CORP.	MT. CARMEL DRILLING CO.
COMPLETED	08/05/51	07/29/52	NOT GIVEN
SAMPLED	12/05/51	11/25/52	02/23/65
FORMATION	SILU-REEF	NOT GIVEN	MISS-PALESTINE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	2222	1074	1830
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	88.7	93.1
ETHANE	0.6	2.3	1.0
PROPANE	0.5	0.3	0.1
N-BUTANE	0.3	TRACE	0.1
ISOBUTANE	0.3	0.0	TRACE
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	0.1	0.0	0.6
NITROGEN	4.1	7.8	4.2
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.1
HELIUM	0.09	0.13	0.17
HEATING VALUE*	998	948	1021
SPECIFIC GRAVITY	0.600	0.604	0.605

	INDEX 1030 SAMPLE 3397	INDEX 1031 SAMPLE 3405	INDEX 1032 SAMPLE 3406
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	RUSSELLVILLE	RUSSELLVILLE	RUSSELLVILLE
WELL NAME	SCOTT GREY NO. 1	CARPENTER & WHITE	BEIRHAUS NO. 5
LOCATION	SEC. 13, T4N, R11W	SEC. 7, T4N, R11W	SEC. 13, T4N, R11W
OWNER	R. R. WILLIS	KENTUCKY NAT. GAS & PARRIOTT	J. S. YOUNG, JR.
COMPLETED	07/14/38	12/03/38	12/17/41
SAMPLED	05/11/42	05/11/42	05/11/42
FORMATION	PENN-BUCHANAN	NOT GIVEN	PENN-BRIDGEPORT
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1061	1080	787
WELLHEAD PRESSURE,PSIG	196	204	213
OPEN FLOW, MCFD	27855	8476	3375
COMPONENT, MOLE PCT			
METHANE	83.0	87.1	83.2
ETHANE	6.2	6.5	6.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	5.6	9.4
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.21	0.12	0.20
HEATING VALUE*	952	999	963
SPECIFIC GRAVITY	0.630	0.614	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1033 SAMPLE 3409	INDEX 1034 SAMPLE 3744	INDEX 1035 SAMPLE 3395
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	LAWRENCE	LAWRENCE	MACOUPIN
FIELD	RUSSELLVILLE	RUSSELLVILLE	PLAINVIEW
WELL NAME	SCOTT GREY ACRES NO. 3	THOMPSON-SERHART NO. 1	STEPHEN NO. 2
LOCATION	SEC. 8, T4N, R11W	SEC. 18, T4N, R10W	SEC. 18, T8N, R8W
OWNER	R. R. WILLIS	KENTUCKY NATURAL GAS CORP.	RAY, HOLMES & OTHERS
COMPLETED	04/05/40	02/19/43	05/01/42
SAMPLED	05/11/42	03/31/44	05/09/42
FORMATION	MISS-KIRKWOOD	PENN-BRIDGEPORT	PENN-POTTSVILLE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1326	796	397
WELLHEAD PRESSURE,PSIG	357	207	NOT GIVEN
OPEN FLOW, MCFD	119	2635	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	80.4	94.4
ETHANE	6.4	5.3	0.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.6	13.4	4.5
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.30	0.06
HEATING VALUE*	1010	909	963
SPECIFIC GRAVITY	0.608	0.639	0.579

	INDEX 1036 SAMPLE 3396	INDEX 1037 SAMPLE 4275	INDEX 1038 SAMPLE 3407
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	MACOUPIN	MORGAN	WABASH
FIELD	PLAINVIEW	WAVERLY	MOUNT CARMEL
WELL NAME	T. S. SNEDEKER	S. MCMAHAN	RISLEY NO. 1
LOCATION	SEC. 15, T8N, R8W	SEC. 22, T13N, R8W	SEC. 17, T 1S, R12W
OWNER	T. S. SNEDEKER	L. M. LADET	SHELL OIL CO.
COMPLETED	--/--/32	12/17/46	--/--/40
SAMPLED	05/09/42	12/14/46	05/11/42
FORMATION	PENN-POTTSVILLE	DEVO-LIMESTONE	MISS-MCCLOSKY
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	420	992	2325
WELLHEAD PRESSURE,PSIG	120	390	NOT GIVEN
OPEN FLOW, MCFD	1000	1270	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	94.9	28.0
ETHANE	0.0	0.0	65.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.4	3.6	4.9
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	1.2	1.0
HELIUM	0.14	0.01	0.07
HEATING VALUE*	909	961	1459
SPECIFIC GRAVITY	0.599	0.583	0.911

	INDEX 1039 SAMPLE 4415	INDEX 1040 SAMPLE 13106	INDEX 1041 SAMPLE 11801
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	WASHINGTON	WILLIAMSON	WILLIAMSON
FIELD	DUBOIS N	CORINTH S	JOHNSON CITY E
WELL NAME	KASBAN NO. 1	BELLE GENT A NO. 1	MADISON COAL CORP. G-3
LOCATION	SEC. 13, T3S, R2W	SEC. 33, T8S, R4E	SEC. 15, T8S, R3E
OWNER	W.O.ALLEN & MABEE PET. CORP.	C. E. BREHM	CIPS CO.
COMPLETED	09/18/47	11/12/70	12/20/68
SAMPLED	01/06/48	11/22/71	03/27/69
FORMATION	NOT GIVEN	MISS-HARDINSBURG	MISS-TAR SPRINGS
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1184	2227	1928
WELLHEAD PRESSURE,PSIG	500	850	625
OPEN FLOW, MCFD	15300	200	6400
COMPONENT, MOLE PCT			
METHANE	88.3	96.1	97.2
ETHANE	4.1	0.6	0.7
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	6.8	2.9	1.6
OXYGEN	0.3	0.2	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.3
HELIUM	0.36	0.15	0.09
HEATING VALUE*	968	984	997
SPECIFIC GRAVITY	0.604	0.569	0.566

	INDEX 1042 SAMPLE 13271	INDEX 1043 SAMPLE 3839	INDEX 1044 SAMPLE 3530
STATE	ILLINOIS	INDIANA	INDIANA
COUNTY	WILLIAMSON	DAVIESS	DAVIESS
FIELD	STIRITZ	GLENDALE	HUDSONVILLE
WELL NAME	NOVINSKY NO. 1	E. MCCRACKEN NO. 6-C	GOSLIN NO. 2
LOCATION	SEC. 12, T8S, R2E	SEC. 16, T2N, R6W	SEC. 9, T1N, R6W
OWNER	C. E. BREHM DRILLING & PROD.	P. O. BROWN INC.	JOE BAUER
COMPLETED	09/14/71	06/18/42	--/--/34
SAMPLED	06/19/72	05/15/44	05/15/42
FORMATION	MISS-TAR SPRINGS	MISS-	MISS-BARKER
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1935	730	750
WELLHEAD PRESSURE,PSIG	NOT GIVEN	310	100
OPEN FLOW, MCFD	4300	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	96.4	82.0	93.8
ETHANE	0.8	6.9	0.4
PROPANE	0.2	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	2.1	10.3	5.0
OXYGEN	TRACE	0.5	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.12	0.18	0.12
HEATING VALUE*	1003	954	957
SPECIFIC GRAVITY	0.572	0.634	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1045 SAMPLE 9787	INDEX 1046 SAMPLE 4883	INDEX 1047 SAMPLE 5041
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DAVIFSS	DAVIESS	DAVIESS
FIELD	ODON E	PLAINVILLE	PLAINVILLE
WELL NAME	JAMES SHAW NO. 1A	W. C. FOUST A NO. 1	LOCKIE MEURER NO. 1-A
LOCATION	SEC. 22, T5N, R5W	SEC. 21, T4N, R7W	SEC. 2, T4N, R7W
OWNER	HENRY GWALTNEY	NATIONAL ASSOC. PETROLEUM CO	NATIONAL ASSOC. PETROLEUM CO
COMPLETED	08/13/64	04/06/50	08/17/50
SAMPLED	03/03/65	04/08/50	05/01/51
FORMATION	DEVO-	NOT GIVEN	MISS-SALEM
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1620	1143	1090
WELLHEAD PRESSURE,PSIG	701	525	525
OPEN FLOW, MCFD	5500	4186	4000
COMPONENT, MOLE PCT			
METHANE	94.3	68.9	73.0
ETHANE	2.4	6.3	6.5
PROPANE	0.3	2.8	2.7
N-BUTANE	TRACE	0.6	0.6
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	2.4	19.4	15.8
OXYGEN	0.0	0.8	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.02	0.36	0.36
HEATING VALUE*	1015	923	963
SPECIFIC GRAVITY	0.584	0.719	0.701

	INDEX 1048 SAMPLE 5043	INDEX 1049 SAMPLE 512	INDEX 1050 SAMPLE 513
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DAVIESS	DECATUR	DECATUR
FIELD	PLAINVILLE	EASTERN	WESTPORT
WELL NAME	W. C. FOUST NO. 1-A	DICK MEEK NO. 1	MOLLIE MARTIN NO. 2
LOCATION	SEC. 21, T4N, R7W	1 MI S GREENBURG	4 MI N WESTPORT
OWNER	NATIONAL ASSOC. PETROLEUM CO	GREENBURG GAS & ELECTRIC CO.	GREENBURG GAS & ELECTRIC CO.
COMPLETED	04/08/50	--/--/15	--/--/15
SAMPLED	NOT GIVEN	10/21/20	10/21/20
FORMATION	MISS-SALEM	ORDO-TRENTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	315	300	300
DEPTH, FEET	1144	898	898
WELLHEAD PRESSURE,PSIG	525	300	300
OPEN FLOW, MCFD	4000	500	700
COMPONENT, MOLE PCT			
METHANE	71.8	78.2	75.6
ETHANE	6.7	2.8	4.5
PROPANE	3.0	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	15.8	17.9	19.1
OXYGEN	TRACE	0.9	0.2
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.0	0.2
HELIUM	0.36	0.40	0.43
HEATING VALUE*	969	842	846
SPECIFIC GRAVITY	0.707	0.647	0.657

	INDEX 1051 SAMPLE 5042	INDEX 1052 SAMPLE 1934	INDEX 1053 SAMPLE 2855
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DUBOIS	GIBSON	GIBSON
FIELD	NOT GIVEN	OAKLAND CITY	PRINCETON
WELL NAME	ROMAN BEGLE NO. 1	GEO. ALLEN NO. 2	HALL NO. 1
LOCATION	SEC. 24, T3S, R5W	SEC. 22, T2S, R9W	SEC. 20, T1S, R11W
OWNER	NATIONAL ASSOC. PETROLEUM CO	SHELL OIL CO.	PETROLEUM EXPLORATION, INC.
COMPLETED	01/03/51	11/06/29	09/--/40
SAMPLED	05/01/51	02/11/30	03/12/41
FORMATION	MISS-JACKSON	MISS-CHESTER	MISS-HARDINSBURG
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	589	1434	1760
WELLHEAD PRESSURE,PSIG	265	630	795
OPEN FLOW, MCFD	476	8000	3000
COMPONENT, MOLE PCT			
METHANE	86.2	80.4	64.7
ETHANE	4.4	5.5	9.3
PROPANE	0.9	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	7.2	13.4	25.0
OXYGEN	TRACE	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.3	0.2
HELIUM	0.12	0.23	0.54
HEATING VALUE*	993	913	822
SPECIFIC GRAVITY	0.629	0.641	0.705

	INDEX 1054 SAMPLE 3519	INDEX 1055 SAMPLE 1083	INDEX 1056 SAMPLE 2609
STATE	INDIANA	INDIANA	INDIANA
COUNTY	GREENE	HARRISON	HENRY
FIELD	SWITZ CITY	TOBACCO LANDING	NOT GIVEN
WELL NAME	WALTER HOLMES NO. 1	LAFE CROSIER	MARY E. REED NO. 2
LOCATION	SEC. 22, T7N, R6W	BOONE TOWNSHIP	SEC. 12, T16N, R8E
OWNER	MIDWEST DEVELOPMENT CO.	RAILROADERS GAS CO.	KNIGHTSTOWN NATURAL GAS CO.
COMPLETED	12/--/40	12/--/22	09/24/29
SAMPLED	05/20/42	06/15/25	02/20/33
FORMATION	DEVO-	DEVO-BLACK SHALE	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	315	315	300
DEPTH, FEET	1648	405	959
WELLHEAD PRESSURE,PSIG	714	170	15
OPEN FLOW, MCFD	382	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	91.6	85.3	75.8
ETHANE	5.3	4.7	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	7.5	9.8
OXYGEN	0.5	1.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	1.4	0.4
HELIUM	0.08	0.17	0.30
HEATING VALUE*	1023	948	1004
SPECIFIC GRAVITY	0.601	0.629	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1057 SAMPLE 2325	INDEX 1058 SAMPLE 2298	INDEX 1059 SAMPLE 4831
STATE	INDIANA	INDIANA	INDIANA
COUNTY	HUNTINGTON	KNOX	MARSHALL
FIELD	BUSSARD	OAKTOWN W	LAKE OF THE WOODS
WELL NAME	NO. 1	NO. 1	NOAH ANDERSON NO. 2
LOCATION	SEC. 26, T28N, R9E	SEC. 15, T5N, R10W	SEC. 13, T34N, R2E
OWNER	TWO RIVERS CORP.	JAS. H. GARDNER ET AL.	MARSHAL PETROLEUM CO.
COMPLETED	06/01/30	12/11/30	10/27/49
SAMPLED	05/11/31	02/27/31	01/14/50
FORMATION	NOT GIVEN	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	315	305
DEPTH, FEET	1050	705	350
WELLHEAD PRESSURE,PSIG	240	350	90
OPEN FLOW, MCFD	50	3900	10
COMPONENT, MOLE PCT			
METHANE	57.3	97.0	91.8
ETHANE	20.3	0.8	0.9
PROPANE	---	---	0.1
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	21.2	1.8	3.2
OXYGEN	0.3	0.1	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.3	3.0
HELIUM	0.38	0.06	0.41
HEATING VALUE*	944	997	961
SPECIFIC GRAVITY	0.747	0.569	0.605

	INDEX 1060 SAMPLE 5045	INDEX 1061 SAMPLE 1995	INDEX 1062 SAMPLE 2364
STATE	INDIANA	INDIANA	INDIANA
COUNTY	MARSHALL	MONROE	MONROE
FIELD	NORTHTOWN	UNIONVILLE	UNIONVILLE
WELL NAME	NELSON SALTENRIGHT NO. 1	M. E. SHIRLEY NO. 1	JACOB NEAL NO. 1
LOCATION	SEC. 11, T24N, R2E	SEC. 7, T9N, R1E	SEC. 7, BENTON TWP.
OWNER	MARSHALL PETROLEUM CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	10/24/50	11/01/29	04/10/31
SAMPLED	04/19/51	04/10/30	07/23/31
FORMATION	NOT GIVEN	DEVO-CORNIFEROUS	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	305	315	315
DEPTH, FEET	374	672	799
WELLHEAD PRESSURE,PSIG	100	230	225
OPEN FLOW, MCFD	500	1000	1080
COMPONENT, MOLE PCT			
METHANE	88.1	94.8	93.9
ETHANE	1.2	1.9	3.3
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	6.1	2.4	2.1
OXYGEN	0.7	0.3	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	3.4	0.6	0.6
HELIUM	0.00	0.04	0.05
HEATING VALUE*	926	994	1010
SPECIFIC GRAVITY	0.628	0.581	0.586

	INDEX 1063 SAMPLE 6059	INDEX 1064 SAMPLE 3529	INDEX 1065 SAMPLE 3819
STATE	INDIANA	INDIANA	INDIANA
COUNTY	PIKE	PIKE	PIKE
FIELD	HAZELTON	IVA	IVA
WELL NAME	NO. 1	CARPENTER NO. 1	STEEN NO. 1
LOCATION	SEC. 20, T1N, R9W	SEC. 19, T1N, R6W	SEC. 24, T1N, R7W
OWNER	HERBERT GRUBB	LOUISVILLE LAND BANK	INDIANA FARM BUREAU
COMPLETED	02/15/56	06/04/41	12/22/42
SAMPLED	05/14/56	05/15/42	04/22/44
FORMATION	MISS-CYPRESS	MISS-BARKER	MISS-CHESTER L
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1364	703	840
WELLHEAD PRESSURE,PSIG	462	225	300
OPEN FLOW, MCFD	5000	500	200
COMPONENT, MOLE PCT			
METHANE	68.5	82.9	86.0
ETHANE	5.5	0.4	8.2
PROPANE	0.7	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	24.0	15.8	5.5
OXYGEN	TRACE	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.59	0.33	TRACE
HEATING VALUE*	817	847	1018
SPECIFIC GRAVITY	0.668	0.625	0.620

	INDEX 1066 SAMPLE 3535	INDEX 1067 SAMPLE 3536	INDEX 1068 SAMPLE 3537
STATE	INDIANA	INDIANA	INDIANA
COUNTY	SPENCER	SPENCER	SPENCER
FIELD	ROCKPORT	ROCKPORT	ROCKPORT
WELL NAME	LEAH KOFF NO. 2	AXTON-BUMFUS NO. 1	R. HARVEY NO. 1
LOCATION	SEC. 19, T7S, R6W	SEC. 30, T7S, R6W	SEC. 4, T8S, R6W
OWNER	KENTUCKY NATURAL GAS CO.	KENTUCKY NATURAL GAS CO.	KENTUCKY NATURAL GAS CO.
COMPLETED	04/13/40	11/17/39	06/05/40
SAMPLED	05/18/42	05/18/42	05/18/42
FORMATION	MISS-PALESTINE	MISS-PALESTINE	PENN-CASEYVILLE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	871	871	622
WELLHEAD PRESSURE,PSIG	248	240	146
OPEN FLOW, MCFD	11946	3952	240
COMPONENT, MOLE PCT			
METHANE	91.0	91.2	90.2
ETHANE	4.8	4.8	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.5	3.3	9.0
OXYGEN	0.5	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.13	0.26
HEATING VALUE*	1008	1010	914
SPECIFIC GRAVITY	0.596	0.595	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1069 SAMPLE 3538	INDEX 1070 SAMPLE 3527	INDEX 1071 SAMPLE 2483
STATE	INDIANA	INDIANA	INDIANA
COUNTY	SPENCER	SULLIVAN	SWITZERLAND
FIELD	ROCKPORT	MARTS	LONG RUN
WELL NAME	HENRY WERTHWEIR NO. 1	SARAH HAUGER	IRA&DAVID WISEMAN NO. 1
LOCATION	SEC. 29, T7S, R6W	SEC. 19, T9N, R9W	SEC. 16, T2N, R3W
OWNER	KENTUCKY NATURAL GAS CO.	DOME GAS CO.	F. C. BAKES
COMPLETED	05/31/40	03/01/38	12/16/31
SAMPLED	05/18/42	05/14/42	03/17/32
FORMATION	PENN-CASEYVILLE	-SANDSTONE	ORDO-TRENTON U
GEOLOGIC PROVINCE CODE	315	315	300
DEPTH, FEET	641	259	280
WELLHEAD PRESSURE,PSIG	265	30	120
OPEN FLOW, MCFD	1931	50	1500
COMPONENT, MOLE PCT			
METHANE	96.5	97.0	80.2
ETHANE	0.0	0.0	8.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.8	1.6	9.4
OXYGEN	0.4	0.4	1.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	1.0	0.4
HELIUM	0.12	0.04	0.10
HEATING VALUE*	978	983	965
SPECIFIC GRAVITY	0.570	0.573	0.646

	INDEX 1072 SAMPLE 12017	INDEX 1073 SAMPLE 12018	INDEX 1074 SAMPLE 12020
STATE	IOWA	IOWA	IOWA
COUNTY	WEBSTER	WEBSTER	WEBSTER
FIELD	VINCENT	VINCENT	VINCENT
WELL NAME	SHARP NO. 2	WILLEY NO. 1	ANDERSON NO. 1
LOCATION	SEC. 10, T90N, R27W	SEC. 11, T90N, R27W	SEC. 3, T90N, R27W
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	10/26/63	04/25/66	09/03/65
SAMPLED	08/29/69	08/29/69	08/29/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	325	325	325
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.4	TRACE	77.9
ETHANE	5.3	0.0	5.5
PROPANE	1.1	TRACE	1.3
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	8.1	65.3	13.4
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	0.8	0.1
HYDROGEN	0.5	33.7	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.09	0.00	0.12
HEATING VALUE*	996	109	944
SPECIFIC GRAVITY	0.629	0.671	0.657

	INDEX 1075 SAMPLE 12021	INDEX 1076 SAMPLE 1875	INDEX 1077 SAMPLE 16098
STATE	IOWA	KANSAS	KANSAS
COUNTY	WEBSTER	ANDERSON	BARBER
FIELD	VINCENT	COLONY	ADAMS
WELL NAME	HOFMANN NO. 3	VIETJE NO. 10	SIMPSON NO. 1
LOCATION	SEC. 4, T90N, R27W	SEC. 28, T22S, R19E	SEC. 32, T31S, R12W
OWNER	NORTHERN NATURAL GAS CO.	ARKANSAS FUEL OIL CO.	ABERCROMBIE DRILLING, INC.
COMPLETED	09/03/64	12/22/22	NOT GIVEN
SAMPLED	08/29/69	09/24/29	10/16/80
FORMATION	NOT GIVEN	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	325	335	375
DEPTH, FEET	NOT GIVEN	900	4200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	15	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	11100
COMPONENT, MOLE PCT			
METHANE	0.1	94.4	77.8
ETHANE	0.0	2.7	7.8
PROPANE	TRACE	---	3.9
N-BUTANE	0.0	---	1.0
ISOBUTANE	0.0	---	0.5
N-PENTANE	0.0	---	0.3
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	3.5	1.8	0.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	96.3	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	1.0	TRACE
HELIUM	0.00	0.20	0.43
HEATING VALUE*	313	1005	1104
SPECIFIC GRAVITY	0.101	0.587	0.700

	INDEX 1078 SAMPLE 9573	INDEX 1079 SAMPLE 9578	INDEX 1080 SAMPLE 9720
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	AETNA	AETNA	AETNA
WELL NAME	DAVIS RANCH E NO. 1	BIRDIE CLARK NO. 1	NO. 1
LOCATION	SEC. 35, T34S, R15W	SEC. 7, T34S, R13W	SEC. 29, T34S, R13W
OWNER	K & E DRILLING, INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	07/17/64	05/02/64	12/16/64
SAMPLED	09/29/64	09/23/64	02/05/65
FORMATION	MISS-	MISS-LIME	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4834	4846	4821
WELLHEAD PRESSURE,PSIG	1633	1440	1590
OPEN FLOW, MCFD	12000	9240	2090
COMPONENT, MOLE PCT			
METHANE	92.0	84.3	84.7
ETHANE	3.8	6.7	6.6
PROPANE	1.2	2.6	2.3
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.6	4.4	4.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.21	0.13
HEATING VALUE*	1078	1102	1088
SPECIFIC GRAVITY	0.614	0.660	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1081 SAMPLE 11722	INDEX 1082 SAMPLE 12152	INDEX 1083 SAMPLE 4017
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	AETNA	AETNA	ALLEN
WELL NAME	WOLGAMOTT NO. 1	MCGRATH A NO. 1	SHRIVER NO. 1
LOCATION	SEC. 9, T35S, R14W	SEC. 9, T33S, R14W	SEC. 1, T30S, R14W
OWNER	SHENANDOAH OIL CORP.	SAGE DRILLING CO., INC.	LION OIL CO.
COMPLETED	07/19/67	04/30/69	NOT GIVEN
SAMPLED	01/07/69	12/16/69	05/04/45
FORMATION	PENN-CHEROKEE	MISS-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4800	4652	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1392	1332	NOT GIVEN
OPEN FLOW, MCFD	9500	1718	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	92.6	56.2
ETHANE	4.2	3.7	18.0
PROPANE	1.6	1.1	---
N-BUTANE	0.6	0.3	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.2	0.0	---
HEXANES PLUS	0.3	0.0	---
NITROGEN	2.5	1.9	23.3
OXYGEN	0.2	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.4
HELIUM	0.09	0.13	1.79
HEATING VALUE*	1085	1043	892
SPECIFIC GRAVITY	0.629	0.594	0.737

	INDEX 1084 SAMPLE 12716	INDEX 1085 SAMPLE 15570	INDEX 1086 SAMPLE 16015
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	BLUNK	BOGGS	CEDAR
WELL NAME	BLUNK NO. 1	FORRESTER "A" NO. 1	MILLER NO. 1
LOCATION	SEC. 25, T34S, R14W	SEC. 34, T33S, R11W	SEC. 36, T33S, R10W
OWNER	IMPERIAL OIL CO.	NATIONAL OIL CO.	GEORGE R. JONES
COMPLETED	12/07/71	11/18/78	01/09/80
SAMPLED	03/08/71	02/27/79	07/10/80
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4695	4517	4569
WELLHEAD PRESSURE,PSIG	1200	1405	1600
OPEN FLOW, MCFD	NOT GIVEN	4000	2015
COMPONENT, MOLE PCT			
METHANE	87.6	88.0	88.1
ETHANE	5.0	5.0	5.3
PROPANE	2.0	2.2	2.2
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	2.9	2.7	2.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.12	0.08	0.13
HEATING VALUE*	1121	1108	1109
SPECIFIC GRAVITY	0.654	0.642	0.642

	INDEX 1087 SAMPLE 4611	INDEX 1088 SAMPLE 3255	INDEX 1089 SAMPLE 3802
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	COTTONWOOD CREEK	DEERHEAD	DEERHEAD
WELL NAME	WERNER B NO. 1	HILDEBRAND NO. 1	HILDEBRAND NO. 2
LOCATION	SEC. 21, T30S, R14W	SEC. 26, T32S, R15W	SEC. 22, T32S, R15W
OWNER	GREAT LAKES CARBON CORP.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	08/31/48	03/01/42	06/28/43
SAMPLED	11/04/48	04/01/42	04/13/44
FORMATION	ORDO-SIMPSON	ORDO-VIOLA	ORDO-VIOLA U
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4582	4926	4980
WELLHEAD PRESSURE,PSIG	1400	1600	1700
OPEN FLOW, MCFD	4000	14500	34000
COMPONENT, MOLE PCT			
METHANE	51.3	78.6	69.4
ETHANE	26.3	13.0	18.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.3	7.1	11.3
OXYGEN	0.4	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	1.55	0.76	0.71
HEATING VALUE*	991	1029	1029
SPECIFIC GRAVITY	0.766	0.648	0.691

	INDEX 1090 SAMPLE 4224	INDEX 1091 SAMPLE 12039	INDEX 1092 SAMPLE 12091
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEERHEAD	DEGEER	DEGEER NE
WELL NAME	HILDEBRAND NO. 9	CARR NO. 1	CARR NO. 1
LOCATION	SEC. 27, T32S, R15W	SEC. 36, T32S, R15W	SEC. 36, T32S, R15W
OWNER	CHAMPLIN REFINING CO.	BEACON RESOURCES CORP.	BEACON RESOURCES CORP.
COMPLETED	01/--/47	NOT GIVEN	12/03/69
SAMPLED	02/05/47	09/12/69	10/23/69
FORMATION	NOT GIVEN	PERM-FOHAKER	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	2999	4315
WELLHEAD PRESSURE,PSIG	380	1275	1400
OPEN FLOW, MCFD	2000	8	8
COMPONENT, MOLE PCT			
METHANE	75.8	91.8	92.0
ETHANE	9.6	3.7	3.6
PROPANE	---	1.5	1.4
N-BUTANE	---	0.4	0.4
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	8.4	1.6	1.7
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	6.5	0.0	TRACE
HELIUM	0.72	0.09	0.09
HEATING VALUE*	922	1083	1072
SPECIFIC GRAVITY	0.692	0.615	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1093 SAMPLE 13402	INDEX 1094 SAMPLE 6054	INDEX 1095 SAMPLE 15266
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEGEER W	DRIFTWOOD	EADS
WELL NAME	BRASS NO. 1	DONOVAN NO. A-1	AYRES NO. 1
LOCATION	SEC. 5, T33S, R15W	SEC. 1, T24S, R13W	SEC. 3, T30S, R14W
OWNER	CHAMPLIN PETROLEUM CO.	AYLWARD DRILLING CO.	MAURICE L. BROWN CO.
COMPLETED	01/14/71	01/11/56	07/15/77
SAMPLED	09/24/72	05/11/56	04/20/78
FORMATION	PENN-LANSING-KANSAS CITY	MISS-CHAT	PENN-TORONTO
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4362	4635	3831
WELLHEAD PRESSURE,PSIG	1521	1400	930
OPEN FLOW, MCFD	3500	5400	2097
COMPONENT, MOLE PCT			
METHANE	87.5	93.5	77.3
ETHANE	4.9	TRACE	4.7
PROPANE	2.1	0.1	2.5
N-BUTANE	0.7	0.1	0.9
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.5	5.5	12.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.17	0.36	0.44
HEATING VALUE*	1093	966	1012
SPECIFIC GRAVITY	0.644	0.583	0.692

	INDEX 1096 SAMPLE 12087	INDEX 1097 SAMPLE 9648	INDEX 1098 SAMPLE 9879
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	FORSYTH	GILBERT	HARDTNER N
WELL NAME	KIRKBRIDE NO. 4	GILBERT NO. 1	V. L. COOK A NO. 1
LOCATION	SEC. 20, T32S, R12W	SEC. 18, T32S, R11W	SEC. 8, T34S, R12W
OWNER	BARBARA OIL CO.	BEARDMORE DRILLING CO.	AMERADA PETROLEUM CORP.
COMPLETED	08/23/69	08/26/64	03/20/65
SAMPLED	10/13/69	11/25/64	04/26/65
FORMATION	MISS-	PENN-DOUGLAS	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4420	3568	4694
WELLHEAD PRESSURE,PSIG	1412	1250	1174
OPEN FLOW, MCFD	3550	800	2400
COMPONENT, MOLE PCT			
METHANE	78.7	86.1	81.4
ETHANE	6.5	4.1	3.5
PROPANE	3.8	1.4	1.3
N-BUTANE	0.9	0.4	0.4
ISOBUTANE	0.5	TRACE	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.9	7.2	12.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.28	0.23	0.08
HEATING VALUE*	1073	1013	9580
SPECIFIC GRAVITY	0.687	0.632	0.655

	INDEX 1099 SAMPLE 6085	INDEX 1100 SAMPLE 8002	INDEX 1101 SAMPLE 11293
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	ILS	ILS	KNACKSTEDT
WELL NAME	SMITH ESTATE NO. 1	WATKINS-NELSON NO. 1	KNACKSTEDT NO. 1
LOCATION	SEC. 9, T31S, R11W	SEC. 17, T31S, R11W	SEC. 18, T30S, R13W
OWNER	CARL TODD DRILLING	LARIO OIL & GAS CO.	SUNRAY DX OIL CO.
COMPLETED	02/25/56	06/09/61	03/01/67
SAMPLED	06/12/56	05/24/61	02/12/68
FORMATION	ORDO-SIMPSON	PENN-DOUGLAS	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4864	3757	4514
WELLHEAD PRESSURE,PSIG	1531	NOT GIVEN	1359
OPEN FLOW, MCFD	NOT GIVEN	8060	5139
COMPONENT, MOLE PCT			
METHANE	64.9	87.3	76.3
ETHANE	6.5	4.4	6.1
PROPANE	3.0	1.8	1.7
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.4	0.4	0.0
N-PENTANE	0.4	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	22.0	4.4	13.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.21	0.20	1.12
HEATING VALUE*	928	1070	947
SPECIFIC GRAVITY	0.738	0.639	0.666

	INDEX 1102 SAMPLE 4031	INDEX 1103 SAMPLE 11949	INDEX 1104 SAMPLE 14566
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	LAKE CITY	LITTLE SANDY CREEK	LITTLE SANDY CREEK
WELL NAME	D. V. HARGIS NO. 1	ANTRIM NO. 1	HARBAUGH NO. 1
LOCATION	SEC. 3, T31S, R14W	SEC. 30, T32S, R10W	SEC. 36, T32S, R10W
OWNER	STANOLIND OIL & GAS CO.	D. R. LAUCK OIL CO. INC.	OIL PROPERTY MANAGEMENT, INC
COMPLETED	08/30/44	NOT GIVEN	10/30/75
SAMPLED	10/15/45	NOT GIVEN	01/23/76
FORMATION	ORDO-MAQUOKETA	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4399	NOT GIVEN	4288
WELLHEAD PRESSURE,PSIG	1445	NOT GIVEN	1329
OPEN FLOW, MCFD	4000	NOT GIVEN	4599
COMPONENT, MOLE PCT			
METHANE	76.6	79.6	88.1
ETHANE	17.5	5.0	5.3
PROPANE	---	2.9	2.3
N-BUTANE	---	0.9	0.6
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	5.6	8.3	2.6
OXYGEN	0.1	1.6	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.4	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.01	0.11	0.11
HEATING VALUE*	1090	1047	1099
SPECIFIC GRAVITY	0.667	0.684	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1105 SAMPLE 10305	INDEX 1106 SAMPLE 10727	INDEX 1107 SAMPLE 12813
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MCGUIRE-GOEMANN	MEAIRS	MEAIRS
WELL NAME	RYSER-MCGUIRE NO. 1	MEAIRS NO. 1	HOAGLAND NO. 1
LOCATION	SEC. 24, T32S, R11W	SEC. 27, T30S, R12W	SEC. 36, T30S, R12W
OWNER	MOBIL OIL CORP.	CHIEF DRILLING CO., INC.	LEBEN OIL CORP.
COMPLETED	12/13/56	12/19/65	04/10/70
SAMPLED	12/03/65	09/20/66	05/04/71
FORMATION	MISS-	PENN-DOUGLAS	PENN-TARKIO
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4434	3656	3152
WELLHEAD PRESSURE,PSIG	423	1300	1200
OPEN FLOW, MCFD	214	1800	4100
COMPONENT, MOLE PCT			
METHANE	89.6	87.3	71.2
ETHANE	4.7	4.2	3.5
PROPANE	1.9	1.8	1.6
N-BUTANE	0.8	0.7	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	1.7	4.4	21.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.13	0.20	0.43
HEATING VALUE*	1115	1072	897
SPECIFIC GRAVITY	0.638	0.640	0.708

	INDEX 1108 SAMPLE 13841	INDEX 1109 SAMPLE 13842	INDEX 1110 SAMPLE 15388
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEAIRS	MEAIRS	MEANDER
WELL NAME	KUMBERG"B"NO.1	KUMBERG"A"NO.1	CLARK O NO. 1
LOCATION	SEC. 14, T30S, R12W	SEC. 15, T30S, R12W	SEC. 32, T31S, R12W
OWNER	GLEN N. RUPE	GLEN N. RUPE	TEXAS OIL & GAS CORP.
COMPLETED	12/22/73	06/19/73	08/11/77
SAMPLED	11/28/73	11/28/73	09/27/78
FORMATION	PENN--TARKIO	PENN-HOWARD	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3436	3146	4210
WELLHEAD PRESSURE,PSIG	1030	1120	1316
OPEN FLOW, MCFD	4177	3568	4694
COMPONENT, MOLE PCT			
METHANE	88.7	86.0	75.0
ETHANE	3.8	4.2	7.1
PROPANE	1.6	1.8	3.5
N-BUTANE	0.4	0.6	0.9
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.5	6.1	12.0
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.18	0.23	0.32
HEATING VALUE*	1050	1041	1048
SPECIFIC GRAVITY	0.625	0.641	0.705

	INDEX 1111 SAMPLE 7250	INDEX 1112 SAMPLE 1859	INDEX 1113 SAMPLE 5401
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE LODGE W	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS
WELL NAME	DAVIS RANCH UNIT NO. 1	ALEXANDER NO. 1	LONKER NO. 1
LOCATION	SEC. 32, T33S, R14W	SEC. 13, T33S, R13W	SEC. 1, T33S, R13W
OWNER	CHAMPLIN OIL & REFINING CO.	BARBARA OIL CO.	SKELLY OIL CO.
COMPLETED	04/29/59	NOT GIVEN	12/15/52
SAMPLED	10/24/59	09/04/29	02/24/53
FORMATION	MISS-	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4656	NOT GIVEN	3976
WELLHEAD PRESSURE,PSIG	1550	1600	1081
OPEN FLOW, MCFD	13810	NOT GIVEN	42460
COMPONENT, MOLE PCT			
METHANE	92.7	84.0	84.6
ETHANE	3.5	13.6	3.4
PROPANE	1.2	----	1.6
N-BUTANE	0.4	---	0.6
ISOBUTANE	0.2	---	0.3
N-PENTANE	TRACE	---	0.2
ISOPENTANE	0.3	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	1.2	2.0	9.4
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.10	0.01	0.23
HEATING VALUE*	1080	1098	1016
SPECIFIC GRAVITY	0.611	0.632	0.648

	INDEX 1114 SAMPLE 10490	INDEX 1115 SAMPLE 10491	INDEX 1116 SAMPLE 10492
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS
WELL NAME	ALEXANDER A NO. 1	NOT GIVEN	G. S. LONKER NO. 4
LOCATION	SEC. 7, T33S, R12W	SEC. 1, T33S, R13W	SEC. 36, T32S, R13W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	03/31/66	03/31/66	03/31/66
SAMPLED	03/31/66	03/31/66	03/31/66
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4554	4003	NOT GIVEN
WELLHEAD PRESSURE,PSIG	491	338	396
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.7	83.9	85.8
ETHANE	4.9	3.8	5.3
PROPANE	2.0	1.9	2.5
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	3.5	8.0	4.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.17	0.20	0.13
HEATING VALUE*	1088	1044	1097
SPECIFIC GRAVITY	0.640	0.662	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1117 SAMPLE 15530	INDEX 1118 SAMPLE 10720	INDEX 1119 SAMPLE 5805
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE RIVER	MILLS S	MOFFETT
WELL NAME	WHEELOCK NO. 2	F. SPICER GAS UNIT NO. 1	MOFFETT NO. 1
LOCATION	SEC. 3, T31S, R12W	SEC. 34, T30S, R12W	SEC. 9, T30S, R15W
OWNER	CHIEF DRILLING CO.	CONTINENTAL OIL CO.	MESSMAN-RINEHART OIL CO.
COMPLETED	02/01/78	06/10/66	01/25/55
SAMPLED	12/04/78	09/14/66	04/13/55
FORMATION	MISS-	PENN-DOUGLAS	PENN-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4302	3568	4571
WELLHEAD PRESSURE,PSIG	1341	1265	1381
OPEN FLOW, MCFD	6563	1250	12400
COMPONENT, MOLE PCT			
METHANE	76.0	88.6	62.8
ETHANE	6.9	4.2	4.8
PROPANE	3.9	1.7	3.1
N-BUTANE	1.1	0.5	0.9
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	10.7	4.2	25.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.31	0.20	1.38
HEATING VALUE*	1067	1067	876
SPECIFIC GRAVITY	0.704	0.630	0.744

	INDEX 1120 SAMPLE 5940	INDEX 1121 SAMPLE 9114	INDEX 1122 SAMPLE 9445
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	NOT GIVEN	NOT GIVEN	NURSE
WELL NAME	MCCULLOUGH NO. 1	HOLMES NO. 1	WINTER NO. 1
LOCATION	SEC. 30, T33S, R12W	SEC. 35, T33S, R13W	SEC. 7, T31S, R12W
OWNER	TRANS ERA PET. INC. ET AL.	CONTINENTAL OIL CO.	FRED B. ANSHUTZ
COMPLETED	06/17/55	NOT GIVEN	NOT GIVEN
SAMPLED	09/14/55	10/03/63	07/09/64
FORMATION	MISS-	MISS-	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4454	4511	3630
WELLHEAD PRESSURE,PSIG	1585	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4448	3120	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	89.9	87.5
ETHANE	5.9	4.6	4.1
PROPANE	2.6	1.8	1.4
N-BUTANE	0.8	0.7	0.6
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	9.2	2.0	5.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.23	0.10	0.20
HEATING VALUE*	1049	1097	1059
SPECIFIC GRAVITY	0.676	0.630	0.640

	INDEX 1123 SAMPLE 15067	INDEX 1124 SAMPLE 15544	INDEX 1125 SAMPLE 10422
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	NURSE	NURSE N	PALMER
WELL NAME	PACKARD NO. 1	OLSON NO. 1	DEGEER A NO. 2
LOCATION	SEC. 22, T31S, R13W	SEC. 32, T30S, R12W	SEC. 13, T32S, R14W
OWNER	OIL PROPERTY MANAGEMENT, INC	RAYMOND OIL CO., INC.	LIVINGSTON OIL CO.
COMPLETED	05/05/77	06/30/78	11/14/62
SAMPLED	08/02/77	12/23/78	03/01/66
FORMATION	PERM-INDIAN CAVE	PENN-TARKIO	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2628	2940	4470
WELLHEAD PRESSURE,PSIG	120	940	1034
OPEN FLOW, MCFD	4258	2000	4701
COMPONENT, MOLE PCT			
METHANE	77.6	84.9	90.7
ETHANE	3.7	3.8	4.3
PROPANE	1.2	1.6	1.6
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	16.1	8.0	1.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.44	0.26	0.13
HEATING VALUE*	910	1021	1087
SPECIFIC GRAVITY	0.662	0.650	0.623

	INDEX 1126 SAMPLE 10423	INDEX 1127 SAMPLE 10489	INDEX 1128 SAMPLE 13442
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	PALMER	PALMER	RHODES
WELL NAME	MILLS NO. 2	M. L. HOPKINS NO. 1	GROENDYKE NO. 1
LOCATION	SEC. 19, T32S, R13W	SEC. 28, T32S, R13W	SEC. 14, T33S, R12W
OWNER	LIVINGSTON OIL CO.	SKELLY OIL CO.	OKMAR OIL CO.
COMPLETED	NOT GIVEN	03/31/66	12/25/71
SAMPLED	03/01/66	03/31/66	09/30/72
FORMATION	MISS-	MISS-	PENN-ELGIN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4510	4446	3450
WELLHEAD PRESSURE,PSIG	297	1600	1300
OPEN FLOW, MCFD	881	NOT GIVEN	1900
COMPONENT, MOLE PCT			
METHANE	87.2	79.7	83.5
ETHANE	6.8	6.1	4.1
PROPANE	2.6	3.0	1.7
N-BUTANE	0.9	1.0	0.5
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.9	8.2	8.0
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.04	0.18	0.15
HEATING VALUE*	1161	1090	1017
SPECIFIC GRAVITY	0.660	0.694	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1129 SAMPLE 10324	INDEX 1130 SAMPLE 10331	INDEX 1131 SAMPLE 13441
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	RHODES N	RHODES S	RHODES SW
WELL NAME	EARLY B NO. 1	NEWKIRK B, NO. 1	HARBAUGH NO. 1
LOCATION	SEC. 4, T33, R11W	SEC. 31, T33S, R11W	SEC. 12, T33S, R12W
OWNER	SUPERIOR OIL CO.	GULF OIL CORP.	OKMAR OIL CO.
COMPLETED	02/02/65	10/26/57	12/31/71
SAMPLED	12/13/65	12/20/65	09/30/72
FORMATION	PENN-DOUGLAS	MISS-	PENN-ELGIN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3655	4561	3400
WELLHEAD PRESSURE,PSIG	580	543	1325
OPEN FLOW, MCFD	547	NOT GIVEN	2300
COMPONENT, MOLE PCT			
METHANE	84.8	87.2	88.6
ETHANE	5.1	5.7	4.4
PROPANE	2.3	2.7	1.9
N-BUTANE	0.8	1.0	0.6
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.9	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	5.7	1.7	3.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.21	0.05	0.15
HEATING VALUE*	1078	1154	1083
SPECIFIC GRAVITY	0.658	0.662	0.634

	INDEX 1132 SAMPLE 9835	INDEX 1133 SAMPLE 10407	INDEX 1134 SAMPLE 10303
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	SHARON	SHARON NE	SHARON NW
WELL NAME	KETZNER NO. 1	WENZEL	CORA SLINKER NO. 1
LOCATION	SEC. 1, T32S, R10W	SEC. 11, T32S, R10W	SEC. 11, T32S, R10W
OWNER	LARIO OIL & GAS CO.	E. K. EDMISTON	MOBIL OIL CORP.
COMPLETED	12/23/64	09/25/64	11/28/56
SAMPLED	04/06/65	02/17/66	12/03/65
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4370	4358	4334
WELLHEAD PRESSURE,PSIG	1292	1100	794
OPEN FLOW, MCFD	3400	3426	5253
COMPONENT, MOLE PCT			
METHANE	90.4	91.3	90.1
ETHANE	4.2	4.4	4.4
PROPANE	1.7	1.7	1.7
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.9	1.3	2.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.11	0.10
HEATING VALUE*	1096	1088	1094
SPECIFIC GRAVITY	0.628	0.618	0.629

	INDEX 1135 SAMPLE 3944	INDEX 1136 SAMPLE 4653	INDEX 1137 SAMPLE 10323
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	SKINNER	SKINNER N	STUMPH-SMITH
WELL NAME	LEMON NO. 1	GANT A NO. 4	STUMPH-SMITH F NO. 1
LOCATION	SEC. 28, T30S, R13W	SEC. 32, T30S, R13W	SEC. 18, T32, R14W
OWNER	LION OIL CO.	J. M. HURER CORP.	NATIONAL COOP REFINERY ASSN.
COMPLETED	01/--/45	NOT GIVEN	12/13/65
SAMPLED	01/26/45	05/23/49	12/13/65
FORMATION	ORDO-VIOLA	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4528	3310	4741
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	189
OPEN FLOW, MCFD	18	NOT GIVEN	110
COMPONENT, MOLE PCT			
METHANE	80.8	59.6	90.0
ETHANE	12.7	17.4	4.1
PROPANE	---	---	1.5
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	5.6	19.9	2.5
OXYGEN	0.1	2.6	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.68	0.31	0.15
HEATING VALUE*	1046	816	1091
SPECIFIC GRAVITY	0.639	0.738	0.631

	INDEX 1138 SAMPLE 5867	INDEX 1139 SAMPLE 11355	INDEX 1140 SAMPLE 15022
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	TRAFFAS	TRAFFAS	WHELAN SE
WELL NAME	G. M. TRAFFAS NO. 1	NEWTON-TUCKER NO. 1	WHEELOCK NO. 1
LOCATION	SEC. 6, T33S, R10W	SEC. 8, T33S, R10W	SEC. 33, T31S, R12W
OWNER	MAGNOLIA PETROLEUM CO.	GRAYBOL OIL CORP.	CHIEF DRILLING CO., INC.
COMPLETED	03/31/55	08/29/67	11/09/76
SAMPLED	06/27/55	02/28/68	06/08/77
FORMATION	MISS-CHAT	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4581	4604	4260
WELLHEAD PRESSURE,PSIG	1516	1548	1320
OPEN FLOW, MCFD	1262	21000	925
COMPONENT, MOLE PCT			
METHANE	90.4	89.8	76.5
ETHANE	4.2	4.7	6.8
PROPANE	1.8	1.9	3.5
N-BUTANE	0.6	0.8	1.0
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.9	1.5	10.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.10	0.32
HEATING VALUE*	1100	1113	1062
SPECIFIC GRAVITY	0.631	0.635	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1141 SAMPLE 5924	INDEX 1142 SAMPLE 9459	INDEX 1143 SAMPLE 13077
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOEMANN NO. 1	GRESS NO. 1	IVES NO. 1
LOCATION	SEC. 29, T32S, R10W	SEC. 8, T31S, R12W	SEC. 11, T33S, R12W
OWNER	GLOBE OIL & REFINING CO.	COLORADO OIL & GAS CORP.	OKMAR OIL CO.
COMPLETED	05/03/55	NOT GIVEN	08/09/71
SAMPLED	08/29/55	07/08/64	10/--/71
FORMATION	MISS-CHERT	PENN-DOUGLAS	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4404	3699	4375
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	1505
OPEN FLOW, MCFD	681	NOT GIVEN	17250
COMPONENT, MOLE PCT			
METHANE	89.4	88.0	88.3
ETHANE	4.4	3.9	4.8
PROPANE	2.0	1.6	2.4
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	1.9	4.4	2.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.10	0.18	0.18
HEATING VALUE*	1114	1065	1110
SPECIFIC GRAVITY	0.640	0.637	0.639

	INDEX 1144 SAMPLE 4498	INDEX 1145 SAMPLE 5254	INDEX 1146 SAMPLE 5623
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	ADOLF	ALEFS	ALEFS
WELL NAME	ADOLPH NO. 1	ALEFS NO. 2	BRACK-ALEFS NO. 2
LOCATION	SEC. 16, T20S, R15W	SEC. 14, T19S, R14W	SEC. 14, T19S, R14W
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	BRACK DRILLING CO.	BRACK DRLG. CO.
COMPLETED	04/20/47	06/28/52	08/28/52
SAMPLED	06/--/48	06/28/52	06/28/52
FORMATION	CAMO-ARBUCKLE	PENN-KANSAS CITY	-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3734	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1050	1005	1005
OPEN FLOW, MCFD	7000	3633	3633
COMPONENT, MOLE PCT			
METHANE	69.0	49.5	49.9
ETHANE	12.4	5.5	6.1
PROPANE	---	2.5	3.0
N-BUTANE	---	0.9	1.1
ISOBUTANE	---	0.6	0.8
N-PENTANE	---	0.4	0.5
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	15.9	35.8	34.1
OXYGEN	0.1	0.1	TRACE
ARGON	---	0.2	0.2
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	2.17	3.82	3.55
HEATING VALUE*	921	746	797
SPECIFIC GRAVITY	0.677	0.782	0.791

	INDEX 1147 SAMPLE 7842	INDEX 1148 SAMPLE 4078	INDEX 1149 SAMPLE 4079
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	AMES SE	BEHRENS	BEHRENS
WELL NAME	FIEST NO. C-1	BEHRENS NO. 2	BEHRENS NO. 1
LOCATION	SEC. 35, T18S, R11W	SEC. 6, T20S, R15W	SEC. 6, T20S, R15W
OWNER	RAYMOND OIL CO.	SOLAR OIL CO.	SOLAR OIL CO.
COMPLETED	02/16/61	NOT GIVEN	NOT GIVEN
SAMPLED	01/07/61	09/21/45	09/21/45
FORMATION	PENN-	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3022	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1145	800	50
OPEN FLOW, MCFD	734	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.5	75.6	68.8
ETHANE	5.8	15.2	26.8
PROPANE	3.8	---	---
N-BUTANE	1.4	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	20.5	8.0	3.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	1.00	0.87	0.58
HEATING VALUE*	973	1038	1119
SPECIFIC GRAVITY	0.752	0.662	0.703

	INDEX 1150 SAMPLE 5357	INDEX 1151 SAMPLE 4494	INDEX 1152 SAMPLE 9214
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	BEHRENS	BERGTAL	CHAFFEE
WELL NAME	GEIL NO. 1	HATTIE UNRUH NO. 1	RUSSELL NO. 1
LOCATION	SEC. 29, T19S, R15W	SEC. 22, T20S, R15W	SEC. 36, T19S, R14W
OWNER	WARD & INGLING	KANSAS-NEBRASKA NAT. GAS CO.	VAUGHAN DRILLING, INC.
COMPLETED	NOT GIVEN	07/27/47	01/16/64
SAMPLED	12/09/52	06/--/48	01/16/64
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3580	3672	3480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1050	1082
OPEN FLOW, MCFD	NOT GIVEN	8700	3310
COMPONENT, MOLE PCT			
METHANE	83.9	79.3	77.0
ETHANE	3.7	10.9	4.6
PROPANE	1.7	---	1.8
N-BUTANE	0.6	---	0.8
ISOBUTANE	0.3	---	0.1
N-PENTANE	0.3	---	0.3
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	7.7	8.1	12.7
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	1.09	1.21	1.70
HEATING VALUE*	1018	999	980
SPECIFIC GRAVITY	0.650	0.641	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1153 SAMPLE 8606	INDEX 1154 SAMPLE 8668	INDEX 1155 SAMPLE 8898
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	CHASE-SILICA	CHASE-SILICA	CLARENCE S
WELL NAME	ISERN NO. 1	ISERN NO. 2	KLIEWER NO. 1
LOCATION	SEC. 26, T19S, R11W	SEC. 26, T19S, R11W	SEC. 1, T20S, R15W
OWNER	TROJAN OIL & GAS CO.	TROJAN OIL & GAS CO.	WOODYS QUALITY OIL CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	NOT GIVEN
SAMPLED	06/16/62	08/23/62	03/--/63
FORMATION	PENN-LANSING-KANSAS CITY	PENN-KANSAS CITY	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3024	3044	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1050	430	NOT GIVEN
OPEN FLOW, MCFD	800	517	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.1	68.1	58.9
ETHANE	5.2	7.5	6.1
PROPANE	3.2	5.0	2.3
N-BUTANE	1.1	1.9	0.8
ISOBUTANE	0.6	0.9	0.4
N-PENTANE	0.2	0.4	0.1
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	22.9	14.7	27.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.97	0.75	3.15
HEATING VALUE*	919	1098	828
SPECIFIC GRAVITY	0.742	0.768	0.738

	INDEX 1156 SAMPLE 5546	INDEX 1157 SAMPLE 10359	INDEX 1158 SAMPLE 10360
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	CONVERSE	CONVERSE	CONVERSE
WELL NAME	CONVERSE NO. 1	SCHMIDT	SCHMIDT B, NO. 1
LOCATION	SEC. 20, T20S, R15W	SEC. 20, T20, R15	SEC. 17, T20, R15
OWNER	SUNRAY OIL CORP.	ROCK ISLAND O. & R. CO., INC	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	12/01/65
SAMPLED	08/10/53	01/10/66	01/07/66
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3754
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1105	1078
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6160
COMPONENT, MOLE PCT			
METHANE	85.6	81.8	82.9
ETHANE	4.0	4.1	3.9
PROPANE	1.5	1.6	1.5
N-BUTANE	0.4	0.7	0.5
ISOBUTANE	0.3	TRACE	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	6.5	9.1	8.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.84	1.42	1.18
HEATING VALUE*	1020	1004	998
SPECIFIC GRAVITY	0.635	0.655	0.647

	INDEX 1159 SAMPLE 4152	INDEX 1160 SAMPLE 5285	INDEX 1161 SAMPLE 5552
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	DUNDEE	DUNDEE	DUNDEE
WELL NAME	CHRISTIANSON NO. 1	J. J. SMITH NO. 1	RADENBERG NO. 4
LOCATION	SEC. 29, T20S, R14W	SEC. 20, T20S, R14W	SEC. 24, T20S, R15W
OWNER	CHAMPLIN REFINING CO.	ADAIR OIL CO.	MAGNOLIA PETROLEUM CO.
COMPLETED	05/09/45	09/29/52	NOT GIVEN
SAMPLED	10/14/46	09/30/52	09/09/53
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3606	3580	3574
WELLHEAD PRESSURE,PSIG	1040	990	1200
OPEN FLOW, MCFD	8236	650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.3	81.3	82.0
ETHANE	10.8	4.1	4.0
PROPANE	---	1.5	1.7
N-BUTANE	---	0.2	0.5
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	10.0	10.6	9.5
OXYGEN	0.1	TRACE	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	1.49	1.40	1.27
HEATING VALUE*	977	963	997
SPECIFIC GRAVITY	0.686	0.644	0.650

	INDEX 1162 SAMPLE 7684	INDEX 1163 SAMPLE 8256	INDEX 1164 SAMPLE 5207
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	ELLINWOOD S	FORT ZARAH	GREAT BEND AIRPORT
WELL NAME	KOWALSKY NO. 7	WOOD NO. 1	P. ESSMILLER NO. 3
LOCATION	SEC. 18, T20S, R11W	SEC. 25, T19S, R13W	SEC. 26, T19S, R14W
OWNER	COOPERATIVE REFINERY ASSN.	NADEL & GUSSMAN OIL CO.	HONAKER DRILLING CO.
COMPLETED	10/06/41	NOT GIVEN	NOT GIVEN
SAMPLED	09/15/60	10/22/61	05/23/52
FORMATION	PENN-TARKIO	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2415	3403	NOT GIVEN
WELLHEAD PRESSURE,PSIG	850	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3	300
COMPONENT, MOLE PCT			
METHANE	74.9	41.3	53.6
ETHANE	2.8	4.5	5.4
PROPANE	1.2	1.4	3.0
N-BUTANE	0.4	0.5	0.8
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.9	47.0	32.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.90	4.07	3.06
HEATING VALUE*	673	597	788
SPECIFIC GRAVITY	0.671	0.850	0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1165 SAMPLE 10768		INDEX 1166 SAMPLE 7619		INDEX 1167 SAMPLE 7678	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	GREAT BEND AIRPORT		GREAT BEND TOWNSITE		GREAT BEND TOWNSITE	
WELL NAME	RUSSELL A NO. 9		WALLACE NO. 1		WALLACE NO. 1	
LOCATION	SEC. 26, T19S, R14W		SEC. 19, T19, R13W		SEC. 19, T19S, R13W	
OWNER	PETROLEUM MANAGEMENT, INC.		HONAKER-DAVIS DRILLING CO.		GRARIDGE CORP.	
COMPLETED	NOT GIVEN		NOT GIVEN		02/16/56	
SAMPLED	11/07/66		07/22/60		08/24/60	
FORMATION	PENN-WABAUNSEE		PENN-LANSING		PENN-LANSING-KANSAS CITY	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	2246		3250		3250	
WELLHEAD PRESSURE,PSIG	700		900		840	
OPEN FLOW, MCFD	10900		2000		2000	
COMPONENT, MOLE PCT						
METHANE	72.9		57.9		61.2	
ETHANE	1.8		2.4		2.4	
PROPANE	0.7		3.2		2.2	
N-BUTANE	0.2		1.2		1.0	
ISOBUTANE	0.0		0.2		0.6	
N-PENTANE	0.0		0.2		0.2	
ISOPENTANE	0.0		0.2		0.3	
CYCLOPENTANE	0.0		0.1		TRACE	
HEXANES PLUS	0.0		0.1		0.1	
NITROGEN	23.3		29.5		30.2	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		3.5		0.3	
HELIUM	0.94		1.30		1.60	
HEATING VALUE*	796		786		801	
SPECIFIC GRAVITY	0.668		0.781		0.746	

	INDEX 1168 SAMPLE 5255		INDEX 1169 SAMPLE 5265		INDEX 1170 SAMPLE 5550	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	GREAT BEND W		GREAT BEND W		GREAT BEND W	
WELL NAME	ESSMILLER NO. 4		SUTTON NO. 1		RUSSELL NO. A-9	
LOCATION	SEC. 26, T19S, R14W		SEC. 15, T19S, R14W		SEC. 26, T19S, R14W	
OWNER	HONAKER DRILLING CO.		MARMAD OIL CO.		HELMERICH & PAYNE, INC.	
COMPLETED	06/26/52		03/25/52		08/31/53	
SAMPLED	06/28/52		07/03/52		09/01/53	
FORMATION	PENN-KANSAS CITY		PENN-KANSAS CITY		CAMO-ARBUCKLE	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	3203		3200		3457	
WELLHEAD PRESSURE,PSIG	950		200		977	
OPEN FLOW, MCFD	900		531		4730	
COMPONENT, MOLE PCT						
METHANE	62.1		64.6		69.1	
ETHANE	2.4		4.1		4.9	
PROPANE	1.5		1.4		2.4	
N-BUTANE	0.7		0.4		0.7	
ISOBUTANE	0.2		0.2		0.4	
N-PENTANE	0.2		0.0		0.3	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.1		TRACE		0.2	
NITROGEN	30.5		25.4		19.0	
OXYGEN	0.1		TRACE		0.1	
ARGON	0.1		0.2		0.1	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.4		0.1		0.3	
HELIUM	1.53		3.31		2.43	
HEATING VALUE*	763		797		914	
SPECIFIC GRAVITY	0.730		0.697		0.705	

	INDEX 1171 SAMPLE 5551		INDEX 1172 SAMPLE 5208		INDEX 1173 SAMPLE 5408	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	GREATBEND TOWNSITE		HEIZER SW		HEIZER SW	
WELL NAME	WILDCAT NO. 1		WITTE NO. 1		MILLER NO. 1	
LOCATION	SEC. 21, T19S, R13W		SEC. 21, T19S, R14W		SEC. 21, T19S, R14W	
OWNER	HONAKER DRILLING CO.		HONAKER DRILLING CO.		HONAKER DRILLING CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	08/31/53		06/01/52		03/05/53	
FORMATION	CAMO-ARBUCKLE		-CONGLOMERATE		CAMO-ARBUCKLE	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	3429		3513		3511	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1050		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		2400		2554	
COMPONENT, MOLE PCT						
METHANE	46.1		72.8		52.3	
ETHANE	9.0		4.5		4.4	
PROPANE	8.0		2.1		1.2	
N-BUTANE	3.8		0.7		0.3	
ISOBUTANE	3.1		0.2		0.5	
N-PENTANE	1.2		0.2		0.1	
ISOPENTANE	1.1		0.2		TRACE	
CYCLOPENTANE	0.2		TRACE		TRACE	
HEXANES PLUS	1.0		0.2		0.2	
NITROGEN	24.0		16.7		36.4	
OXYGEN	0.3		0.1		TRACE	
ARGON	0.1		0.1		0.2	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.4		0.1		0.2	
HELIUM	1.65		2.11		4.22	
HEATING VALUE*	1226		930		681	
SPECIFIC GRAVITY	0.955		0.687		0.744	

	INDEX 1174 SAMPLE 10614		INDEX 1175 SAMPLE 3212		INDEX 1176 SAMPLE 8277	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	HEIZER SW		KRUCKENBERG		MERTEN SE	
WELL NAME	HALL NO. 2		MERTON NO. 1		SUCHY NO. 1	
LOCATION	SEC. 28, T19, R14		SEC. 11, T19S, R15W		SEC. 27, T19S, R15W	
OWNER	CLARENCE MERMIS		SCHERMERHORN OIL CORP.		WESTERN PETROLEUM CO., INC.	
COMPLETED	NOT GIVEN		04/--/41		NOT GIVEN	
SAMPLED	06/16/66		03/27/42		11/16/61	
FORMATION	PENN-LANSING-KANSAS CITY		CAMB-REAGAN		PENN-KANSAS CITY	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	2304		3535		3162	
WELLHEAD PRESSURE,PSIG	1000		1027		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		8250		1500	
COMPONENT, MOLE PCT						
METHANE	51.0		78.2		61.9	
ETHANE	1.3		11.9		2.4	
PROPANE	1.3		---		2.0	
N-BUTANE	0.8		---		0.9	
ISOBUTANE	0.3		---		0.5	
N-PENTANE	0.2		---		0.1	
ISOPENTANE	0.3		---		0.2	
CYCLOPENTANE	TRACE		---		TRACE	
HEXANES PLUS	0.2		---		0.1	
NITROGEN	42.9		8.2		30.2	
OXYGEN	0.0		0.3		TRACE	
ARGON	0.1		---		0.1	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		TRACE	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	1.45		1.20		1.25	
HEATING VALUE*	642		1005		782	
SPECIFIC GRAVITY	0.779		0.646		0.737	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1177 SAMPLE 2701		INDEX 1178 SAMPLE 3650		INDEX 1179 SAMPLE 4342	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	NOT GIVEN		AMES NO. 1		A. UNRUH NO. 1	
LOCATION	SEC. 18, T19S, R11W		SEC. 22, T18S, R11W		SEC. 16, T20S, R15W	
OWNER	DOWNING ET AL.		EDOUARD JONAS		KANSAS-NEBRASKA NAT. GAS CO.	
COMPLETED	NOT GIVEN		06/30/43		05/10/47	
SAMPLED	NOT GIVEN		07/26/43		08/07/47	
FORMATION	NOT GIVEN		PENN-LANSING-KANSAS CITY		CAMO-ARBUCKLE	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	3052		3042		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	975		400		1150	
OPEN FLOW, MCFD	7500		NOT GIVEN		5000	
COMPONENT, MOLE PCT						
METHANE	60.6		51.3		69.8	
ETHANE	18.0		33.1		11.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	20.1		14.8		16.3	
OXYGEN	0.3		0.6		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.0		0.0		0.4	
HELIUM	0.95		0.19		2.22	
HEATING VALUE*	936		1113		904	
SPECIFIC GRAVITY	0.724		0.782		0.673	

	INDEX 1180 SAMPLE 7799		INDEX 1181 SAMPLE 8909		INDEX 1182 SAMPLE 2960	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	NOT GIVEN		NOT GIVEN		OTIS	
WELL NAME	INJECTOR NO. 2		UNRUH		DIRKS NO. 1	
LOCATION	SEC. 20, T8, R15W		NOT GIVEN		SEC. 18, T18S, R15W	
OWNER	KANSAS-NEBRASKA NAT. GAS CO.		PAWNEE SALT CO. ET AL.		HANNUM DRILLING CO.	
COMPLETED	NOT GIVEN		--/--/61		04/26/40	
SAMPLED	12/08/60		03/28/63		11/07/41	
FORMATION	NOT GIVEN		PERM-WICHITA-ALBANY		CAMB-REAGAN	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	NOT GIVEN		3800		3478	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1000		700	
OPEN FLOW, MCFD	NOT GIVEN		3000		48000	
COMPONENT, MOLE PCT						
METHANE	66.7		85.8		73.9	
ETHANE	4.1		3.8		13.2	
PROPANE	1.6		1.5		---	
N-BUTANE	0.6		0.7		---	
ISOBUTANE	0.4		0.2		---	
N-PENTANE	0.2		0.1		---	
ISOPENTANE	0.1		0.3		---	
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.1		0.2		---	
NITROGEN	23.0		6.1		11.0	
OXYGEN	0.0		0.0		0.2	
ARGON	0.1		TRACE		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		0.5		0.2	
HELIUM	2.80		0.79		1.48	
HEATING VALUE*	838		1038		985	
SPECIFIC GRAVITY	0.704		0.644		0.662	

	INDEX 1183 SAMPLE 2978		INDEX 1184 SAMPLE 3022		INDEX 1185 SAMPLE 3218	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	OTIS		OTIS		OTIS	
WELL NAME	FERDINAND BRACK NO. 1		HUNTER		HABERMAN NO. 1	
LOCATION	SEC. 21, T18S, R15W		SEC. 33, T18S, R15W		SEC. 8, T18S, R15W	
OWNER	STANOLIND OIL CO.		KENWOOD OIL CO.		HANNUM DRILLING CO.	
COMPLETED	12/0A/36		NOT GIVEN		03/03/41	
SAMPLED	11/05/41		NOT GIVEN		03/27/42	
FORMATION	CAMB-REAGAN		NOT GIVEN		CAMB-REAGAN	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	3456		NOT GIVEN		3500	
WELLHEAD PRESSURE,PSIG	925		NOT GIVEN		629	
OPEN FLOW, MCFD	18400		NOT GIVEN		14700	
COMPONENT, MOLE PCT						
METHANE	76.7		78.2		66.8	
ETHANE	13.7		12.3		11.6	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	7.9		8.0		19.1	
OXYGEN	0.2		0.1		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.2		0.3	
HELIUM	1.17		1.15		1.90	
HEATING VALUE*	1092		1013		885	
SPECIFIC GRAVITY	0.654		0.646		0.687	

	INDEX 1186 SAMPLE 6355		INDEX 1187 SAMPLE 3096		INDEX 1188 SAMPLE 3214	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	BARTON		BARTON		BARTON	
FIELD	OTIS		PAWNEE ROCK		PAWNEE ROCK	
WELL NAME	FIRE NO. 1		BOWTER NO. 1		J. J. SCHMIDT NO. 1	
LOCATION	SEC. 28, T18S, R15W		SEC. 12, T20S, R16W		SEC. 22, T20S, R15W	
OWNER	SKELLY OIL CO.		AMERADA PETROLEUM CORP.		HELMERICH & PAYNE, INC.	
COMPLETED	06/--/57		07/21/41		10/01/41	
SAMPLED	08/09/57		02/27/42		03/26/42	
FORMATION	PENN-KANSAS CITY		CAMO-ARBUCKLE		CAMO-ARBUCKLE	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	3193		3757		3669	
WELLHEAD PRESSURE,PSIG	1257		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	3400		NOT GIVEN		1585	
COMPONENT, MOLE PCT						
METHANE	61.8		77.0		80.0	
ETHANE	3.0		16.3		9.6	
PROPANE	1.1		---		---	
N-BUTANE	0.2		---		---	
ISOBUTANE	0.3		---		---	
N-PENTANE	0.0		---		---	
ISOPENTANE	TRACE		---		---	
CYCLOPENTANE	0.0		---		---	
HEXANES PLUS	TRACE		---		---	
NITROGEN	31.0		5.0		8.6	
OXYGEN	TRACE		0.8		0.4	
ARGON	0.1		---		---	
HYDROGEN	TRACE		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.1		0.4		0.2	
HELIUM	2.31		0.85		1.23	
HEATING VALUE*	725		1072		982	
SPECIFIC GRAVITY	0.707		0.658		0.637	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1189 SAMPLE 3440	INDEX 1190 SAMPLE 5516	INDEX 1191 SAMPLE 3103
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK E
WELL NAME	O. PECKERT NO. 1	JURGENSON NO. 1	SW 45 4 56 1
LOCATION	SEC. 18, T20S, R15W	SEC. 27, T19S, R15W	SEC. 17, T20S, R15W
OWNER	TRANSWESTERN OIL CO.	SCHERMERHORN OIL CORP.	HELMERICH & PAYNE, INC.
COMPLETED	04/01/42	06/20/53	10/14/41
SAMPLED	05/28/42	07/16/53	02/26/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3790	3600	3802
WELLHEAD PRESSURE,PSIG	1100	500	NOT GIVEN
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.6	82.5	68.2
ETHANE	8.3	4.8	18.5
PROPANE	---	2.1	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.3	---
NITROGEN	6.1	7.0	10.9
OXYGEN	0.4	TRACE	0.5
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.4	0.5
HELIUM	1.10	0.92	1.35
HEATING VALUE*	996	1057	1022
SPECIFIC GRAVITY	0.623	0.665	0.693

	INDEX 1192 SAMPLE 3112	INDEX 1193 SAMPLE 3233	INDEX 1194 SAMPLE 3234
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE ROCK E	PRUSA	RICK
WELL NAME	J. B. SMITH NO. 1	OSER NO. 1	RADER NO. 2
LOCATION	SEC. 17, T20S, R15W	SEC. 17, T16S, R11W	SEC. 11, T19S, R11W
OWNER	HELMERICH & PAYNE, INC.	SINCLAIR PRAIRIE OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	02/21/39	NOT GIVEN
SAMPLED	02/26/42	03/24/42	03/25/42
FORMATION	CAMO-ARBUCKLE	PENN-LANSING-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3799	2970	3107
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	1060
OPEN FLOW, MCFD	NOT GIVEN	11600	1863
COMPONENT, MOLE PCT			
METHANE	85.8	54.7	58.7
ETHANE	3.4	11.0	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.6	32.6	20.8
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	1.51	1.32	0.93
HEATING VALUE*	930	751	935
SPECIFIC GRAVITY	0.606	0.741	0.735

	INDEX 1195 SAMPLE 8268	INDEX 1196 SAMPLE 4072	INDEX 1197 SAMPLE 4495
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	SHAEFER-ROTHGARN	UNRUH	UNRUH
WELL NAME	ENGLEMAN NO. 1	UNRUH NO. 1	MOORE
LOCATION	SEC. 27, T20S, R13W	SEC. 24, T20S, R15W	SEC. 18, T20S, R14W
OWNER	ALPINE OIL & ROYALTY CO.,INC	HARBER DRILLING CO.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	09/20/61	NOT GIVEN	09/25/47
SAMPLED	11/02/61	09/21/45	--/--/48
FORMATION	PENN-KANSAS CITY	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3257	NOT GIVEN	3561
WELLHEAD PRESSURE,PSIG	1040	1090	1050
OPEN FLOW, MCFD	2400	NOT GIVEN	24200
COMPONENT, MOLE PCT			
METHANE	71.2	75.3	79.5
ETHANE	2.6	14.4	9.8
PROPANE	1.4	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	22.3	8.9	8.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	1.04	1.26	1.34
HEATING VALUE*	852	1021	981
SPECIFIC GRAVITY	0.691	0.658	0.639

	INDEX 1198 SAMPLE 4496	INDEX 1199 SAMPLE 6164	INDEX 1200 SAMPLE 3194
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BOURBON
FIELD	UNRUH	WORKMAN NW	REDFIELD
WELL NAME	LILLIAN STROBEL NO. 1	OPAL LANTERMAN	SCHLEGAL NO. 1
LOCATION	SEC. 14, T20S, R15W	SEC. 16, T20S, R12W	SEC. 9, T24S, R23E
OWNER	SINCLAIR PRAIRIE OIL CO.	SKELLY OIL CO.	RAYMOND MOWERY
COMPLETED	12/29/47	NOT GIVEN	--/--/36
SAMPLED	06/--/48	10/16/56	03/25/42
FORMATION	ORDO-	PENN-KANSAS CITY	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	385	385	365
DEPTH, FEET	3596	3153	400
WELLHEAD PRESSURE,PSIG	1021	1060	100
OPEN FLOW, MCFD	40500	500	1000
COMPONENT, MOLE PCT			
METHANE	79.4	66.3	98.4
ETHANE	10.7	2.9	0.0
PROPANE	---	2.1	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	8.2	25.3	0.7
OXYGEN	0.1	TRACE	0.5
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	1.28	0.99	0.06
HEATING VALUE*	996	855	997
SPECIFIC GRAVITY	0.639	0.726	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1201 SAMPLE 137	INDEX 1202 SAMPLE 138	INDEX 1203 SAMPLE 147
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	BUTLER
FIELD	AUGUSTA	AUGUSTA	EL DORADO
WELL NAME	SCULLY NO. 1	PENLEY NO. 1	ENGART NO. 11
LOCATION	SEC. 21, T27S, R4E	SEC. 21, T27S, R4E	SEC. 12, T26S, R4E
OWNER	EMPIRE GAS & FUEL CO.	SINCLAIR OIL & GAS CO.	EMPIRE GAS & FUEL CO.
COMPLETED	05/--/15	09/--/15	03/--/18
SAMPLED	03/10/20	03/01/20	03/15/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1451	1380	1190
WELLHEAD PRESSURE,PSIG	94	65	250
OPEN FLOW, MCFD	550	480	210
COMPONENT, MOLE PCT			
METHANE	70.3	69.9	69.2
ETHANE	2.2	2.7	4.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	25.8	25.4	24.4
OXYGEN	0.7	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.97	1.20	1.01
HEATING VALUE*	752	756	773
SPECIFIC GRAVITY	0.671	0.671	0.666

	INDEX 1204 SAMPLE 149	INDEX 1205 SAMPLE 150	INDEX 1206 SAMPLE 152
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	BUTLER
FIELD	EL DORADO	EL DORADO	EL DORADO
WELL NAME	MANNING NO. 4	RALSTON NO. 11	GUSSMAN NO. 1
LOCATION	SEC. 5, T26S, R5E	SEC. 1, T26S, R4E	SEC. 17, T27S, R 7E
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	NOT GIVEN	05/--/18	09/--/16
SAMPLED	03/12/20	03/15/20	03/15/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1141	1254	892
WELLHEAD PRESSURE,PSIG	196	260	55
OPEN FLOW, MCFD	380000	260	110
COMPONENT, MOLE PCT			
METHANE	72.2	71.6	65.9
ETHANE	1.4	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	24.3	27.1	31.3
OXYGEN	0.8	0.0	1.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	1.16	1.25	1.49
HEATING VALUE*	756	725	668
SPECIFIC GRAVITY	0.660	0.661	0.685

	INDEX 1207 SAMPLE 4369	INDEX 1208 SAMPLE 922	INDEX 1209 SAMPLE 3816
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	BUTLER
FIELD	FOX ARUSH	KNOX FARM	POTWIN
WELL NAME	WOMACK NO. 1	NO. 1	BRAINERD NO. B-1
LOCATION	SEC. 19, T28S, R6E	SEC. 17, T27, R7	SEC. 3, T25S, R3E
OWNER	J. M. HUBER CORP.	TIDAL OIL CO.	VICKERS PETROLEUM CO.
COMPLETED	02/--/47	NOT GIVEN	03/29/44
SAMPLED	10/27/47	09/14/24	02/23/44
FORMATION	PENN-BARTLESVILLE	-DARK BROWN CLOSE SAND	PERM-FORT RILEY
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	2697	2582	830
WELLHEAD PRESSURE,PSIG	500	850	NOT GIVEN
OPEN FLOW, MCFD	2000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.9	71.5	18.7
ETHANE	72.1	12.7	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.7	12.7	76.0
OXYGEN	0.2	1.9	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.9	0.4
HELIUM	0.72	0.45	2.64
HEATING VALUE*	1362	952	223
SPECIFIC GRAVITY	0.995	0.688	0.673

	INDEX 1210 SAMPLE 2536	INDEX 1211 SAMPLE 3242	INDEX 1212 SAMPLE 3245
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	CHASE	CHASE
FIELD	FLORENCE	FLORENCE	FLORENCE
WELL NAME	STEPHENSON NO. 1	MILLER NO. 6	STEPHENSON NO. 2
LOCATION	SEC. 27, T19S, R6E	SEC. 21, T19S, R6E	SEC. 27, T19S, R6E
OWNER	K.P.&T. GAS CO.	CHASE COUNTY PIPE LINE CO.	K.P.&T. GAS CO.
COMPLETED	02/--/32	12/--/34	04/--/39
SAMPLED	08/18/32	04/01/42	04/01/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	923	514	475
WELLHEAD PRESSURE,PSIG	155	90	80
OPEN FLOW, MCFD	600	195	750
COMPONENT, MOLE PCT			
METHANE	63.3	72.2	59.2
ETHANE	4.8	6.6	4.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	29.7	19.7	34.2
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.2	0.1
HELIUM	1.19	0.99	1.33
HEATING VALUE*	727	850	688
SPECIFIC GRAVITY	0.704	0.668	0.717

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1213 SAMPLE 2640	INDEX 1214 SAMPLE 3246	INDEX 1215 SAMPLE 3247
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	CHASE	CHASE
FIELD	LIPPS	NEVA	NEVA
WELL NAME	MORRIS NO. 1	DOOLITTLE NO. 1	DRUMMOND NO. 6
LOCATION	SEC. 32, T18S, R7E	SEC. 14, T19S, R7E	SEC. 14, T19S, R7E
OWNER	K.R.&T. GAS CO.	COTTONWOOD FALLS GAS CO.	COTTONWOOD FALLS GAS CO.
COMPLETED	09/--/32	NOT GIVEN	NOT GIVEN
SAMPLED	09/05/33	04/01/42	04/01/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	455	107	454
WELLHEAD PRESSURE, PSIG	40	NOT GIVEN	25
OPEN FLOW, MCFD	250	1000	70
COMPONENT, MOLE PCT			
METHANE	45.5	63.0	72.2
ETHANE	10.7	17.0	6.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	42.1	18.9	20.0
OXYGEN	0.3	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	1.03	0.55	0.60
HEATING VALUE*	653	943	850
SPECIFIC GRAVITY	0.783	0.718	0.672

	INDEX 1216 SAMPLE 978	INDEX 1217 SAMPLE 7793	INDEX 1218 SAMPLE 11763
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	CHAUTAUQUA	COACH LINES	ELGIN E
WELL NAME	NO. A0	MK&O COACHLINES NO. 2	ALLEN NO. 1
LOCATION	SEC. 16, T34S, R11E	SEC. 10, T32S, R8E	SEC. 7, T35S, R11E
OWNER	DENMAN BROS.	PURE OIL CO.	WYATT PETROLEUM CORP.
COMPLETED	03/--/24	08/--/60	10/21/67
SAMPLED	01/22/25	12/13/60	02/17/69
FORMATION	NOT GIVEN	PENN-LAYTON	MISS-CHAT
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	715	1758	1882
WELLHEAD PRESSURE, PSIG	180	579	660
OPEN FLOW, MCFD	NOT GIVEN	3400	3000
COMPONENT, MOLE PCT			
METHANE	42.9	52.1	92.5
ETHANE	0.6	3.8	0.9
PROPANE	---	2.7	0.1
N-BUTANE	---	0.8	0.0
ISOBUTANE	---	0.6	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	54.9	38.3	4.2
OXYGEN	0.5	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.9
HELIUM	0.98	0.90	0.30
HEATING VALUE*	445	740	956
SPECIFIC GRAVITY	0.784	0.790	0.595

	INDEX 1219 SAMPLE 654	INDEX 1220 SAMPLE 15692	INDEX 1221 SAMPLE 14224
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CLARK
FIELD	HEWINS	OLIVER	CLARK CREEK
WELL NAME	NOT GIVEN	ROGERS B NO. 1	TUTTLE NO. 2
LOCATION	SEC. 35, T34S, R9E	SEC. 2, T32S, R10E	SEC. 8, T35S, R22W
OWNER	EMPIRE GAS & FUEL CO.	RAM OIL CO.	ROBERT L. HAYNIE
COMPLETED	NOT GIVEN	06/--/78	06/21/74
SAMPLED	09/06/21	07/05/79	11/11/74
FORMATION	PENN-	MISS-	PENN-MORROW
GEOLOGIC PROVINCE CODE	365	365	360
DEPTH, FEET	758	2000	5707
WELLHEAD PRESSURE, PSIG	292	600	1700
OPEN FLOW, MCFD	2400	2200	7000
COMPONENT, MOLE PCT			
METHANE	59.7	82.5	90.1
ETHANE	0.0	1.3	4.7
PROPANE	---	0.5	2.2
N-BUTANE	---	0.3	0.6
ISOBUTANE	---	0.2	0.4
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	39.1	12.3	1.2
OXYGEN	0.2	0.1	0.0
ARGON	---	0.1	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXINE	0.0	1.2	0.1
HELIUM	1.00	1.24	0.11
HEATING VALUE*	605	906	1119
SPECIFIC GRAVITY	0.713	0.641	0.635

	INDEX 1222 SAMPLE 6227	INDEX 1223 SAMPLE 14785	INDEX 1224 SAMPLE 8094
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	ENGLEWOOD AREA	GRANGER CREEK	HARPER RANCH
WELL NAME	L. THEIS NO. 1	DAILY NO. 1-1	KARL MOSSHART NO. 1
LOCATION	SEC. 10, T35S, R25W	SEC. 1, T31S, R22W	SEC. 27, T33S, R21W
OWNER	SHELL OIL CO.	MESA PETROLEUM CO.	SINCLAIR OIL & GAS CO.
COMPLETED	08/01/56	01/23/76	04/17/61
SAMPLED	01/14/57	09/24/76	07/25/61
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5766	5199	5430
WELLHEAD PRESSURE, PSIG	1033	1530	1161
OPEN FLOW, MCFD	3600	47000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.7	87.1	88.4
ETHANE	5.2	4.2	4.9
PROPANE	2.6	1.5	2.0
N-BUTANE	0.8	0.5	0.6
ISOBUTANE	0.7	0.2	0.5
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.0	5.6	3.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.10	0.25	0.10
HEATING VALUE*	1145	1042	1082
SPECIFIC GRAVITY	0.652	0.635	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1225 SAMPLE 10355	INDEX 1226 SAMPLE 14557	INDEX 1227 SAMPLE 15693
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	HARPER RANCH	HARPER RANCH	LEXINGTON
WELL NAME	R. S. SHUPE NO. 1	HARPER RANCH NO. 1	MOORE NO. 3
LOCATION	SEC. 16, T34S, R21W	SEC. 12, T34S, R21W	SEC. 20, T31S, R21W
OWNER	SUNRAY DX OIL CO.	TEXAS OIL & GAS CORP.	MESA PETROLEUM CO.
COMPLETED	07/07/58	NOT GIVEN	04/23/79
SAMPLED	01/11/66	NOT GIVEN	07/08/79
FORMATION	PENN-MORROW	PENN-MORROW	MISS-ST.LOUIS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5580	5416	5181
WELLHEAD PRESSURE,PSIG	1057	NOT GIVEN	1500
OPEN FLOW, MCFD	7000	8155	3900
COMPONENT, MOLE PCT			
METHANE	88.3	91.0	83.1
ETHANE	5.0	3.3	4.8
PROPANE	2.2	1.2	0.7
N-BUTANE	0.8	0.3	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.2
NITROGEN	2.0	3.4	9.5
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.12	0.12	0.30
HEATING VALUE*	1120	1037	996
SPECIFIC GRAVITY	0.648	0.609	0.648

	INDEX 1228 SAMPLE 14903	INDEX 1229 SAMPLE 1092	INDEX 1230 SAMPLE 1868
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	MCKINNEY	NOT GIVEN	NOT GIVEN
WELL NAME	THEIS "W" NO. 1-8	J. MORRISON NO. 1	STEPHENS NO. 1
LOCATION	SEC. 8, T35S, R25W	SEC. 20, T32S, R21W	SEC. 21, T32S, R21W
OWNER	NORTHERN NATURAL GAS CO.	WATCHORN OIL & GAS CO.	WATCHORN OIL & GAS CO.
COMPLETED	10/21/76	06/--/25	10/--/28
SAMPLED	02/15/77	07/16/25	09/18/29
FORMATION	MISS-CHESTER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5955	5308	5440
WELLHEAD PRESSURE,PSIG	1576	50	800
OPEN FLOW, MCFD	4400	7765	8000
COMPONENT, MOLE PCT			
METHANE	90.0	80.4	83.3
ETHANE	4.8	17.8	14.6
PROPANE	2.1	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.2	1.4	1.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.09	0.12	0.13
HEATING VALUE*	1108	1133	1105
SPECIFIC GRAVITY	0.632	0.652	0.637

	INDEX 1231 SAMPLE 9963	INDEX 1232 SAMPLE 10013	INDEX 1233 SAMPLE 7059
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	SITKA	SITKA	TUTTLE
WELL NAME	CAUTHERS TRUST UNIT 1	RANDALL 1-11	C. H. TUTTLE NO. 1
LOCATION	SEC. 29, T33S, R22W	SEC. 11, T34S, R22W	SEC. 8, T35S, R22W
OWNER	PETROLEUM INC.	GRAHAM MICHAELIS DRLG. CO.	PURE OIL CO.
COMPLETED	12/21/64	03/03/65	10/26/58
SAMPLED	07/08/65	07/24/65	05/05/59
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5435	5378	5673
WELLHEAD PRESSURE,PSIG	1647	1453	1650
OPEN FLOW, MCFD	3100	56300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.0	83.6	86.0
ETHANE	4.7	5.1	4.9
PROPANE	2.3	2.5	2.5
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.5	0.7
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	3.4	6.6	3.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.5
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1107	1069	1111
SPECIFIC GRAVITY	0.655	0.663	0.662

	INDEX 1234 SAMPLE 10337	INDEX 1235 SAMPLE 5836	INDEX 1236 SAMPLE 1753
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	COFFEY
FIELD	TUTTLE W	WILDCAT	CARTER
WELL NAME	TUTTLE C NO. 1	STEPHENS H NO. 1	WINZELER NO. 1
LOCATION	SEC. 10, T35S, R21W	SEC. 10, T32S, R21W	SEC. 9, T22S, R14E
OWNER	UNION OIL CO. OF CALIF.	SHAMROCK OIL & GAS CORP.	UNION GAS CORP.
COMPLETED	11/13/57	03/05/55	01/--/29
SAMPLED	12/13/65	05/11/55	04/22/29
FORMATION	PENN-MORROW	PENN-MORROW	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	335
DEPTH, FEET	5625	4193	1327
WELLHEAD PRESSURE,PSIG	1145	1740	510
OPEN FLOW, MCFD	4040	14500	3001
COMPONENT, MOLE PCT			
METHANE	87.5	90.2	86.6
ETHANE	4.5	3.8	4.3
PROPANE	2.1	1.5	---
N-BUTANE	0.7	0.5	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.6	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.4	2.8	8.1
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.11	0.13	0.55
HEATING VALUE*	1098	1062	954
SPECIFIC GRAVITY	0.648	0.619	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1237 SAMPLE 14398	INDEX 1238 SAMPLE 6073	INDEX 1239 SAMPLE 6074
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	AETNA	BEALS	BEALS
WELL NAME	BALLET RANCH NO. 3	PARKS NO. 1	PARKS NO. 1
LOCATION	SEC. 36, T34S, R16W	SEC. 32, T33S, R17W	SEC. 32, T33S, R17W
OWNER	BEREN CORP.	PURE OIL CO.	PURE OIL CO.
COMPLETED	01/29/75	04/10/56	04/10/56
SAMPLED	03/19/75	05/31/56	05/31/56
FORMATION	MISS-	ORDO-SIMPSON	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5670	4368
WELLHEAD PRESSURE,PSIG	1650	1784	1464
OPEN FLOW, MCFD	7236	16000	4400
COMPONENT, MOLE PCT			
METHANE	93.5	71.5	73.4
ETHANE	3.1	5.0	5.0
PROPANE	1.1	3.0	2.9
N-BUTANE	0.3	1.5	1.5
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.1	1.2	0.8
CYCLOPENTANE	0.1	0.4	0.3
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	1.0	15.4	14.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.06	0.67	0.57
HEATING VALUE*	1071	1046	1053
SPECIFIC GRAVITY	0.603	0.744	0.731

	INDEX 1240 SAMPLE 6075	INDEX 1241 SAMPLE 10333	INDEX 1242 SAMPLE 10334
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	BEALS	BEALS	BEALS
WELL NAME	HAZEL BEALS NO. 1	HUCK & HALL NO. 1	H. BEALS NO. 1
LOCATION	SEC. 5, T34S, R17W	SEC. 33, T33S, R17W	SEC. 5, T34S, R17W
OWNER	PURE OIL CO.	CONTINENTAL OIL CO.	UNION OIL CO. OF CALIF.
COMPLETED	12/20/55	12/07/62	02/10/62
SAMPLED	05/29/56	12/15/65	12/15/65
FORMATION	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4393	4351	4948
WELLHEAD PRESSURE,PSIG	1482	953	1259
OPEN FLOW, MCFD	5200	4784	900
COMPONENT, MOLE PCT			
METHANE	79.9	78.3	88.5
ETHANE	4.8	5.1	4.3
PROPANE	0.0	2.5	2.5
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.7	0.5	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	12.1	11.8	2.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.27	0.29	0.15
HEATING VALUE*	996	1016	1098
SPECIFIC GRAVITY	0.673	0.684	0.640

	INDEX 1243 SAMPLE 10335	INDEX 1244 SAMPLE 10336	INDEX 1245 SAMPLE 6818
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	BEALS	BEALS	GLICK
WELL NAME	HUCK & HALL NO. 1	B. L. PARKS NO. 1	ROBBINS-GALLUP NO. A-1
LOCATION	SEC. 33, T33S, R17W	SEC. 32, T33S, R17W	SEC. 2, T31S, R16W
OWNER	CONTINENTAL OIL CO.	UNION OIL CO. OF CALIF.	BARBARA OIL CO.
COMPLETED	12/07/62	04/10/56	09/02/58
SAMPLED	12/15/65	12/13/65	09/30/58
FORMATION	MISS-	ORDO-SIMPSON	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1264	5670	4783
WELLHEAD PRESSURE,PSIG	1264	1700	1520
OPEN FLOW, MCFD	2631	8777	13
COMPONENT, MOLE PCT			
METHANE	88.8	73.3	92.0
ETHANE	3.7	5.0	3.7
PROPANE	1.5	2.9	1.0
N-BUTANE	0.7	1.2	0.4
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.4	15.4	1.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.12	0.70	0.10
HEATING VALUE*	1055	998	1075
SPECIFIC GRAVITY	0.629	0.713	0.614

	INDEX 1246 SAMPLE 11230	INDEX 1247 SAMPLE 11231	INDEX 1248 SAMPLE 12818
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	GLICK	GLICK	HAM
WELL NAME	SCHUETTE NO. 1-1	SCHUETTE NO. 1-1	MERRILL RANCH NO. C-2
LOCATION	SEC. 1, T32S, R16W	SEC. 1, T32S, R16W	SEC. 33, T33S, R16W
OWNER	EASON OIL CO.	EASON OIL CO.	SHENANDOAH OIL CORP.
COMPLETED	01/05/66	01/05/66	10/--/69
SAMPLED	11/22/67	11/21/67	05/--/71
FORMATION	PENN-CHEROKEE	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4808	4855	4972
WELLHEAD PRESSURE,PSIG	1100	1100	1250
OPEN FLOW, MCFD	12500	14000	4902
COMPONENT, MOLE PCT			
METHANE	90.4	90.0	92.3
ETHANE	3.9	4.0	3.8
PROPANE	1.5	1.6	1.2
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.1	0.3	0.0
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	2.3	2.5	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.15	0.17	0.08
HEATING VALUE*	1093	1082	1082
SPECIFIC GRAVITY	0.630	0.626	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1249 SAMPLE 8469		INDEX 1250 SAMPLE 8471		INDEX 1251 SAMPLE 10332	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	NESCATUNGA		NESCATUNGA		NESCATUNGA	
WELL NAME	DALE B NO. 1		DALE B NO. 1		DALE B NO. 1	
LOCATION	SEC. 21, T32S, R18W		SEC. 21, T32S, R18W		SEC. 21, T32S, R18W	
OWNER	J. M. HUBER CORP.		J. M. HUBER CORP.		J. M. HUBER CORP.	
COMPLETED	12/15/61		12/15/61		01/18/62	
SAMPLED	03/19/62		03/19/62		12/15/65	
FORMATION	ORDO-VIOLA		MISS-		ORDO-VIOLA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5632		5174		5632	
WELLHEAD PRESSURE,PSIG	1730		1580		1676	
OPEN FLOW, MCFD	4188		3750		1296	
COMPONENT, MOLE PCT						
METHANE	68.6		90.2		69.8	
ETHANE	4.9		3.2		5.1	
PROPANE	1.9		0.9		2.2	
N-BUTANE	0.5		0.3		0.6	
ISOBUTANE	0.6		0.3		0.5	
N-PENTANE	0.1		0.1		0.3	
ISOPENTANE	0.4		TRACE		TRACE	
CYCLOPENTANE	0.5		0.5		TRACE	
HEXANES PLUS	1.2		0.9		0.2	
NITROGEN	20.1		3.2		20.0	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		0.0		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.94		0.15		0.97	
HEATING VALUE*	971		1084		916	
SPECIFIC GRAVITY	0.743		0.637		0.710	

	INDEX 1252 SAMPLE 11936		INDEX 1253 SAMPLE 15075		INDEX 1254 SAMPLE 6858	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	NOT GIVEN		OVEROCKER		PERRY RANCH	
WELL NAME	SCHUETTE NO. 1		OVEROCKER NO. 1		PERRY NO. 1	
LOCATION	SEC. 1, T32S, R16W		SEC. 6, T33S, R20W		SEC. 12, T32S, R16W	
OWNER	EASON OIL CO.		NATIONAL OIL CO.		MESSMAN-RINEHART OIL CO.	
COMPLETED	NOT GIVEN		03/--/76		06/27/58	
SAMPLED	06/16/69		08/--/77		11/05/58	
FORMATION	PENN-CHEROKEE		PENN-MORROW		MISS-CHAT	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		5216		4785	
WELLHEAD PRESSURE,PSIG	1200		1650		1515	
OPEN FLOW, MCFD	500		2600		11000	
COMPONENT, MOLE PCT						
METHANE	90.9		90.6		92.6	
ETHANE	3.7		3.9		3.6	
PROPANE	1.6		1.3		1.2	
N-BUTANE	0.5		0.4		0.4	
ISOBUTANE	0.2		0.1		0.2	
N-PENTANE	0.1		0.1		0.2	
ISOPENTANE	0.2		0.1		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	2.2		3.0		1.3	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.2	
CARBON DIOXIDE	TRACE		0.3		0.10	
HELIUM	0.16		0.15		1068	
HEATING VALUE*	1079		1052		0.606	
SPECIFIC GRAVITY	0.620		0.616			

	INDEX 1255 SAMPLE 7942		INDEX 1256 SAMPLE 10391		INDEX 1257 SAMPLE 5430	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	PERRY RANCH		PERRY RANCH		ROBBINS RANCH	
WELL NAME	PERRY NO. 2		PERRY RANCH NO. 1		ROBBINS RANCH NO. 1	
LOCATION	SEC. 13, T32S, R16W		SEC. 12, T32S, R16W		SEC. 23, T31S, R16W	
OWNER	MESSMAN-RINEHART OIL CO.		MESSMAN-RINEHART OIL CO.		BARBARA OIL CO.	
COMPLETED	02/26/61		07/05/58		02/14/53	
SAMPLED	04/28/61		02/10/66		03/27/53	
FORMATION	MISS-CHERT		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4778		4795		4886	
WELLHEAD PRESSURE,PSIG	1505		1610		1498	
OPEN FLOW, MCFD	2460		6000		5922	
COMPONENT, MOLE PCT						
METHANE	92.4		91.8		92.2	
ETHANE	3.7		3.8		3.3	
PROPANE	1.2		1.2		1.3	
N-BUTANE	0.4		0.5		0.5	
ISOBUTANE	0.3		0.2		0.1	
N-PENTANE	0.1		0.1		0.2	
ISOPENTANE	TRACE		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	1.4		1.6		1.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.4	
HELIUM	0.10		0.15		0.13	
HEATING VALUE*	1066		1080		1070	
SPECIFIC GRAVITY	0.605		0.617		0.613	

	INDEX 1258 SAMPLE 14329		INDEX 1259 SAMPLE 10693		INDEX 1260 SAMPLE 10728	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	SCHUETTE		SHIMER		SHIMER	
WELL NAME	SCHUETTE NO. 1		GREGG NO. 1-12		GREGG NO. 1-12	
LOCATION	SEC. 35, T31S, R16W		SEC. 12, T33S, R17W		SEC. 12, T33S, R17W	
OWNER	NATIONAL OIL CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	03/01/78		02/04/66		01/19/66	
SAMPLED	05/09/75		08/16/66		09/20/66	
FORMATION	MISS-		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4439		5065		5089	
WELLHEAD PRESSURE,PSIG	1100		1575		1540	
OPEN FLOW, MCFD	31162		5487		7066	
COMPONENT, MOLE PCT						
METHANE	91.1		92.4		91.4	
ETHANE	4.9		3.5		3.5	
PROPANE	1.1		1.2		1.7	
N-BUTANE	0.3		0.4		0.5	
ISOBUTANE	0.3		0.1		0.1	
N-PENTANE	TRACE		0.2		0.1	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	1.4		1.5		2.2	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.7		0.1		0.1	
HELIUM	0.11		0.15		0.10	
HEATING VALUE*	1049		1078		1077	
SPECIFIC GRAVITY	0.619		0.617		0.620	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1261 SAMPLE 11557	INDEX 1262 SAMPLE 15552	INDEX 1263 SAMPLE 15806
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	SHIMER	TUTTLE NE	TUTTLE NE
WELL NAME	GREGG NO. 1-7	WOOLFOLK "E" NO. 1	BOX RANCH NO. 1
LOCATION	SEC. 7, T33S, R16W	SEC. 29, T34S, R20W	SEC. 16, T35S, R20W
OWNER	GRAHAM-MICHAELIS DRILLING CO	DONALD C. SLAWSON	MID CONTINENT ENERGY
COMPLETED	05/21/67	07/12/78	10/13/78
SAMPLED	06/27/68	01/02/79	09/09/79
FORMATION	MISS-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5052	5420	5650
WELLHEAD PRESSURE,PSIG	1551	1780	1400
OPEN FLOW, MCFD	4700	6000	8000
COMPONENT, MOLE PCT			
METHANE	91.0	89.7	92.5
ETHANE	3.5	3.9	3.5
PROPANE	1.1	1.5	1.3
N-BUTANE	0.4	0.5	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.7	3.2	1.2
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.09	0.15	0.09
HEATING VALUE*	1060	1059	1077
SPECIFIC GRAVITY	0.619	0.622	0.612

	INDEX 1264 SAMPLE 4490	INDEX 1265 SAMPLE 9044	INDEX 1266 SAMPLE 15981
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	M. A. LORIMOR NO. 1	ALEXANDER NO. 1	HAAS NO. 1
LOCATION	SEC. 36, T31S, R20W	SEC. 4, T35S, R20W	SEC. 19, T34S, R17W
OWNER	GULF OIL CORP.	SINCLAIR OIL & GAS CO.	GEORGE R. JONES
COMPLETED	NOT GIVEN	05/03/63	01/19/80
SAMPLED	04/23/48	07/15/63	06/11/80
FORMATION	MISS-	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5191	5461	5238
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1782	1680
OPEN FLOW, MCFD	240	3500	2443
COMPONENT, MOLE PCT			
METHANE	0.0	91.3	91.1
ETHANE	1.0	3.5	3.1
PROPANE	---	1.3	1.0
N-BUTANE	---	0.8	0.3
ISOBUTANE	---	TRACE	0.1
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.6	0.1
NITROGEN	97.3	1.4	3.8
OXYGEN	1.4	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.07	0.10	0.13
HEATING VALUE*	18	1108	1035
SPECIFIC GRAVITY	0.970	0.632	0.612

	INDEX 1267 SAMPLE 11075	INDEX 1268 SAMPLE 11948	INDEX 1269 SAMPLE 12554
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	WILMORE	WILMORE	WILMORE
WELL NAME	EMERICK A NO. 1	BOISSEAU NO. 1	PEPPER D NO. 1-20
LOCATION	SEC. 24, T31S, R18W	SEC. 22, T31S, R18W	SEC. 20, T31S, R17W
OWNER	ANADARKO PRODUCTION CO.	PETROLEUM INC.	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	10/24/66	09/30/68	04/29/70
SAMPLED	08/25/67	07/02/68	11/23/70
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4966	5075	5120
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1483	1504
OPEN FLOW, MCFD	2570	17200	5124
COMPONENT, MOLE PCT			
METHANE	92.5	92.8	92.3
ETHANE	3.1	2.8	3.4
PROPANE	1.1	0.6	1.3
N-BUTANE	0.3	0.8	0.4
ISOBUTANE	0.3	0.0	0.3
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.0	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.2	1.8	1.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.13	0.10	0.11
HEATING VALUE*	1055	1073	1067
SPECIFIC GRAVITY	0.606	0.612	0.606

	INDEX 1270 SAMPLE 15386	INDEX 1271 SAMPLE 15387	INDEX 1272 SAMPLE 2684
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COWLEY
FIELD	YELLOWSTONE	YELLOWSTONE	FERGUSON
WELL NAME	MCMORAN NO. 1	MCMORAN NO. 1	FERGUSON NO. 1
LOCATION	SEC. 8, T35S, R16W	SEC. 8, T35S, R16W	SEC. 21, T30S, R8E
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	BILL LASSEN ET AL.
COMPLETED	06/15/78	06/15/78	NOT GIVEN
SAMPLED	09/27/78	09/27/78	12/06/34
FORMATION	MISS-	PENN-FORT SCOTT	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	5280	5164	2055
WELLHEAD PRESSURE,PSIG	1735	1725	NOT GIVEN
OPEN FLOW, MCFD	700	8000	1750
COMPONENT, MOLE PCT			
METHANE	92.4	89.7	29.0
ETHANE	3.6	4.0	16.8
PROPANE	1.3	2.0	---
N-BUTANE	0.4	0.7	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	1.0	1.9	45.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	7.2
HELIUM	0.07	0.08	1.59
HEATING VALUE*	1086	1111	595
SPECIFIC GRAVITY	0.614	0.639	0.888

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1273 SAMPLE 3185	INDEX 1274 SAMPLE 10435	INDEX 1275 SAMPLE 10436
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	GEUDA SPRINGS	GIBSON	GIBSON
WELL NAME	N. E. MULKEY NO. 1	L. V. SCOTT NO. 1	L. M. BRYANT A-S
LOCATION	SEC. 8, T34S, R3E	SEC. 5, T35S, R3E	SEC. 32, T34S, R3E
OWNER	CONSOLIDATED GAS UTIL. CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	03/17/34	06/28/63	07/27/52
SAMPLED	03/19/42	03/08/66	03/08/66
FORMATION	PENN-BARTLESVILLE	PENN-SEVERY	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1863	1450	3375
WELLHEAD PRESSURE,PSIG	450	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	350	235	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.9	75.0	11.5
ETHANE	14.4	4.3	27.8
PROPANE	---	2.0	33.2
N-BUTANE	---	0.7	11.3
ISOBUTANE	---	0.4	4.0
N-PENTANE	---	0.1	3.2
ISOPENTANE	---	0.3	2.9
CYCLOPENTANE	---	0.1	0.5
HEXANES PLUS	---	0.2	2.1
NITROGEN	25.6	16.2	2.5
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.9
HELIUM	0.75	0.40	0.04
HEATING VALUE*	865	957	2379
SPECIFIC GRAVITY	0.725	0.695	1.454

	INDEX 1276 SAMPLE 1194	INDEX 1277 SAMPLE 1870	INDEX 1278 SAMPLE 1984
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	GRAHAM	JARVIS	JARVIS
WELL NAME	GRAHAM NO. 3	JARVIS NO. 1	HARRIS NO. 2
LOCATION	NOT GIVEN	SEC. 30, T31S, R5E	SEC. 20, T31S, R6E
OWNER	MARLAND OIL CO.	ROTH & FAUROT	MID-KANSAS OIL & GAS CO.
COMPLETED	NOT GIVEN	08/--/25	12/31/29
SAMPLED	12/11/25	09/23/29	04/07/30
FORMATION	EOCE-WILCOX	NOT GIVEN	TERT-
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	3508	1700	2211
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	750
OPEN FLOW, MCFD	NOT GIVEN	5000	16500
COMPONENT, MOLE PCT			
METHANE	49.4	55.7	64.3
ETHANE	29.3	13.3	12.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.3	29.8	21.4
OXYGEN	0.9	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.85	0.90	0.79
HEATING VALUE*	1025	803	883
SPECIFIC GRAVITY	0.784	0.742	0.708

	INDEX 1279 SAMPLE 13144	INDEX 1280 SAMPLE 4772	INDEX 1281 SAMPLE 15683
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	LAYTON	NEW SALEM N	POSEY
WELL NAME	WALKER NO. 1	ROBERTS NO. 1	LINK-RICHARDSON NO. 2
LOCATION	SEC. 18, T32S, R8E	SEC. 21, T31S, R5E	NOT GIVEN
OWNER	BRUCE D. BENSON	EARL J. WAKEFIELD	PETROLEUM ENTERPRISES
COMPLETED	10/20/71	06/--/49	06/16/79
SAMPLED	02/10/72	10/16/49	06/28/79
FORMATION	PENN-LAYTON	PENN-LAYTON	PERM-ADMIRE
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1950	2396	676
WELLHEAD PRESSURE,PSIG	400	800	230
OPEN FLOW, MCFD	12000	3300	1500
COMPONENT, MOLE PCT			
METHANE	54.2	73.0	78.2
ETHANE	3.9	6.6	4.8
PROPANE	2.5	3.2	2.3
N-BUTANE	0.5	0.9	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	37.3	14.6	12.8
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.87	0.56	0.38
HEATING VALUE*	719	1011	993
SPECIFIC GRAVITY	0.767	0.710	0.679

	INDEX 1282 SAMPLE 3187	INDEX 1283 SAMPLE 1719	INDEX 1284 SAMPLE 1869
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	WALNUT BEND	WERNER	WERNER
WELL NAME	F. M. LEMERT	NO. 1	WERNER NO. 1
LOCATION	SEC. 11, T34S, R4E	SEC. 31, T32S, R6E	SEC. 31, T32S, R6E
OWNER	F. M. LEMERT	ROTH & FAUROT	HOME NATURAL GAS CO.
COMPLETED	07/04/40	06/--/28	07/--/28
SAMPLED	03/19/42	02/26/29	09/20/29
FORMATION	MISS-CHAT	PENN-KANSAS CITY	PENN-LAYTON
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	3075	2400	2400
WELLHEAD PRESSURE,PSIG	1100	800	920
OPEN FLOW, MCFD	750	2000	2500
COMPONENT, MOLE PCT			
METHANE	61.1	41.2	52.4
ETHANE	16.5	31.3	21.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.8	26.5	21.3
OXYGEN	0.3	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	1.6
HELIUM	0.55	0.55	0.51
HEATING VALUE*	915	979	959
SPECIFIC GRAVITY	0.724	0.820	0.776

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1285 SAMPLE 1787	INDEX 1286 SAMPLE 1343	INDEX 1287 SAMPLE 2676
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	DICKINSON
FIELD	WILDCAT	WILMOT-FLORAL	NOT GIVEN
WELL NAME	STERLING NO. 1	COFFEE NO. 1	PHILLIPS LEASE
LOCATION	SEC. 5, T35, R5E	SEC. 30, T31S, R5E	SEC. 15, T15S, R1E
OWNER	BRADY & COOPER	ROTH & FAUROT	FRED FRANKS
COMPLETED	12/--/28	07/--/25	NOT GIVEN
SAMPLED	05/24/29	01/13/27	07/17/34
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	380
DEPTH, FEET	1775	1682	2025
WELLHEAD PRESSURE,PSIG	680	250	NOT GIVEN
OPEN FLOW, MCFD	1000	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	44.9	56.4	2.4
ETHANE	6.9	13.2	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	46.8	28.9	93.6
OXYGEN	0.3	0.7	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.91	0.78	3.76
HEATING VALUE*	578	808	24
SPECIFIC GRAVITY	0.782	0.747	0.926

	INDEX 1288 SAMPLE 3176	INDEX 1289 SAMPLE 12164	INDEX 1290 SAMPLE 3675
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DOUGLAS	EDWARDS	EDWARDS
FIELD	EUDORA	BADGER HILL	BELPRE
WELL NAME	NEIS ESTATE NO. 2	CARLSON NO. 1	BREITENBACH NO. 1
LOCATION	SEC. 3, T13S, R21E	SEC. 12, T23S, R19W	SEC. 5, T25S, R16W
OWNER	T. A. GOFF	WALTERS DRILLING CO.	CITIES SERVICE OIL CO.
COMPLETED	09/--/40	06/30/69	09/27/43
SAMPLED	03/26/42	12/12/69	10/09/43
FORMATION	PENN-SQUIRREL	PENN-CHEROKEE	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	335	360	360
DEPTH, FEET	580	4407	3778
WELLHEAD PRESSURE,PSIG	254	1600	1100
OPEN FLOW, MCFD	130	3000	17650
COMPONENT, MOLE PCT			
METHANE	91.3	33.2	70.6
ETHANE	4.3	3.3	12.8
PROPANE	---	1.6	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.2	---
NITROGEN	3.4	57.1	15.7
OXYGEN	0.3	0.0	0.1
ARGON	---	0.2	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.30	3.34	0.46
HEATING VALUE*	1002	479	945
SPECIFIC GRAVITY	0.594	0.830	0.684

	INDEX 1291 SAMPLE 3737	INDEX 1292 SAMPLE 11317	INDEX 1293 SAMPLE 11397
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BELPRE	BENSON	BENSON
WELL NAME	ENGLISH NO. 1	HAMMEKE NO. 1	HAMMEKE NO. 1
LOCATION	SEC. 8, T25S, R16W	SEC. 1, T24S, R16W	SEC. 1, T24S, R16W
OWNER	CITIES SERVICE OIL CO.	ET AL, INC.	ET AL, INC.
COMPLETED	07/07/42	10/04/67	10/04/67
SAMPLED	03/24/44	02/21/68	03/15/68
FORMATION	PENN-LANSING	-CONGLOMERATE	-CONGLOMERATE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3784	4060	4060
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1203
OPEN FLOW, MCFD	25203	3740	3740
COMPONENT, MOLE PCT			
METHANE	58.8	63.8	75.9
ETHANE	24.6	3.6	4.1
PROPANE	---	1.5	1.7
N-BUTANE	---	0.6	0.6
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	15.6	24.5	14.0
OXYGEN	0.5	2.8	0.0
ARGON	---	0.2	0.1
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.40	1.72	2.67
HEATING VALUE*	1036	799	939
SPECIFIC GRAVITY	0.743	0.725	0.666

	INDEX 1294 SAMPLE 9604	INDEX 1295 SAMPLE 10115	INDEX 1296 SAMPLE 9574
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BORDEWICK	BORDEWICK E	BRADBRIDGE
WELL NAME	BELCHER NO. 1	BORDEWICK UNIT NO. 1	KLEIN NO. 1
LOCATION	SEC. 19, T26S, R18W	SEC. 23, T26S, R18W	SEC. 2, T24S, R16W
OWNER	AYLWARD DRILLING CO.	WESTERN PETROLEUM CO., INC.	MESSMAN RINEHART OIL CO.
COMPLETED	09/09/63	10/02/64	06/10/64
SAMPLED	10/18/64	09/09/65	09/25/64
FORMATION	PENN-TARKIO	PENN-WABAUNSEE	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3336	3236	3606
WELLHEAD PRESSURE,PSIG	1050	1022	1147
OPEN FLOW, MCFD	1450	8157	9000
COMPONENT, MOLE PCT			
METHANE	80.1	81.0	61.6
ETHANE	2.6	3.2	3.5
PROPANE	1.0	1.5	2.0
N-BUTANE	0.2	0.6	0.7
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	15.1	12.1	29.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	1.4
HELIUM	0.45	0.35	0.83
HEATING VALUE*	911	9870	796
SPECIFIC GRAVITY	0.650	0.667	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1297 SAMPLE 9575	INDEX 1298 SAMPLE 10619	INDEX 1299 SAMPLE 11318
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BRADBRIDGE	BRADBRIDGE	BRADBRIDGE
WELL NAME	KLEIN NO. 1	NEIDIG	HOWELL NO. 1
LOCATION	SEC. 2, T24S, R16W	SEC. 1, T24S, R16W	SEC. 12, T24S, R16W
OWNER	MESSMAN RINEHART OIL CO.	BARNETT OIL CO.	ET AL, INC.
COMPLETED	06/10/64	NOT GIVEN	09/27/67
SAMPLED	09/24/64	06/13/66	02/24/68
FORMATION	PENN-HOWARD	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2994	4053	4034
WELLHEAD PRESSURE,PSIG	963	1300	1177
OPEN FLOW, MCFD	2500	8000	3180
COMPONENT, MOLE PCT			
METHANE	71.1	38.8	41.0
ETHANE	3.0	4.8	4.7
PROPANE	1.6	2.4	2.5
N-BUTANE	0.8	0.9	1.0
ISOBUTANE	0.4	0.7	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	21.1	46.5	44.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.2	0.2
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	0.63	4.25	4.23
HEATING VALUE*	897	636	654
SPECIFIC GRAVITY	0.712	0.826	0.816

	INDEX 1300 SAMPLE 13931	INDEX 1301 SAMPLE 8819	INDEX 1302 SAMPLE 15269
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BRADBRIDGE	BRITTON	BRITTON
WELL NAME	BELT-JOHNSON NO. 1	BRITTON NO. 1	BRITTON NO. 1
LOCATION	SEC. 11, T24S, R16W	SEC.9,T26S,R17W	SEC. 8, T26S, R18W
OWNER	ALPINE DRILLING CO.	LEBEN DRILLING, INC.	RUPE OIL CO., INC.
COMPLETED	04/12/70	DRILL STEM TEST	01/--/77
SAMPLED	03/04/74	12/29/62	04/21/78
FORMATION	CAMO-ARBUCKLE	MISS-KINDERHOOK	MISS-CHERT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4075	4475	4709
WELLHEAD PRESSURE,PSIG	1150	NOT GIVEN	1330
OPEN FLOW, MCFD	750000	NOT GIVEN	21000
COMPONENT, MOLE PCT			
METHANE	34.6	88.5	89.4
ETHANE	4.5	3.2	3.2
PROPANE	2.5	1.1	1.1
N-BUTANE	0.9	0.4	0.4
ISOBUTANE	0.9	0.2	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	50.2	5.4	4.7
OXYGEN	0.0	0.0	0.0
ARGON	0.2	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	4.66	0.49	0.40
HEATING VALUE*	597	1021	1029
SPECIFIC GRAVITY	0.841	0.620	0.617

	INDEX 1303 SAMPLE 10712	INDEX 1304 SAMPLE 10310	INDEX 1305 SAMPLE 10343
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	CHURCHVIEW	EMBRY	EMBRY
WELL NAME	PLOGER NO. 1	B. A. MEYER NO. 1	EMBRY NO. 1
LOCATION	SEC. 20, T23S, R19W	SEC. 23, T24S, R16W	SEC. 24, T24S, R16W
OWNER	STICKLE DRILLING CO.	HUMBLE OIL & REFINING CO.	SUNRAY DX OIL CO.
COMPLETED	NOT GIVEN	04/22/58	04/08/57
SAMPLED	09/0A/66	12/06/65	12/21/65
FORMATION	MISS-	MISS-KINDERHOOK	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4520	4224	4215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	739	731
OPEN FLOW, MCFD	367	1060	4704
COMPONENT, MOLE PCT			
METHANE	35.2	89.8	88.6
ETHANE	2.2	3.6	3.9
PROPANE	1.1	1.4	1.4
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	56.0	3.6	4.3
OXYGEN	0.3	0.0	0.0
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	3.25	0.45	0.44
HEATING VALUE*	476	1047	1049
SPECIFIC GRAVITY	0.820	0.617	0.625

	INDEX 1306 SAMPLE 12759	INDEX 1307 SAMPLE 12885	INDEX 1308 SAMPLE 12886
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	ENLOW	ENLOW	ENLOW
WELL NAME	SMITH NO. 1	HAHN NO. 3	ENLOW NO. 1
LOCATION	SEC. 8, T24S, R16W	SEC. 4, T24S, R16W	SEC. 9, T24S, R16W
OWNER	IMPERIAL OIL CO.	MESSMAN RINEHART NO. 3	MESSMAN-RINEHART OIL CO.
COMPLETED	NOT GIVEN	04/10/71	07/02/59
SAMPLED	04/10/71	09/01/71	06/16/71
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4161	4104
WELLHEAD PRESSURE,PSIG	1750	1220	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.7	89.5	84.9
ETHANE	3.6	5.3	5.2
PROPANE	1.5	1.5	1.3
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.7	4.1	6.1
OXYGEN	0.0	0.0	1.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.45	0.46	0.38
HEATING VALUE*	1052	1065	999
SPECIFIC GRAVITY	0.629	0.619	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1309 SAMPLE 7779	INDEX 1310 SAMPLE 10304	INDEX 1311 SAMPLE 5853
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	FELLSBERG	FELLSBURG	GRONER
WELL NAME	FATSER NO. 1	FATZER UNIT NO. 1	GRONER NO. 1
LOCATION	SEC. 34, T25S, R17W	SEC. 34, T25S, R17W	SEC. 34, T25S, R20W
OWNER	NATIONAL DRILLING CO.	MOBIL OIL CO.	GMR OIL CO.
COMPLETED	06/29/60	07/07/60	NOT GIVEN
SAMPLED	11/21/60	12/01/65	06/01/55
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4489	4489	4670
WELLHEAD PRESSURE,PSIG	1400	1320	1475
OPEN FLOW, MCFD	4985	4740	2600
COMPONENT, MOLE PCT			
METHANE	89.9	88.7	44.3
ETHANE	3.4	3.6	4.0
PROPANE	1.0	1.4	1.0
N-BUTANE	0.3	0.5	0.4
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.2	4.3	45.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.2
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.50	0.41	3.46
HEATING VALUE*	1027	1050	793
SPECIFIC GRAVITY	0.610	0.627	0.785

	INDEX 1312 SAMPLE 9400	INDEX 1313 SAMPLE 11132	INDEX 1314 SAMPLE 13153
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	GRONER	GRONER	GRONER
WELL NAME	JENSEN NO. 1	JENSEN B NO. 1	JENSEN
LOCATION	SEC. 6, T23S, R20W	SEC. 6, T23S, R20W	SEC. 6, T23S, R20W
OWNER	IMPERIAL OIL OF KANSAS	CITIES SERVICE OIL CO.	RICHARD R. HORNER
COMPLETED	01/29/64	05/22/64	01/29/64
SAMPLED	05/14/64	09/22/67	02/20/72
FORMATION	MISS-	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4496	4496	4496
WELLHEAD PRESSURE,PSIG	1050	1420	1050
OPEN FLOW, MCFD	1140	NOT GIVEN	1140
COMPONENT, MOLE PCT			
METHANE	56.1	56.2	57.3
ETHANE	3.8	3.7	3.7
PROPANE	1.6	1.5	1.7
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	34.3	34.2	32.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	2.72	2.76	2.68
HEATING VALUE*	715	725	735
SPECIFIC GRAVITY	0.742	0.741	0.738

	INDEX 1315 SAMPLE 3236	INDEX 1316 SAMPLE 11267	INDEX 1317 SAMPLE 8437
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	LEWIS	MARTIN N	MC CLANAHAN
WELL NAME	T. L. MCCARTY	ROBBINS NO. 1	NEUSOM NO. 1
LOCATION	SEC. 22, T25S, R17W	SEC. 33, T26S, R20W	SEC. 12, T26S, R18W
OWNER	STANOLIND OIL & GAS CO.	MULL DRILLING CO.	RAYMOND OIL CO., INC.
COMPLETED	05/23/50	07/17/67	02/22/62
SAMPLED	03/26/42	02/01/68	02/20/62
FORMATION	PENN-CONGLOMERATE BASAL	-DOLOMITE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4450	4797	4555
WELLHEAD PRESSURE,PSIG	340	1350	NOT GIVEN
OPEN FLOW, MCFD	256	3500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.3	78.7	89.1
ETHANE	12.2	5.2	3.2
PROPANE	---	1.9	1.0
N-BUTANE	---	0.5	0.3
ISOBUTANE	---	0.4	0.2
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	4.6	11.4	4.9
OXYGEN	0.3	0.0	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.38	1.04	0.57
HEATING VALUE*	1052	993	1024
SPECIFIC GRAVITY	0.636	0.669	0.619

	INDEX 1318 SAMPLE 8434	INDEX 1319 SAMPLE 1879	INDEX 1320 SAMPLE 7828
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MC CLANAHAN E	MCCARTY	MCCLANAHAN
WELL NAME	NEUSOM NO. 1	MCCARTY NO. 1	KING NO. 1
LOCATION	SEC. 12, T26S, R18W	SEC. 31, T25S, R17W	NOT GIVEN
OWNER	RAYMOND OIL CO., INC.	BRITISH-AMERICAN OIL CO.	JOHN R. EVANS
COMPLETED	02/22/62	07/--/29	12/--/59
SAMPLED	02/20/62	09/26/29	01/24/61
FORMATION	-CONGLOMERATE	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4520	4666	4650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	950
OPEN FLOW, MCFD	NOT GIVEN	14000	1000
COMPONENT, MOLE PCT			
METHANE	78.1	88.5	90.0
ETHANE	2.9	7.1	3.4
PROPANE	0.9	---	1.0
N-BUTANE	0.3	---	0.4
ISOBUTANE	0.1	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	14.1	3.4	4.4
OXYGEN	2.5	0.3	0.0
ARGON	0.1	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.30	0.44	0.20
HEATING VALUE*	898	1024	1036
SPECIFIC GRAVITY	0.665	0.607	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1321 SAMPLE 11390	INDEX 1322 SAMPLE 15234	INDEX 1323 SAMPLE 11624
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MCCLANAHAN E	MULL	NOT GIVEN
WELL NAME	WELSCH NO. 1	MULL NO. 2	TITUS NO. 1
LOCATION	SEC. 13, T26S, R18W	SEC. 33, T26S, R17W	SEC. 4, T26S, R19W
OWNER	GLEN RUPE	IMPERIAL OIL CO.	GLEN N. RUPE
COMPLETED	10/06/67	04/23/77	06/26/68
SAMPLED	03/12/68	02/10/78	08/15/68
FORMATION	MISS-	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4529	4545	4730
WELLHEAD PRESSURE,PSIG	1080	1320	1250
OPEN FLOW, MCFD	4000	2777	1300
COMPONENT, MOLE PCT			
METHANE	89.5	90.6	65.2
ETHANE	3.3	3.3	4.7
PROPANE	1.0	1.4	1.9
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	TRACE	0.2	0.3
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	4.5	2.9	24.2
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.38	0.24	1.97
HEATING VALUE*	1030	1064	860
SPECIFIC GRAVITY	0.617	0.618	0.724

	INDEX 1324 SAMPLE 15845	INDEX 1325 SAMPLE 6218	INDEX 1326 SAMPLE 14755
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	NOT GIVEN	TROUSDALE S	WAYNE N
WELL NAME	MCLEAN NO. 1	KING NO. 1	BRITTON NO. 1
LOCATION	SEC. 9, T25S, R18W	SEC. 33, T26S, R16W	SEC. 15, T24S, R17W
OWNER	IMPERIAL OIL CO.	SUNRAY MID-CONTINENT OIL CO.	F. G. HOLL
COMPLETED	10/25/78	11/16/56	03/19/76
SAMPLED	11/29/79	12/13/56	09/14/76
FORMATION	PENN-MARMATON	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4398	4472	4321
WELLHEAD PRESSURE,PSIG	1350	1180	1288
OPEN FLOW, MCFD	6600	5	5500
COMPONENT, MOLE PCT			
METHANE	87.1	82.0	88.8
ETHANE	3.2	3.5	3.2
PROPANE	1.0	0.9	1.1
N-BUTANE	0.3	0.5	0.3
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	6.6	10.1	5.6
OXYGEN	0.0	1.1	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	TRACE
HELIUM	0.64	0.51	0.57
HEATING VALUE*	993	967	1012
SPECIFIC GRAVITY	0.622	0.651	0.614

	INDEX 1327 SAMPLE 10309	INDEX 1328 SAMPLE 7677	INDEX 1329 SAMPLE 11666
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	RUSSELL A, NO. 1	KING B NO. 1	BLANCHE A, KING NO. 1
LOCATION	SEC. 26, T25, R16W	NOT GIVEN	SEC. 25, T26S, R19W
OWNER	NATURAL GAS & OIL CO.	PICKRELL DRILLING CO.	NORTHERN PUMP CO.
COMPLETED	06/09/58	NOT GIVEN	07/25/68
SAMPLED	12/03/65	09/13/60	10/02/68
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4373	NOT GIVEN	4759
WELLHEAD PRESSURE,PSIG	13	1680	1558
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2310
COMPONENT, MOLE PCT			
METHANE	81.7	90.2	90.7
ETHANE	7.5	3.4	3.1
PROPANE	3.4	0.8	1.0
N-BUTANE	1.4	0.2	0.3
ISOBUTANE	0.7	0.9	0.2
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.7	0.0	0.1
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	2.5	3.7	3.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	TRACE
HELIUM	0.15	0.30	0.29
HEATING VALUE*	1220	1051	1040
SPECIFIC GRAVITY	0.717	0.621	0.619

	INDEX 1330 SAMPLE 5643	INDEX 1331 SAMPLE 14605	INDEX 1332 SAMPLE 15684
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	ELK
FIELD	WOKATY	WOKATY	OGDSDEN
WELL NAME	WOKATY NO. 1	RUSSELL "A" NO. 1	TODD NO. 2
LOCATION	SEC. 25, T25S, R17W	SEC. 19, T25S, R16W	SEC. 2A, T31S, R9E
OWNER	CITIES PRODUCTION CORP.	D.R. LAUCK OIL CO., INC.	PETROLEUM ENTERPRISES
COMPLETED	04/29/54	12/01/75	10/17/78
SAMPLED	06/23/54	03/03/76	06/28/79
FORMATION	PENN-BASAL	PENN-CHEROKEE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	4385	4354	1766
WELLHEAD PRESSURE,PSIG	1580	1185	600
OPEN FLOW, MCFD	2450	2800	4000
COMPONENT, MOLE PCT			
METHANE	87.1	85.7	55.9
ETHANE	3.2	3.3	5.9
PROPANE	1.3	1.0	3.8
N-BUTANE	0.5	0.3	1.1
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	0.2	TRACE	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	6.2	8.3	30.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.67	0.40	1.15
HEATING VALUE*	1029	978	859
SPECIFIC GRAVITY	0.629	0.629	0.786

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1333 SAMPLE 15828	INDEX 1334 SAMPLE 171	INDEX 1335 SAMPLE 184
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELK	ELK
FIELD	LOGSDEN	LONGTON	LONGTON
WELL NAME	PINEGAR NO. 1	RUDDLE NO. 3 SW	KIMSEY NO. 1
LOCATION	SEC. 21, T31S, R9E	SEC. 21, T31S, R12E	SEC. 20, T31S, R12E
OWNER	RAMOIL CO.	SOUTHWESTERN GAS CO.	HOUSTON-OKLAHOMA O & G CO.
COMPLETED	06/--/79	10/--/17	NOT GIVEN
SAMPLED	11/02/79	03/29/20	03/31/20
FORMATION	PENN-CLEVELAND	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1812	778	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	115	NOT GIVEN
OPEN FLOW, MCFD	2500	790	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.2	81.7	83.4
ETHANE	5.6	0.0	0.0
PROPANE	3.6	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	32.5	17.0	14.5
OXYGEN	TRACE	0.4	1.4
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	1.24	0.60	0.62
HEATING VALUE*	841	828	845
SPECIFIC GRAVITY	0.792	0.626	0.619

	INDEX 1336 SAMPLE 185	INDEX 1337 SAMPLE 215	INDEX 1338 SAMPLE 216
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELK	ELK
FIELD	LONGTON S	MOLINE	MOLINE
WELL NAME	FOSTER NO. 1	SWISHER NO. 1	WOLF NO. 1
LOCATION	SEC. 33, T31S, R12E	SEC. 10, T32S, R9E	SEC. 2, T32S, R9E
OWNER	SOUTHWESTERN GAS CO.	MOLINE GAS CO.	MOLINE GAS CO.
COMPLETED	09/--/29	03/--/20	02/--/19
SAMPLED	03/31/20	04/15/20	04/15/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	689	1450	1500
WELLHEAD PRESSURE,PSIG	120	200	130
OPEN FLOW, MCFD	500	1500	2000
COMPONENT, MOLE PCT			
METHANE	85.7	74.4	75.1
ETHANE	0.0	4.9	5.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.7	19.6	18.6
OXYGEN	0.0	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.52	0.72	TRACE
HEATING VALUE*	868	841	859
SPECIFIC GRAVITY	0.608	0.658	0.663

	INDEX 1339 SAMPLE 1585	INDEX 1340 SAMPLE 3222	INDEX 1341 SAMPLE 14417
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELLSWORTH	ELLSWORTH
FIELD	WEBB	ELLSWORTH	ELLSWORTH
WELL NAME	WEBB NO. 22	STATE NO. 1	KIHN NO. 1
LOCATION	SEC. 14, T31S, R10E	SEC. 29, T15S, R8W	SEC. 30, T15S, R8W
OWNER	UNION GAS CORP.	INGLING & PARKER	ARTHUR GORSKI
COMPLETED	01/14/28	06/25/41	06/06/75
SAMPLED	03/07/28	03/25/42	07/23/75
FORMATION	NOT GIVEN	PENN-DOUGLAS	PENN-LANSING
GEOLOGIC PROVINCE CODE	365	385	385
DEPTH, FEET	1113	2480	2550
WELLHEAD PRESSURE,PSIG	335	914	900
OPEN FLOW, MCFD	1036	3079	2000
COMPONENT, MOLE PCT			
METHANE	66.7	58.4	62.1
ETHANE	9.7	12.8	5.8
PROPANE	---	---	3.2
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	22.2	27.4	25.6
OXYGEN	0.6	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.63	0.80	0.80
HEATING VALUE*	849	821	904
SPECIFIC GRAVITY	0.698	0.732	0.758

	INDEX 1342 SAMPLE 2582	INDEX 1343 SAMPLE 7640	INDEX 1344 SAMPLE 9930
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	ELLSWORTH	ELLSWORTH
FIELD	NOT GIVEN	WILDCAT	WILDCAT
WELL NAME	KONAK NO. 1	NOT GIVEN	SCHLESSINGER
LOCATION	SEC. 15, T16S, R7W	SEC. 15, T16S, R7W	SEC. 30, T16S, R10W
OWNER	MID-KANSAS OIL & GAS CO.	KANSAS PETROLEUM, INC.	MESSMAN-RINEHART OIL CO.
COMPLETED	NOT GIVEN	07/29/60	05/11/65
SAMPLED	01/09/33	07/29/60	06/17/65
FORMATION	NOT GIVEN	PERM-INDIAN CAVE	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	1765	1770	3042
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1050
OPEN FLOW, MCFD	2400	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	44.2	50.7	62.4
ETHANE	3.3	1.6	4.8
PROPANE	---	0.8	3.2
N-BUTANE	---	0.2	1.0
ISOBUTANE	---	0.1	0.0
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	46.6	44.0	24.7
OXYGEN	4.7	0.0	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.9	1.9
HELIUM	1.10	1.30	1.05
HEATING VALUE*	507	578	8710
SPECIFIC GRAVITY	0.785	0.762	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1345 SAMPLE 2580	INDEX 1346 SAMPLE 3475	INDEX 1347 SAMPLE 3767
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BROWN NO. 1	JONES NO. 1	LAYMAN NO. 1
LOCATION	SEC. 16, T25S, R34W	SEC. 34, T26S, R34W	SEC. 13, T24S, R34W
OWNER	DENHAM ET AL.	HELMERICH & PAYNE, INC.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	NOT GIVEN	09/24/36	06/20/42
SAMPLED	12/14/42	05/16/42	04/07/44
FORMATION	NOT GIVEN	PERM-LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2534	2700	2750
WELLHEAD PRESSURE,PSIG	937	440	NOT GIVEN
OPEN FLOW, MCFD	5500	6398	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.7	65.0	57.6
ETHANE	17.1	14.7	28.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.3	18.3	13.9
OXYGEN	0.3	0.5	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	1.0	0.1
HELIUM	0.47	0.45	0.16
HEATING VALUE*	972	922	1089
SPECIFIC GRAVITY	0.707	0.713	0.751

	INDEX 1348 SAMPLE 4227	INDEX 1349 SAMPLE 7478	INDEX 1350 SAMPLE 7494
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	WRIGHT NO. 1	V. K. TATE NO. 1	GARDEN CITY AIRPORT NO. 1
LOCATION	SEC. 33, T21S, R34W	SEC. 35, T24S, R31W	SEC. 28, T24, R31
OWNER	SHALLOW WATER REFINING CO.	NATIONAL COOP. REF. ASSOC.	NORTHERN NATURAL GAS CO.
COMPLETED	07/26/45	11/04/59	10/29/59
SAMPLED	02/26/47	03/29/60	04/04/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2537	2688	2658
WELLHEAD PRESSURE,PSIG	918	420	400
OPEN FLOW, MCFD	9115	2060	3500
COMPONENT, MOLE PCT			
METHANE	77.2	46.8	55.3
ETHANE	0.0	1.2	2.5
PROPANE	---	1.0	1.2
N-BUTANE	---	0.1	0.4
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	21.7	37.0	39.2
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.9	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	11.6	0.1
HELIUM	0.73	0.40	0.80
HEATING VALUE*	782	528	662
SPECIFIC GRAVITY	0.645	0.835	0.749

	INDEX 1351 SAMPLE 7517	INDEX 1352 SAMPLE 7695	INDEX 1353 SAMPLE 7697
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	SPRATT	GANO NO. 21-1	GANO NO. 34-1
LOCATION	SEC. 32, T24S, R33W	SEC. 21, T21S, R33W	SEC. 34, T21S, R33W
OWNER	KANSAS NATURAL GAS INC.	A. D. MCKELVY	A. D. MCKELVY
COMPLETED	11/12/59	07/--/60	11/27/59
SAMPLED	04/18/60	09/26/60	09/26/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2556	2588	2629
WELLHEAD PRESSURE,PSIG	362	445	400
OPEN FLOW, MCFD	14500	16300	724
COMPONENT, MOLE PCT			
METHANE	67.0	52.9	49.7
ETHANE	4.4	4.1	5.7
PROPANE	2.7	2.4	2.1
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	22.9	38.2	42.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.50	0.70	0.80
HEATING VALUE*	933	764	668
SPECIFIC GRAVITY	0.723	0.775	0.788

	INDEX 1354 SAMPLE 7771	INDEX 1355 SAMPLE 7772	INDEX 1356 SAMPLE 7773
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	MAUDE GREATHOUSE NO. 20	HIPP NO. 11	GANO NO. 1
LOCATION	SEC. 20, T21S, R32W	SEC. 11, T21S, R33W	SEC. 35, T21S, R33W
OWNER	A. D. MCKELVY	A. D. MCKELVY	A. D. MCKELVY
COMPLETED	11/08/60	11/12/60	NOT GIVEN
SAMPLED	11/12/60	11/12/60	11/12/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2656	2581	NOT GIVEN
WELLHEAD PRESSURE,PSIG	365	430	NOT GIVEN
OPEN FLOW, MCFD	9212	14028	7000
COMPONENT, MOLE PCT			
METHANE	87.8	82.8	83.5
ETHANE	3.3	4.2	2.5
PROPANE	2.0	2.8	1.3
N-BUTANE	0.5	0.7	0.2
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	5.8	8.3	50.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.98	0.90	0.90
HEATING VALUE*	1036	823	538
SPECIFIC GRAVITY	0.793	0.820	0.792

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1357 SAMPLE 7782	INDEX 1358 SAMPLE 7863	INDEX 1359 SAMPLE 7956
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BIERNACKI NO. 16	FINNUP NO. 1-28	BROWN NO. 1
LOCATION	SEC. 16, T24S, R31W	SEC. 28, T21S, R33W	SEC. 33, T21S, R33W
OWNER	A. D. MCKELVY	SHELL OIL CO.	W. L. HARTMAN
COMPLETED	11/19/60	07/21/60	01/28/61
SAMPLED	11/19/60	NOT GIVEN	05/--/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2664	2548	2558
WELLHEAD PRESSURE,PSIG	418	392	415
OPEN FLOW, MCFD	12857	464	5000
COMPONENT, MOLE PCT			
METHANE	56.1	51.3	50.5
ETHANE	3.2	4.0	3.7
PROPANE	1.6	2.3	2.1
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	37.5	40.2	41.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.80	0.80	0.80
HEATING VALUE*	697	694	676
SPECIFIC GRAVITY	0.753	0.778	0.782

	INDEX 1360 SAMPLE 8046	INDEX 1361 SAMPLE 12871	INDEX 1362 SAMPLE 12987
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	KERFOOT A-1	U. S. A. NO. 1	HUGOTON - USA C-1
LOCATION	SEC. 37, T23S, R31W	SEC. 32, T24S, R34W	SEC. 26, T26S, R34W
OWNER	CITIES SERVICE OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/20/61	NOT GIVEN	NOT GIVEN
SAMPLED	06/20/61	06/22/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2664	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	407	235	NOT GIVEN
OPEN FLOW, MCFD	8770	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.2	72.1	72.9
ETHANE	4.0	6.0	4.9
PROPANE	2.1	3.5	2.7
N-BUTANE	0.5	1.0	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	33.8	16.1	17.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.70	0.44	0.45
HEATING VALUE*	756	992	939
SPECIFIC GRAVITY	0.750	0.712	0.695

	INDEX 1363 SAMPLE 12992	INDEX 1364 SAMPLE 12993	INDEX 1365 SAMPLE 15231
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	PANOMA
WELL NAME	REEVES NO. 1	HICKS E NO. 1	U.S.A. "D" NO. 7
LOCATION	SEC. 31, T25S, R33W	SEC. 12, T25S, R32W	SEC. 18, T26S, R34W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	HELMERICH & PAYNE, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	05/14/77
SAMPLED	09/24/71	08/24/71	03/18/78
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2790
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	205
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	495
COMPONENT, MOLE PCT			
METHANE	66.8	60.6	72.1
ETHANE	4.0	2.5	6.0
PROPANE	2.3	1.3	3.4
N-BUTANE	0.5	0.3	1.0
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	25.4	34.2	16.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.58	0.76	0.42
HEATING VALUE*	839	714	1001
SPECIFIC GRAVITY	0.714	0.728	0.718

	INDEX 1366 SAMPLE 15232	INDEX 1367 SAMPLE 7589	INDEX 1368 SAMPLE 3932
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	PANOMA	WAMPLER	WILDCAT
WELL NAME	JONES-I NO. 1	WAMPLER NO. A-2	TRESNAN-MILLER NO. 1
LOCATION	SEC. 29, T26S, R34W	SEC. 30, T21S, R33W	SEC. 26, T22S, R34W
OWNER	HELMERICH & PAYNE, INC.	IMPERIAL OIL OF KANSAS, INC.	CARTER OIL CO.
COMPLETED	09/10/77	11/09/59	NOT GIVEN
SAMPLED	03/17/78	06/22/60	09/14/44
FORMATION	PERM-COUNCIL GROVE	PERM-CHASE GROUP	PERM-DOLOMITE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2813	2519	2608
WELLHEAD PRESSURE,PSIG	194	600	435
OPEN FLOW, MCFD	340	7000	1000
COMPONENT, MOLE PCT			
METHANE	71.7	50.7	52.0
ETHANE	5.6	4.2	16.0
PROPANE	3.0	2.5	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	17.3	39.8	30.8
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.45	0.80	0.74
HEATING VALUE*	973	717	813
SPECIFIC GRAVITY	0.714	0.792	0.762

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1369 SAMPLE 9206	INDEX 1370 SAMPLE 3204	INDEX 1371 SAMPLE 5622
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FORD	FORD	FORD
FIELD	BUCKLIN	PLEASANT VALLEY	PLEASANT VALLEY S
WELL NAME	JAY BELINGER NO. 1	NOT GIVEN	VICE NO. 1
LOCATION	SEC. 7, T29S, R21W	SEC. 34, T27S, R21W	SEC. 14, T28S, R21W
OWNER	TIME PETROLEUM CO.	SINCLAIR PRAIRIE OIL CO.	W. J. COPPINGER
COMPLETED	08/0A/63	06/13/48	02/24/54
SAMPLED	12/26/63	03/19/42	03/04/54
FORMATION	MISS-CHEROKEE	MISS-LIME	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5057	4890	5018
WELLHEAD PRESSURE,PSIG	1520	500	1408
OPEN FLOW, MCFD	3500	NOT GIVEN	8520
COMPONENT, MOLE PCT			
METHANE	83.6	79.8	83.8
ETHANE	4.3	12.1	4.8
PROPANE	1.4	---	1.7
N-BUTANE	0.6	---	0.6
ISOBUTANE	0.1	---	0.5
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	8.6	7.1	7.4
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.50	0.42	0.41
HEATING VALUE*	1011	1025	1043
SPECIFIC GRAVITY	0.648	0.646	0.655

	INDEX 1372 SAMPLE 7641	INDEX 1373 SAMPLE 7644	INDEX 1374 SAMPLE 1874
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FORD	FORD	FRANKLIN
FIELD	WILLROADS	WILLROADS	PAMONA
WELL NAME	L. A. MCCOY NO. 1	MCCOY NO. 1	BARTON NO. 2
LOCATION	SEC. 26, T27S, R24W	SEC. 26, T27S, R24W	SEC. 25, T16S, R17E
OWNER	TENNESSEE GAS TRANSMISSION	TENNESSEE GAS TRANSMISSION	H. H. HAWORTH
COMPLETED	07/30/60	NOT GIVEN	10/01/28
SAMPLED	07/30/60	08/12/60	09/23/29
FORMATION	PERM-CHASE GROUP	MISS-	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	335
DEPTH, FEET	2663	5066	1230
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	425
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1100
COMPONENT, MOLE PCT			
METHANE	64.0	66.9	81.5
ETHANE	0.5	5.9	1.9
PROPANE	0.1	3.3	---
N-BUTANE	TRACE	1.2	---
ISOBUTANE	0.0	0.4	---
N-PENTANE	0.0	0.4	---
ISOPENTANE	TRACE	0.2	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	34.0	20.2	14.5
OXYGEN	0.2	TRACE	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	1.00	0.90	1.05
HEATING VALUE*	660	964	860
SPECIFIC GRAVITY	0.696	0.742	0.627

	INDEX 1375 SAMPLE 3216	INDEX 1376 SAMPLE 3207	INDEX 1377 SAMPLE 7055
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRAHAM	GRANT	GRANT
FIELD	GETTYSBURG	HUGOTON	HUGOTON
WELL NAME	MONTGOMERY NO. 1	BLACK-ELDER	B. M. RADCLIFF NO. 1
LOCATION	SEC. 7, T4S, R23W	SEC. 24, T29S, R35W	SEC. 21, T30S, R35W
OWNER	CITIES SERVICE OIL CO.	UNITED PRODUCING CO.	UNITED PRODUCING CO., INC.
COMPLETED	09/20/41	09/27/37	10/13/42
SAMPLED	03/23/42	03/21/42	05/04/59
FORMATION	PENN-LANSING-KANSAS CITY	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	385	360	360
DEPTH, FEET	3551	NOT GIVEN	2542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	417	362
OPEN FLOW, MCFD	NOT GIVEN	11397	13000
COMPONENT, MOLE PCT			
METHANE	3.1	68.5	74.2
ETHANE	25.3	16.8	6.1
PROPANE	---	---	3.1
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	67.3	13.9	14.0
OXYGEN	0.3	0.3	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	0.1	0.2
HELIUM	2.61	0.41	0.40
HEATING VALUE*	485	595	1013
SPECIFIC GRAVITY	0.962	0.696	0.706

	INDEX 1378 SAMPLE 10824	INDEX 1379 SAMPLE 7268	INDEX 1380 SAMPLE 7356
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	PANOMA	PANOMA
WELL NAME	KERMEYER ESTATE NO. 2	WINGER	ANDERSON NO. 1
LOCATION	SEC. 24, T29S, R37W	SEC. 19, T29S, R37W	SEC. 7, T27S, R37W
OWNER	ASHLAND OIL & REFINING CO.	HUGOTON PRODUCTION CO.	NORTHERN NATURAL GAS CO.
COMPLETED	09/17/66	07/09/59	08/14/59
SAMPLED	12/16/66	10/29/59	01/21/60
FORMATION	PERM-CHASE GROUP	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2690	2880	2694
WELLHEAD PRESSURE,PSIG	343	338	370
OPEN FLOW, MCFD	38000	6727	14670
COMPONENT, MOLE PCT			
METHANE	73.0	71.6	71.0
ETHANE	6.3	4.6	6.3
PROPANE	3.8	3.3	3.4
N-BUTANE	1.7	0.9	0.8
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.6	17.7	17.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	TRACE
HELIUM	0.41	0.40	0.40
HEATING VALUE*	1017	967	972
SPECIFIC GRAVITY	0.712	0.718	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1381 SAMPLE 7477	INDEX 1382 SAMPLE 7732	INDEX 1383 SAMPLE 7983
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	THORPE C NO. 2	JARVIS NO. 2	GOERTZEN B
LOCATION	SEC. 5, T27S, R37W	SEC. 36, T30S, R38W	SEC. 5, T29S, R38W
OWNER	NORTHERN NATURAL GAS CO.	HUGOTON PRODUCTION CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	01/27/60	09/04/60	04/16/61
SAMPLED	03/29/60	10/21/60	05/20/61
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2725	2800	2650
WELLHEAD PRESSURE,PSIG	425	351	367
OPEN FLOW, MCFD	269	5609	931
COMPONENT, MOLE PCT			
METHANE	71.0	67.4	72.7
ETHANE	5.4	7.4	6.6
PROPANE	2.2	4.1	3.4
N-BUTANE	0.5	1.1	0.8
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.7	17.9	15.2
OXYGEN	0.1	0.3	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.40	0.50
HEATING VALUE*	917	1006	997
SPECIFIC GRAVITY	0.705	0.746	0.707

	INDEX 1384 SAMPLE 10883	INDEX 1385 SAMPLE 13116	INDEX 1386 SAMPLE 15034
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	HAMPTON A NO. 2	LUCAS NO. 2	DAVATZ "B" NO. 4
LOCATION	SEC. 2, T28S, R36W	SEC. 33, T30S, R38W	SEC. 13, T28S, R36W
OWNER	CITIES SERVICE OIL CO.	MESA PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	11/07/71	NOT GIVEN
SAMPLED	NOT GIVEN	12/15/71	06/22/77
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2878	2751	2939
WELLHEAD PRESSURE,PSIG	NOT GIVEN	263	201
OPEN FLOW, MCFD	4600	5100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	70.8	72.5
ETHANE	6.3	5.7	6.5
PROPANE	3.6	3.5	3.6
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.6	17.5	15.0
OXYGEN	0.0	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.40	0.44	0.41
HEATING VALUE*	1010	988	1014
SPECIFIC GRAVITY	0.709	0.726	0.715

	INDEX 1387 SAMPLE 6733	INDEX 1388 SAMPLE 8934	INDEX 1389 SAMPLE 8935
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GREELEY	GREELEY
FIELD	PANOMA N	BRADSHAW	BRADSHAW
WELL NAME	HINDMARSH NO. 2	MILLER NO. 1	FLOYD UNIT NO. 1
LOCATION	SEC. 33, T29S, R37W	SEC. 9, T20S, R39W	SEC. 25, T19S, R40W
OWNER	HUGOTON PRODUCTION CO.	HADSON OIL & GAS CO.	HADSON OIL & GAS CO.
COMPLETED	01/27/58	04/--/60	04/--/63
SAMPLED	07/16/58	04/15/63	04/17/63
FORMATION	PERM-COUNCIL GROVE	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2755	NOT GIVEN	2744
WELLHEAD PRESSURE,PSIG	407	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2431	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	64.1	60.4
ETHANE	6.3	5.2	4.8
PROPANE	3.6	2.9	2.8
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	24.6	29.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.40	0.60	0.70
HEATING VALUE*	1016	891	837
SPECIFIC GRAVITY	0.715	0.747	0.754

	INDEX 1390 SAMPLE 14631	INDEX 1391 SAMPLE 14729	INDEX 1392 SAMPLE 7791
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREELEY
FIELD	BYERLY N	BYERLY N	CLIFT
WELL NAME	ROE NO. 1	SELL "B" NO. 1	CLIFT NO. 1
LOCATION	SEC. 29, T17S, R40W	SEC. 3, T17S, R40W	SEC. 9, T19S, R40W
OWNER	ROE BANKS	DORCHESTER EXPLORATION, INC.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	09/24/75	06/04/76	09/13/60
SAMPLED	04/02/76	08/02/76	12/06/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2937	2994	2884
WELLHEAD PRESSURE,PSIG	NOT GIVEN	516	434
OPEN FLOW, MCFD	2150	1721	435
COMPONENT, MOLE PCT			
METHANE	44.4	35.8	52.2
ETHANE	4.3	3.2	4.9
PROPANE	2.9	2.4	2.8
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	45.4	55.3	37.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.95	1.13	1.00
HEATING VALUE*	668	545	748
SPECIFIC GRAVITY	0.820	0.847	0.784

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1393 SAMPLE 8635	INDEX 1394 SAMPLE 14730	INDEX 1395 SAMPLE 141
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREENWOOD
FIELD	CLIFT	WILDCAT	BEAUMONT
WELL NAME	CLIFT NO. 1	WEAR "B" NO. 1	R. B. TEMPLE NO. 2
LOCATION	SEC. 9, T19S, R40W	SEC. 25, T17S, R40W	SEC. 13, T27S, R8E
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	DORCHESTER EXPLORATION, INC.	EMPIRE GAS & FUEL CO.
COMPLETED	09/02/60	05/14/76	07/--/19
SAMPLED	08/17/62	08/02/76	03/13/20
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	2800	2941	1125
WELLHEAD PRESSURE,PSIG	434	522	310
OPEN FLOW, MCFD	435	7624	10000
COMPONENT, MOLE PCT			
METHANE	52.8	52.5	82.1
ETHANE	4.6	4.5	0.0
PROPANE	2.8	2.9	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.8	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	36.9	37.3	16.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.86	1.86	0.92
HEATING VALUE*	753	754	832
SPECIFIC GRAVITY	0.703	0.708	0.620

	INDEX 1396 SAMPLE 145	INDEX 1397 SAMPLE 146	INDEX 1398 SAMPLE 153
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREENWOOD	GREENWOOD	GREENWOOD
FIELD	BEAUMONT	BEAUMONT	BEAUMONT
WELL NAME	C. R. LEWIS NO. 1	T. F. RILEY NO. 1	M. SELBACK NO. 1
LOCATION	SEC. 35, T27S, R8E	SEC. 7, T27S, R4E	SEC. 24, T27S, R8E
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	03/--/19	NOT GIVEN	01/--/19
SAMPLED	03/13/20	03/13/20	03/18/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1174	1118	1142
WELLHEAD PRESSURE,PSIG	125	300	270
OPEN FLOW, MCFD	350	2000	5000
COMPONENT, MOLE PCT			
METHANE	82.5	85.9	84.2
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.4	12.6	14.3
OXYGEN	1.9	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	1.00	0.93	0.89
HEATING VALUE*	836	870	853
SPECIFIC GRAVITY	0.624	0.604	0.611

	INDEX 1399 SAMPLE 155	INDEX 1400 SAMPLE 3554	INDEX 1401 SAMPLE 5649
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREENWOOD	GREENWOOD	GREENWOOD
FIELD	BEAUMONT	NOT GIVEN	NOT GIVEN
WELL NAME	STEWART NO. 3	RUSH NO. 1	MARHENKE LEASE
LOCATION	SEC. 12, T27S, R8E	SEC. 9, T27S, R11E	NOT GIVEN
OWNER	EMPIRE GAS & FUEL CO.	H. F. OZENBERGER ET AL.	STERLING DAVIS
COMPLETED	09/--/19	NOT GIVEN	NOT GIVEN
SAMPLED	03/18/20	07/07/42	07/13/54
FORMATION	PENN-	PENN-KANSAS CITY	NOT GIVEN
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1186	960	NOT GIVEN
WELLHEAD PRESSURE,PSIG	265	460	NOT GIVEN
OPEN FLOW, MCFD	2700	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.0	31.9	54.7
ETHANE	0.0	0.0	0.1
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	10.0	66.2	42.0
OXYGEN	0.9	0.5	1.4
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.1	0.5
HELIUM	0.95	1.31	1.16
HEATING VALUE*	891	323	556
SPECIFIC GRAVITY	0.596	0.826	0.737

	INDEX 1402 SAMPLE 957	INDEX 1403 SAMPLE 997	INDEX 1404 SAMPLE 1873
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREENWOOD	GREENWOOD	GREENWOOD
FIELD	REECE	REECE	REECE
WELL NAME	CHRIST KUHN NO. 2	CHRIST KUHN NO. 1	OLSEN NO. 1
LOCATION	SEC. 28, T26S, R9E	SEC. 28, T26S, R9E	SEC. 28, T26S, R9E
OWNER	MAGNOLIA PETROLEUM CO.	MAGNOLIA PETROLEUM CO.	REED & WILSON
COMPLETED	NOT GIVEN	02/10/25	--/--/27
SAMPLED	12/26/24	02/13/25	09/21/29
FORMATION	-LIME	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	953	875	NOT GIVEN
WELLHEAD PRESSURE,PSIG	240	224	NOT GIVEN
OPEN FLOW, MCFD	8115	3478	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	73.3	75.8
ETHANE	2.3	1.5	0.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.5	22.4	21.8
OXYGEN	0.5	0.6	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	1.3	0.2
HELIUM	1.04	0.95	1.06
HEATING VALUE*	795	769	784
SPECIFIC GRAVITY	0.659	0.667	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1405 SAMPLE 5174	INDEX 1406 SAMPLE 6506	INDEX 1407 SAMPLE 7317
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREENWOOD	HAMILTON	HAMILTON
FIELD	TUCKER	BRADSHAW	BRADSHAW
WELL NAME	BUTLER NO. 1	WEDEL NO. 1	TATE A-1
LOCATION	SEC. 15, T26S, R11E	SEC. 1, T22S, R41W	SEC. 16, T24S, R41W
OWNER	WARD A. MCGINNIS	KANSAS-NEBRASKA NAT. GAS CO.	HAMILTON BROS., INC.
COMPLETED	--/--/26	12/13/57	NOT GIVEN
SAMPLED	02/25/52	02/18/58	12/26/59
FORMATION	PENN-DOUGLAS	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	365	360	360
DEPTH, FEET	620	2752	2305
WELLHEAD PRESSURE,PSIG	240	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	3200	887
COMPONENT, MOLE PCT			
METHANE	58.5	62.9	48.2
ETHANE	0.1	5.5	4.2
PROPANE	0.1	3.1	3.1
N-BUTANE	0.0	1.0	1.0
ISOBUTANE	0.0	0.3	0.5
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	39.7	25.8	41.2
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	1.38	0.60	1.00
HEATING VALUE*	597	891	726
SPECIFIC GRAVITY	0.715	0.752	0.610

	INDEX 1408 SAMPLE 7358	INDEX 1409 SAMPLE 7601	INDEX 1410 SAMPLE 7607
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	TATE A NO. 1-16	P. A. CRAIG NO. 1-24	J. B. OWINGS NO. 1-5
LOCATION	SEC. 16, T24S, R41W	SEC. 24, T21S, R42W	SEC. 5, T24S, R41W
OWNER	HAMILTON BROS., INC.	MAYLO OIL CO.	HAMILTON BROS., INC.
COMPLETED	NOT GIVEN	07/09/60	NOT GIVEN
SAMPLED	01/25/60	07/09/60	07/16/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2305	2765	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	47.2	49.5	41.0
ETHANE	4.3	4.6	3.7
PROPANE	3.3	3.5	3.1
N-BUTANE	1.1	1.3	1.3
ISOBUTANE	0.6	0.2	0.2
N-PENTANE	0.3	0.6	0.3
ISOPENTANE	0.4	0.7	0.3
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.6	0.9	0.2
NITROGEN	40.8	35.9	48.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.5	0.1
HELIUM	0.90	0.80	1.00
HEATING VALUE*	767	839	649
SPECIFIC GRAVITY	0.832	0.847	0.842

	INDEX 1411 SAMPLE 7608	INDEX 1412 SAMPLE 7634	INDEX 1413 SAMPLE 7664
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	TATE A NO. 1-16	J. B. OWINGS NO. 1-5	J. E. TRACY NO. 1-33
LOCATION	SEC. 16, T24S, R41W	SEC. 5, T24S, R41W	SEC. 33, T23S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	12/26/59	NOT GIVEN	08/15/60
SAMPLED	07/16/60	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WINFIELD	-UPPER ZONE	PERM-WINFIELD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2305	NOT GIVEN	2306
WELLHEAD PRESSURE,PSIG	321	NOT GIVEN	262
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1536
COMPONENT, MOLE PCT			
METHANE	47.0	41.1	44.8
ETHANE	4.5	3.6	4.0
PROPANE	3.5	3.0	2.9
N-BUTANE	1.2	1.2	1.0
ISOBUTANE	1.0	0.3	0.5
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	40.6	48.7	44.8
OXYGEN	TRACE	0.0	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	1.00	1.00	0.90
HEATING VALUE*	758	632	682
SPECIFIC GRAVITY	0.825	0.833	0.826

	INDEX 1414 SAMPLE 7702	INDEX 1415 SAMPLE 7703	INDEX 1416 SAMPLE 7704
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	MATTIE MAXFIELD NO. 1-30	D. CONNOR NO. 1-30	U.S.A. HARBISON NO. 1-22
LOCATION	SEC. 30, T22S, R40W	SEC. 30, T23S, R40W	SEC. 22, T24S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/04/60	10/01/60	10/04/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2594	2440	2310
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	NOT GIVEN
OPEN FLOW, MCFD	3305	1050	1300
COMPONENT, MOLE PCT			
METHANE	57.7	55.6	44.9
ETHANE	5.9	5.1	4.2
PROPANE	3.5	3.3	3.2
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	29.9	33.0	44.0
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.70	1.10
HEATING VALUE*	858	822	699
SPECIFIC GRAVITY	0.777	0.785	0.824

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1417 SAMPLE 7723	INDEX 1418 SAMPLE 7890	INDEX 1419 SAMPLE 7986
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	HOWELL NO. 1	GRISSOM NO. 1-4	TATE A NO. 1-16
LOCATION	SEC. 21, T21S, R41W	SEC. 8, T22S, R41W	SEC. 16, T24S, R41W
OWNER	MAYFLO OIL CO.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	09/09/60	NOT GIVEN	12/26/59
SAMPLED	NOT GIVEN	05/01/61	06/02/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-WINFIELD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2770	2750	2305
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	321
OPEN FLOW, MCFD	1400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.7	60.2	48.5
ETHANE	5.8	5.6	4.5
PROPANE	3.3	3.1	3.3
N-BUTANE	1.0	0.9	1.1
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	28.4	28.4	40.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.70	0.60	0.90
HEATING VALUE*	867	856	739
SPECIFIC GRAVITY	0.766	0.757	0.810

	INDEX 1420 SAMPLE 7987	INDEX 1421 SAMPLE 7988	INDEX 1422 SAMPLE 7989
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	C. A. TATE D NO. 1-9	J. E. TRACY NO. 1-33	MATTIE MAXFIELD NO. 1-30
LOCATION	SEC. 9, T24S, R41W	SEC. 33, T23S, R41W	SEC. 30, T22S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	05/30/61	08/15/60	NOT GIVEN
SAMPLED	06/02/61	06/02/61	06/02/61
FORMATION	PERM-WINFIELD	PERM-WINFIELD	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2274	2306	NOT GIVEN
WELLHEAD PRESSURE,PSIG	319	262	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	47.8	45.4	60.1
ETHANE	4.5	4.1	5.8
PROPANE	3.2	3.0	3.4
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	41.2	44.4	28.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	1.00	0.90	0.60
HEATING VALUE*	730	689	869
SPECIFIC GRAVITY	0.813	0.821	0.762

	INDEX 1423 SAMPLE 7990	INDEX 1424 SAMPLE 7991	INDEX 1425 SAMPLE 7992
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	GRISSOM NO. 1-8	KEITH ROSSON NO. 1-32	U. W. SIMON NO. 1-33
LOCATION	SEC. 8, T23S, R41W	SEC. 32, T22S, R40W	SEC. 33, T22S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	03/03/61	03/17/61	12/10/60
SAMPLED	06/02/61	06/02/61	06/02/61
FORMATION	PERM-WINFIELD	PERM-WINFIELD	PERM-WINFIELD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2738	2600	2586
WELLHEAD PRESSURE,PSIG	255	353	356
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.6	61.0	58.8
ETHANE	5.9	5.9	5.8
PROPANE	3.3	3.5	3.4
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	28.3	26.8	29.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.60	0.60	0.60
HEATING VALUE*	876	892	856
SPECIFIC GRAVITY	0.770	0.762	0.766

	INDEX 1426 SAMPLE 8062	INDEX 1427 SAMPLE 8104	INDEX 1428 SAMPLE 8255
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	LARRY DIKEMAN NO. 1-16	CARL LEWIS NO. 1-6	GEORGE T. INGE NO. 1-9
LOCATION	SEC. 16, T22W, R40S	SEC. 6, T22S, R41W	SEC. 9, T23S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	06/26/61	07/25/61	10/03/61
SAMPLED	06/26/61	07/24/61	12/29/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2700	2752	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.4	58.7	56.8
ETHANE	5.9	5.8	5.2
PROPANE	3.5	3.5	3.2
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	27.2	29.3	31.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.60	0.70	0.69
HEATING VALUE*	890	861	838
SPECIFIC GRAVITY	0.766	0.771	0.781

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1429 SAMPLE 8259	INDEX 1430 SAMPLE 8357	INDEX 1431 SAMPLE 8358
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	F. J. GILLAM NO. 1-15	F. ADAMS NO. 1-31	W. M. HALTHILL NO. 1-14
LOCATION	SEC. 15, T21S, R41W	SEC. 31, T22S, R40W	SEC. 14, T24S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	10/09/61	NOT GIVEN	11/30/61
SAMPLED	12/22/61	02/--/62	12/16/61
FORMATION	PERM-WINFIELD	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2766	2590	2317
WELLHEAD PRESSURE,PSIG	321	465	465
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.9	59.7	49.5
ETHANE	5.4	4.7	4.0
PROPANE	3.2	2.9	3.0
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.9	29.4	40.3
OXYGEN	0.0	0.5	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.68	0.61	0.96
HEATING VALUE*	863	835	720
SPECIFIC GRAVITY	0.755	0.763	0.799

	INDEX 1432 SAMPLE 8624	INDEX 1433 SAMPLE 8625	INDEX 1434 SAMPLE 8626
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	OCHS UNIT NO. 1	FRAZIER UNIT NO. 1	BUHRLE UNIT NO. 1
LOCATION	SEC. 16, T23S, R41W	SEC. 34, T21S, R41W	SEC. 28, T22S, R41W
OWNER	LVO CORP	HADSON OIL & GAS CO.	HADSON OIL & GAS CO.
COMPLETED	07/--/62	07/--/62	07/--/62
SAMPLED	07/31/62	07/31/62	07/30/62
FORMATION	PERM-WINFIELD	PERM-	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2466	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	359	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	150	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.7	60.3	59.7
ETHANE	4.8	5.5	5.5
PROPANE	3.1	3.3	3.4
N-BUTANE	1.0	1.1	1.0
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	35.4	28.0	28.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.74	0.66	0.64
HEATING VALUE*	783	872	874
SPECIFIC GRAVITY	0.787	0.763	0.768

	INDEX 1435 SAMPLE 8628	INDEX 1436 SAMPLE 8754	INDEX 1437 SAMPLE 8828
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	HATFIELD UNIT NO. 1	WITT UNIT NO. 1	WOLF NO. 1
LOCATION	SEC. 31, T21S, R41W	SEC. 21, T23S, R40W	SEC. 17, T23S, R40W
OWNER	HADSON OIL & GAS CO.	LVO CORP	LIVINGSTON OIL CO.
COMPLETED	07/17/62	10/--/62	12/--/62
SAMPLED	07/30/62	11/05/62	01/15/63
FORMATION	PERM-CHASE GROUP	PERM-WINFIELD	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2528	2548
WELLHEAD PRESSURE,PSIG	NOT GIVEN	294	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	727	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.9	57.8	58.9
ETHANE	5.5	5.0	5.2
PROPANE	3.2	3.2	3.4
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.3	30.8	29.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.66	0.65	0.65
HEATING VALUE*	865	837	867
SPECIFIC GRAVITY	0.764	0.775	0.775

	INDEX 1438 SAMPLE 8831	INDEX 1439 SAMPLE 8833	INDEX 1440 SAMPLE 8834
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	JOHNSON UNIT NO. 1	DURBIN NO. 1	BOLTZ NO. 1
LOCATION	SEC. 22, T21S, R41W	SEC. 19, T22S, R40W	NOT GIVEN
OWNER	HADSON OIL & GAS CO.	LIVINGSTON OIL CO.	HADSON OIL & GAS CO.
COMPLETED	01/--/63	12/--/62	NOT GIVEN
SAMPLED	01/15/63	01/15/63	02/--/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2773	2648	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.3	60.7	56.8
ETHANE	5.3	5.4	4.5
PROPANE	3.4	3.5	3.1
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.3	27.2	32.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.1
HELIUM	0.64	0.62	0.78
HEATING VALUE*	861	896	819
SPECIFIC GRAVITY	0.772	0.768	0.777

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1441 SAMPLE 8903	INDEX 1442 SAMPLE 8905	INDEX 1443 SAMPLE 8936
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	WILLIAM BOCK NO. 1-10	J. B. SHASTIC NO. 1-5	GRISSOM UNIT NO. 1
LOCATION	SEC. 10, T21S, R41W	SEC. 5, T22S, R41W	SEC. 9, T22S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HADSON OIL & GAS CO.
COMPLETED	03/20/63	03/12/63	04/--/63
SAMPLED	03/20/63	03/12/63	04/17/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2764	3746	2750
WELLHEAD PRESSURE,PSIG	465	465	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.1	61.0	61.1
ETHANE	5.1	5.3	5.3
PROPANE	3.5	3.2	3.1
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	27.5
NITROGEN	27.7	27.6	0.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	0.1	0.1	0.60
HELIUM	0.69	0.65	869
HEATING VALUE*	865	871	0.760
SPECIFIC GRAVITY	0.755	0.760	

	INDEX 1444 SAMPLE 8937	INDEX 1445 SAMPLE 9103	INDEX 1446 SAMPLE 9104
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	HOWELL UNIT NO. 1	BUKRLIE B	STANLEY
LOCATION	SEC. 26, T21S, R41W	NOT GIVEN	NOT GIVEN
OWNER	HADSON OIL & GAS CO.	HADSON GAS & OIL CO.	HADSON GAS & OIL CO.
COMPLETED	04/15/63	NOT GIVEN	NOT GIVEN
SAMPLED	04/17/63	07/17/63	07/17/63
FORMATION	PERM-CHASE GROUP	PERM-	-KOIDU
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2800	2632	2657
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	463
OPEN FLOW, MCFD	NOT GIVEN	1020	7500
COMPONENT, MOLE PCT			
METHANE	62.4	59.6	50.6
ETHANE	5.3	5.6	4.8
PROPANE	2.9	3.3	2.8
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	26.6	28.5	37.2
OXYGEN	0.0	TRACE	1.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.60	0.60	0.70
HEATING VALUE*	873	868	734
SPECIFIC GRAVITY	0.752	0.767	0.799

	INDEX 1447 SAMPLE 9708	INDEX 1448 SAMPLE 5971	INDEX 1449 SAMPLE 11419
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HARPER
FIELD	BRADSHAW	WILDCAT	H-K-W
WELL NAME	CHEATUM UNIT NO. 1	TATE NO. 1	JADE NO. 1
LOCATION	SEC. 2, T24S, R41W	SEC. 17, T24S, R42W	SEC. 15, T35S, R6W
OWNER	TEXACO INC.	MONSANTO CHEMICAL CO.	JAYSON OIL CO.
COMPLETED	09/01/63	11/30/55	08/--/66
SAMPLED	12/24/64	11/27/55	03/28/68
FORMATION	PERM-CHASE GROUP	PERM-SALT	PENN-STALNAKER
GEOLOGIC PROVINCE CODE	360	360	375
DEPTH, FEET	2310	1540	3750
WELLHEAD PRESSURE,PSIG	450	NOT GIVEN	1525
OPEN FLOW, MCFD	4900	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.4	0.5	80.6
ETHANE	4.7	0.0	4.9
PROPANE	3.1	0.0	3.1
N-BUTANE	1.0	0.0	1.2
ISOBUTANE	0.5	0.0	0.5
N-PENTANE	0.2	0.0	0.3
ISOPENTANE	0.2	0.0	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.3
NITROGEN	36.4	99.0	7.9
OXYGEN	0.2	0.2	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.86	0.11	0.23
HEATING VALUE*	773	4	1096
SPECIFIC GRAVITY	0.793	0.966	0.693

	INDEX 1450 SAMPLE 14301	INDEX 1451 SAMPLE 14302	INDEX 1452 SAMPLE 13267
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	HARPER	HARPER	HIBBORD NE
WELL NAME	CLEMENTS NO. 1	CLEMENTS NO. 1	LEWIS B NO. 1
LOCATION	SEC. 11, T32S, R7W	SEC. 11, T32S, R7W	SEC. 31, T33S, R8W
OWNER	BEREN CORP.	BEREN CORP.	MCCOY PETROLEUM CO.
COMPLETED	08/07/74	08/07/74	05/17/72
SAMPLED	08/07/74	03/14/75	06/09/72
FORMATION	ORDO-SIMPSON	PENN-LANSING-KANSAS CITY	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4713	3960	4483
WELLHEAD PRESSURE,PSIG	1441	600	1611
OPEN FLOW, MCFD	1272	40	5500
COMPONENT, MOLE PCT			
METHANE	63.6	63.7	86.5
ETHANE	7.1	7.2	6.2
PROPANE	5.1	5.0	2.7
N-BUTANE	1.4	1.4	0.9
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	21.2	21.0	2.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.61	0.61	0.11
HEATING VALUE*	994	990	1129
SPECIFIC GRAVITY	0.769	0.766	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1453 SAMPLE 14682	INDEX 1454 SAMPLE 4951	INDEX 1455 SAMPLE 8888
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	LITTLE SANDY CREEK	SPIVEY-GRABS	SPIVEY-GRABS
WELL NAME	WILLIAMS NO. 2	STODDARD NO. 1	GATES NO. 1 NS
LOCATION	SEC. 31, T32S, R9W	SEC. 17, T31S, R8W	SEC. 26, T31S, R9W
OWNER	ENERGY RESERVES GROUP, INC.	DEEP ROCK OIL CORP.	MULL DRILLING CO.
COMPLETED	03/24/76	06/14/50	04/--/58
SAMPLED	05/25/76	10/15/50	03/04/63
FORMATION	MISS-	MISS-LIME	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4314	4410	4475
WELLHEAD PRESSURE,PSIG	1410	NOT GIVEN	1045
OPEN FLOW, MCFD	6500	NOT GIVEN	1730
COMPONENT, MOLE PCT			
METHANE	88.9	86.9	85.2
ETHANE	5.4	6.0	4.4
PROPANE	2.2	2.4	1.8
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.9	2.6	6.1
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	0.7
HELIUM	0.10	0.16	0.10
HEATING VALUE*	1111	1105	1051
SPECIFIC GRAVITY	0.636	0.648	0.654

	INDEX 1456 SAMPLE 8889	INDEX 1457 SAMPLE 13266	INDEX 1458 SAMPLE 9603
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	SPIVEY-GRABS	WHARTON	WILDCAT
WELL NAME	GATES NO. 2 NS	HALBOWER B NO 1	DOROTHY MEINEKE NO. 1
LOCATION	SEC. 26, T31S, R9W	SEC. 13, T34S, R8W	SEC. 26, T33S, R6W
OWNER	MULL DRILLING CO.	MCCOY PETROLEUM CO.	SUNRAY DX OIL CO.
COMPLETED	12/--/59	03/24/72	01/28/63
SAMPLED	03/04/63	06/09/72	10/16/64
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4450	4597	4384
WELLHEAD PRESSURE,PSIG	1125	1640	1600
OPEN FLOW, MCFD	1550	6224	2997
COMPONENT, MOLE PCT			
METHANE	77.3	85.7	83.2
ETHANE	3.5	6.1	6.5
PROPANE	1.4	2.6	2.8
N-BUTANE	0.6	0.8	1.0
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	14.2	2.5	5.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.1	TRACE
HELIUM	1.80	0.11	0.18
HEATING VALUE*	941	1120	1115
SPECIFIC GRAVITY	0.667	0.666	0.673

	INDEX 1459 SAMPLE 12765	INDEX 1460 SAMPLE 4777	INDEX 1461 SAMPLE 9535
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARVEY	HARVEY
FIELD	WILDCAT	BURRTON	BURRTON N
WELL NAME	HUGHBANKS NO. 1	J. WARKENTINE	PETERS NO. 1
LOCATION	SEC. 23, T33S, R9W	SEC. 16, T23S, R3W	SEC. 31, T22S, R3W
OWNER	LEBEN OIL CORP.	ANISWORTH BROS., INC.	DRILLERS PRODUCTION CO., INC
COMPLETED	07/22/70	07/16/49	06/01/64
SAMPLED	04/13/71	10/17/49	08/11/64
FORMATION	PENN-STALNAKER	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3725	3304	3311
WELLHEAD PRESSURE,PSIG	500	936	625
OPEN FLOW, MCFD	1750	6	350
COMPONENT, MOLE PCT			
METHANE	85.1	83.9	80.6
ETHANE	3.4	6.0	6.6
PROPANE	2.4	2.8	3.4
N-BUTANE	0.7	0.9	1.4
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.3	TRACE	0.2
HEXANES PLUS	0.5	0.2	0.5
NITROGEN	5.9	4.9	5.6
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.24	0.31	0.30
HEATING VALUE*	1099	1098	1154
SPECIFIC GRAVITY	0.671	0.665	0.704

	INDEX 1462 SAMPLE 1723	INDEX 1463 SAMPLE 2621	INDEX 1464 SAMPLE 2685
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	HALSTEAD	HOLLOW	SPERLING
WELL NAME	HOURY NO. 1	A. R. NIKKEL NO. 2	SPERLING NO. 1
LOCATION	SEC. 11, T23S, R2W	SEC. 8, T22S, R3W	SEC. 23, T22S, R2W
OWNER	MCPHERSON OIL & GAS DEV. CO.	SHELL OIL CO.	IMO OIL & GAS & WOOD BROS.
COMPLETED	10/--/28	05/20/33	NOT GIVEN
SAMPLED	03/09/29	06/29/33	12/13/34
FORMATION	MISS-CHERT	MISS-LIME	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2942	3152	2950
WELLHEAD PRESSURE,PSIG	1000	900	NOT GIVEN
OPEN FLOW, MCFD	7000	1440	7150
COMPONENT, MOLE PCT			
METHANE	59.3	82.4	73.0
ETHANE	21.3	13.4	21.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.5	3.5	5.3
OXYGEN	0.2	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.41	0.34	0.38
HEATING VALUE*	982	1075	1116
SPECIFIC GRAVITY	0.739	0.637	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1465 SAMPLE 12417	INDEX 1466 SAMPLE 5231	INDEX 1467 SAMPLE 15264
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	SPERLING N	WALL	WALL
WELL NAME	WEDEL NO. 2	WALL NO. 1	J. SCHRAG NO. 1
LOCATION	SEC. 12, T22S, R2W	SEC. 25, T22S, R3W	SEC. 24, T22S, R3W
OWNER	J. A. ALLISON	DRILLERS PRODUCTION CO., INC	GEAR PETROLEUM CO.
COMPLETED	08/05/70	12/29/51	09/20/77
SAMPLED	09/19/70	04/14/52	04/21/78
FORMATION	MISS-OSAGE	MISS-LIME	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2971	3145	3200
WELLHEAD PRESSURE,PSIG	780	725	850
OPEN FLOW, MCFD	3400	569	8000
COMPONENT, MOLE PCT			
METHANE	82.3	82.6	83.4
ETHANE	5.6	5.9	6.0
PROPANE	3.0	2.9	3.0
N-BUTANE	0.8	0.9	1.1
ISOBUTANE	0.6	0.4	0.8
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.5	5.8	4.9
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.38	0.35	0.33
HEATING VALUE*	1087	1101	1116
SPECIFIC GRAVITY	0.671	0.674	0.673

	INDEX 1468 SAMPLE 15319	INDEX 1469 SAMPLE 10278	INDEX 1470 SAMPLE 6651
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HASKELL
FIELD	WALL N	WEDEL	EUBANK
WELL NAME	SCHRAG "D" NO. 1	WEDEL	EUBANK NO. 1
LOCATION	SEC. 24, T22S, R3W	NOT GIVEN	SEC. 28, T28S, R34W
OWNER	HAROLD J. MILBURN	LEE PHILLIPS	WHITE EAGLE OIL CO.
COMPLETED	12/03/77	NOT GIVEN	03/03/58
SAMPLED	07/17/78	11/11/65	06/25/58
FORMATION	MISS-	MISS-	MISS-CHESTER
GEOLOGIC PROVINCE CODE	375	375	360
DEPTH, FEET	3183	2966	5429
WELLHEAD PRESSURE,PSIG	826	850	800
OPEN FLOW, MCFD	5800	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.7	82.6	53.4
ETHANE	6.0	5.8	7.0
PROPANE	3.0	2.7	10.3
N-BUTANE	1.0	1.0	5.3
ISOBUTANE	0.5	0.6	3.2
N-PENTANE	0.3	0.4	1.1
ISOPENTANE	0.3	0.2	1.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.8
NITROGEN	4.8	5.9	16.4
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.33	0.38	0.40
HEATING VALUE*	1115	1101	1376
SPECIFIC GRAVITY	0.673	0.674	0.964

	INDEX 1471 SAMPLE 7002	INDEX 1472 SAMPLE 7054	INDEX 1473 SAMPLE 7207
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	COLLINGWOOD NO. 1	O. V. RAY NO. 1	J. D. G. STUCKY NO. 1
LOCATION	SEC. 5, T29S, R34W	SEC. 21, T29S, R34W	SEC. 29, T28S, R34W
OWNER	CITIES SERVICE OIL CO.	UNITED PRODUCING CO., INC.	UNITED PRODUCING CO., INC.
COMPLETED	NOT GIVEN	NOT GIVEN	05/14/58
SAMPLED	03/17/59	04/29/59	09/02/59
FORMATION	MISS-CHESTER	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5430	NOT GIVEN	5460
WELLHEAD PRESSURE,PSIG	1317	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.0	73.2	51.1
ETHANE	4.0	6.3	0.0
PROPANE	2.3	3.3	5.9
N-BUTANE	0.8	0.9	3.9
ISOBUTANE	0.4	0.5	2.0
N-PENTANE	0.2	0.2	0.7
ISOPENTANE	0.2	0.2	2.8
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.2	0.2	1.2
NITROGEN	13.3	14.7	30.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	1.20	0.40	1.60
HEATING VALUE*	983	1019	1096
SPECIFIC GRAVITY	0.684	0.715	0.927

	INDEX 1474 SAMPLE 7354	INDEX 1475 SAMPLE 7667	INDEX 1476 SAMPLE 8366
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	E. M. GREGG NO. 2	EUBANK D NO. 3	HALL K-4
LOCATION	SEC. 5, T29S, R34W	SEC. 33, T28S, R34W	SEC. 5, T29S, R34W
OWNER	UNITED PRODUCING CO., INC.	HELMERICH & PAYNE, INC.	CITIES SERVICES OIL CO.
COMPLETED	11/19/59	06/25/60	08/10/60
SAMPLED	01/21/60	09/07/60	01/08/62
FORMATION	PENN-MORROW	PENN-KANSAS CITY	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5125	4083	5390
WELLHEAD PRESSURE,PSIG	1210	1080	1281
OPEN FLOW, MCFD	NOT GIVEN	7116	15000
COMPONENT, MOLE PCT			
METHANE	73.3	63.2	72.4
ETHANE	5.3	4.7	3.4
PROPANE	3.3	2.6	2.2
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	15.9	24.7	18.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.7	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	1.70	0.70	1.67
HEATING VALUE*	985	869	914
SPECIFIC GRAVITY	0.702	0.748	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1477 SAMPLE 8864	INDEX 1478 SAMPLE 8865	INDEX 1479 SAMPLE 9767
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	HALL K NO. 4	HALL K NO. 4	HALL K NO. 4
LOCATION	SEC. 5, T29S, R34W	SEC. 5, T29S, R34W	SEC. 5, T29S, R34W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/01/60	07/01/60	08/19/60
SAMPLED	02/01/63	02/01/63	04/01/65
FORMATION	PENN-TORONTO & LANSING-KC	MISS-CHESTER	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4032	NOT GIVEN	4032
WELLHEAD PRESSURE, PSIG	1146	NOT GIVEN	924
OPEN FLOW, MCFD	11400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.8	58.2	60.4
ETHANE	4.4	4.4	4.5
PROPANE	2.7	2.7	2.5
N-BUTANE	1.0	1.0	0.7
ISOBUTANE	0.2	0.2	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	32.2	32.1	29.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.67	0.64	0.66
HEATING VALUE*	815	814	824
SPECIFIC GRAVITY	0.771	0.769	0.753

	INDEX 1480 SAMPLE 9781	INDEX 1481 SAMPLE 3202	INDEX 1482 SAMPLE 3210
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	HUGOTON	HUGOTON
WELL NAME	SPRUNGER C NO. 1	TRIMPA NO. 1	ELLIOTT NO. 1
LOCATION	SEC. 20, T28S, R34W	SEC. 28, T28S, R33W	SEC. 30, T29S, R33W
OWNER	NORTHERN NAT. GAS PROD. CO.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	12/08/58	10/14/36	01/11/36
SAMPLED	03/05/65	03/21/42	03/21/42
FORMATION	PENN-MARMATON	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4709	2640	2600
WELLHEAD PRESSURE, PSIG	298	436	415
OPEN FLOW, MCFD	293	116	15320
COMPONENT, MOLE PCT			
METHANE	76.4	64.6	70.0
ETHANE	4.8	11.7	12.9
PROPANE	2.8	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	12.3	22.6	16.2
OXYGEN	TRACE	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.91	0.59	0.48
HEATING VALUE*	1030	864	940
SPECIFIC GRAVITY	0.698	0.707	0.686

	INDEX 1483 SAMPLE 7316	INDEX 1484 SAMPLE 12860	INDEX 1485 SAMPLE 6996
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	HUGOTON	HUGOTON	KOENIG
WELL NAME	CORNELSON NO. 1-A	ATKINS G-1	KOENIG NO. 1
LOCATION	SEC. 36, T28S, R34W	SEC. 8, T27S, R33W	SEC. 12, T29S, R34W
OWNER	HELMERICH & PAYNE, INC.	CITIES SERVICE OIL CO.	W. J. COPPINGER
COMPLETED	10/24/59	NOT GIVEN	12/15/58
SAMPLED	12/16/59	06/23/71	03/10/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2624	NOT GIVEN	5280
WELLHEAD PRESSURE, PSIG	338	NOT GIVEN	1440
OPEN FLOW, MCFD	12382	NOT GIVEN	1770
COMPONENT, MOLE PCT			
METHANE	70.6	72.0	69.4
ETHANE	5.5	4.8	6.0
PROPANE	2.9	2.4	3.2
N-BUTANE	0.8	1.1	0.8
ISOBUTANE	0.3	0.0	0.6
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	18.9	18.4	18.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.50	0.51	0.50
HEATING VALUE*	944	936	972
SPECIFIC GRAVITY	0.714	0.702	0.727

	INDEX 1486 SAMPLE 12253	INDEX 1487 SAMPLE 13154	INDEX 1488 SAMPLE 10689
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KOENIG	KOENIG E	LEMON NE
WELL NAME	LIGHT D-1	LEMON NO. 1	ROHMEYER OPER. UNIT NO. 1
LOCATION	SEC. 1, T29S, R34W	SEC. 8, T29S, R33W	SEC. 30, T29S, R32W
OWNER	CITIES SERVICE OIL CO.	MALLONEE-MAHONEY, INC.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/20/70	08/30/71	06/29/66
SAMPLED	05/06/70	02/29/72	08/12/66
FORMATION	PENN-MORROW	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5351	5080	5232
WELLHEAD PRESSURE, PSIG	749	1167	1374
OPEN FLOW, MCFD	14500	4200	3650
COMPONENT, MOLE PCT			
METHANE	69.2	71.7	73.4
ETHANE	5.7	7.2	5.8
PROPANE	3.4	4.7	3.4
N-BUTANE	0.8	1.1	1.0
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	19.3	13.7	14.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.53	0.27	0.16
HEATING VALUE*	953	1061	1026
SPECIFIC GRAVITY	0.723	0.731	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1489 SAMPLE 14967	INDEX 1490 SAMPLE 14990	INDEX 1491 SAMPLE 8777
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	PANOMA	PANOMA	VICTORY
WELL NAME	UNGLES A-2	ENGLER NO. B-1	WILSON GAS UNIT E NO. 2
LOCATION	SEC. 36, T30N, R34W	SEC. 22, T27S, R34W	SEC. 30, T30S, R33W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	10/03/62
SAMPLED	09/15/77	05/06/77	11/20/62
FORMATION	PENN-LANSING	PERM-COUNCIL GROVE	PENN-LANSING A
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4161	2971	4107
WELLHEAD PRESSURE,PSIG	929	269	875
OPEN FLOW, MCFD	1411	1000	2320
COMPONENT, MOLE PCT			
METHANE	86.5	70.5	71.0
ETHANE	5.8	5.8	4.7
PROPANE	2.7	3.1	2.8
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.6	18.3	16.5
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.17	0.48	0.81
HEATING VALUE*	1132	958	943
SPECIFIC GRAVITY	0.658	0.715	0.709

	INDEX 1492 SAMPLE 10339	INDEX 1493 SAMPLE 12659	INDEX 1494 SAMPLE 9643
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HODGEMAN	HODGEMAN
FIELD	VICTORY	GRONER	REGINER
WELL NAME	U. ANTON B, NO. 1	GRONER NO. 1	P. REGNIER NO. 1
LOCATION	SEC. 21, T30S, R33W	SEC. 1, T23S, R21W	SEC. 2, T24S, R21W
OWNER	PAN AMERICAN PETROLEUM CORP.	RICHARD R. HORNER	SUNRAY DX OIL CO.
COMPLETED	11/06/62	NOT GIVEN	09/28/64
SAMPLED	12/21/65	02/03/71	11/24/64
FORMATION	PENN-MORROW	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5228	4512	4617
WELLHEAD PRESSURE,PSIG	862	1243	1300
OPEN FLOW, MCFD	953	1540	2500
COMPONENT, MOLE PCT			
METHANE	78.1	55.3	59.4
ETHANE	5.9	3.7	3.7
PROPANE	3.3	1.7	1.4
N-BUTANE	0.9	0.5	0.4
ISOBUTANE	0.6	0.3	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	9.7	35.0	31.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.60	2.65	2.38
HEATING VALUE*	1068	707	751
SPECIFIC GRAVITY	0.694	0.743	0.731

	INDEX 1495 SAMPLE 9673	INDEX 1496 SAMPLE 3251	INDEX 1497 SAMPLE 3252
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HODGEMAN	JEFFERSON	JEFFERSON
FIELD	REGINER	MCLOUTH	MCLOUTH
WELL NAME	MARY HOGAN NO. 1	OART NO. 1	ALBERT BARTLETT NO. 2
LOCATION	SEC. 2, T24S, R21W	SEC. 9, T10S, R20E	SEC. 33, T9S, R20E
OWNER	SUNRAY DX OIL CO.	MCLOUGHLIN DEVELOPMENT CO.	MCLOUGHLIN DEVELOPMENT CO.
COMPLETED	12/15/64	06/01/40	05/04/41
SAMPLED	12/22/64	03/27/42	03/27/42
FORMATION	MISS-	-MCLOUTH	MISS-LIME
GEOLOGIC PROVINCE CODE	360	335	335
DEPTH, FEET	4654	1379	1433
WELLHEAD PRESSURE,PSIG	1280	485	485
OPEN FLOW, MCFD	650	14000	6000
COMPONENT, MOLE PCT			
METHANE	59.0	91.6	92.3
ETHANE	3.7	1.1	1.4
PROPANE	1.4	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	32.4	6.4	5.4
OXYGEN	TRACE	0.3	0.4
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	2.36	0.34	0.32
HEATING VALUE*	734	948	960
SPECIFIC GRAVITY	0.728	0.590	0.587

	INDEX 1498 SAMPLE 3201	INDEX 1499 SAMPLE 3931	INDEX 1500 SAMPLE 4179
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	JONES NO. 2	W. STRONG NO. 1	STALLMAN NO. 1
LOCATION	SEC. 25, T26S, R36W	SEC. 27, T22S, R35W	SEC. 24, T23S, R37W
OWNER	HELMERICH & PAYNE, INC.	CARTER OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	02/28/37	09/29/44	09/19/46
SAMPLED	03/21/42	10/05/44	12/07/46
FORMATION	PERM-CHASE GROUP	PERM-DOLOMITE	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2689	2931	2588
WELLHEAD PRESSURE,PSIG	940	452	900
OPEN FLOW, MCFD	2821	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.9	60.4	60.2
ETHANE	20.1	18.2	17.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.7	19.8	20.5
OXYGEN	0.3	0.9	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.6	0.7
HELIUM	0.42	0.62	0.52
HEATING VALUE*	1002	956	931
SPECIFIC GRAVITY	0.720	0.732	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1501 SAMPLE 4439	INDEX 1502 SAMPLE 4764	INDEX 1503 SAMPLE 7757
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	ROSS UNIT NO. 1	NO. 1 BEIDERWELL	M. F. POWERS B NO. 1
LOCATION	SEC. 34, T21S, R35W	SEC. 16, T23S, R38W	SEC. 32, T22S, R37W
OWNER	STANOLIND OIL & GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	TEXACO INC.
COMPLETED	01/27/47	05/05/48	07/17/60
SAMPLED	01/08/48	10/16/49	11/02/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2628	2608	2574
WELLHEAD PRESSURE,PSIG	432	434	433
OPEN FLOW, MCFD	NOT GIVEN	65	2070
COMPONENT, MOLE PCT			
METHANE	53.4	62.5	67.1
ETHANE	18.1	5.5	5.8
PROPANE	---	3.3	3.0
N-BUTANE	---	0.9	0.9
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	27.4	25.7	21.4
OXYGEN	0.2	0.1	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	0.64	0.58	0.60
HEATING VALUE*	465	882	927
SPECIFIC GRAVITY	0.759	0.752	0.730

	INDEX 1504 SAMPLE 12867	INDEX 1505 SAMPLE 12868	INDEX 1506 SAMPLE 12978
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	LEE NO. 6	LEE NO. 4	USA-WHITE NO. A-1
LOCATION	SEC. 24, T26S, R37W	SEC. 29, T26S, R36W	SEC. 23, T25S, R35W
OWNER	NORTHERN NAT. GAS PROD. CO.	NORTHERN NAT. GAS PROD. CO.	MOBIL OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/22/71	06/22/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	220	220	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.0	74.1	74.2
ETHANE	6.0	6.0	5.6
PROPANE	3.5	3.6	3.2
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.4	14.3	14.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.39	0.41	0.41
HEATING VALUE*	1017	1009	993
SPECIFIC GRAVITY	0.699	0.704	0.700

	INDEX 1507 SAMPLE 12979	INDEX 1508 SAMPLE 12980	INDEX 1509 SAMPLE 12981
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	USA-DEAN NO. 1	USA-WHITE NO. B-1	HUGOTON USA NO. 1
LOCATION	SEC. 13, T25S, R35W	SEC. 3, T26S, R35W	SEC. 19, T26S, R35W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	225	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	74.4	75.0
ETHANE	5.5	5.7	5.6
PROPANE	3.1	3.2	3.2
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.9	14.7	14.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.42	0.41	0.40
HEATING VALUE*	974	997	1002
SPECIFIC GRAVITY	0.709	0.700	0.698

	INDEX 1510 SAMPLE 12982	INDEX 1511 SAMPLE 12983	INDEX 1512 SAMPLE 12984
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	USA-WAMPLER NO. 1	USA-WHITE NO. D-1	USA-WHITE E-1
LOCATION	SEC. 28, T26S, R35W	SEC. 17, T26S, R35W	SEC. 21, T26S, R35W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/25/71	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	74.9	74.2
ETHANE	5.6	5.7	5.6
PROPANE	3.2	3.4	3.2
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	15.3	14.2	15.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.41	0.40	0.40
HEATING VALUE*	985	998	990
SPECIFIC GRAVITY	0.704	0.696	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1513 SAMPLE 12985	INDEX 1514 SAMPLE 12986	INDEX 1515 SAMPLE 12988
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	TATE-USA NO. 1	USA-WHITE NO. C-1	HUGOTON-USA NO. B-1
LOCATION	SEC. 20, T26S, R35W	SEC. 8, T26S, R35W	SEC. 26, T26S, R36W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/25/71	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	74.5	75.6
ETHANE	5.7	5.7	5.7
PROPANE	3.3	3.4	3.3
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	14.3	14.5	13.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.40	0.39
HEATING VALUE*	1000	994	999
SPECIFIC GRAVITY	0.698	0.696	0.689

	INDEX 1516 SAMPLE 12989	INDEX 1517 SAMPLE 12990	INDEX 1518 SAMPLE 12994
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	USA - MOORE NO. 1	PHELPS-USA NO. 1	BEATY E
LOCATION	SEC. 32, T26S, R35W	SEC. 35, T26S, R36W	SEC. 26, T25S, R38W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/25/71	08/25/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.7	75.3	72.1
ETHANE	5.7	5.7	5.8
PROPANE	3.3	3.4	3.4
N-BUTANE	0.8	0.8	0.9
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.4	13.7	16.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.42	0.40	0.42
HEATING VALUE*	995	1011	981
SPECIFIC GRAVITY	0.696	0.698	0.710

	INDEX 1519 SAMPLE 12995	INDEX 1520 SAMPLE 12996	INDEX 1521 SAMPLE 12997
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BEATY F	WAECHTER H UNIT	WAECHTER UNIT G NO. 1
LOCATION	SEC. 14, T25S, R38W	SEC. 6, T26S, R37W	SEC. 4, T26S, R37W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/24/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	75.6	75.4
ETHANE	5.7	6.1	6.0
PROPANE	3.4	3.6	3.5
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	18.0	12.6	13.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.44	0.37	0.38
HEATING VALUE*	968	1035	1017
SPECIFIC GRAVITY	0.717	0.701	0.696

	INDEX 1522 SAMPLE 12998	INDEX 1523 SAMPLE 12999	INDEX 1524 SAMPLE 13000
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	WAECHTER J UNIT	BARBEN D-1 UNIT	USA NO. 1
LOCATION	SEC. 33, T25S, R37W	SEC. 32, T25S, R37W	SEC. 30, T25S, R37W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/24/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	75.1	74.2
ETHANE	6.0	6.1	5.9
PROPANE	3.6	3.5	3.6
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.3	13.2	14.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.38	0.38	0.39
HEATING VALUE*	1020	1021	1013
SPECIFIC GRAVITY	0.700	0.700	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1525 SAMPLE 13001	INDEX 1526 SAMPLE 6405	INDEX 1527 SAMPLE 12869
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	LAKIN	PANOMA
WELL NAME	TATE-HUTTON NO. 1	SHAFFER NO. 1	TOOMBS NO. 1
LOCATION	SEC. 28, T25S, R37W	SEC. 34, T25S, R36W	SEC. 29, T26S, R36W
OWNER	AMOCO PRODUCTION CO.	EXCELSIOR OIL CORP.	NORTHERN NAT. GAS PROD. CO.
COMPLETED	NOT GIVEN	07/10/57	NOT GIVEN
SAMPLED	08/24/71	09/25/57	06/22/71
FORMATION	PERM-CHASE GROUP	MISS-	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4994	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	60	190
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	45.7	73.7
ETHANE	5.8	2.4	6.0
PROPANE	3.7	0.0	3.6
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	0.2	0.1
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	14.1	36.7	14.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.4	TRACE
HYDROGEN	0.0	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	9.8	0.0
HELIUM	0.39	2.00	0.40
HEATING VALUE*	1015	609	1008
SPECIFIC GRAVITY	0.705	0.853	0.706

	INDEX 1528 SAMPLE 14018	INDEX 1529 SAMPLE 14019	INDEX 1530 SAMPLE 14736
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	JOHNSON NO. 4A	JOHNSON NO. 2A	KURZ "A" NO. 2
LOCATION	SEC. 19, T25S, R36W	SEC. 24, T25S, R37W	SEC. 30, T24S, R37W
OWNER	W.B. OSBORN	W.B. OSBORN	AMOCO PRODUCTION CO.
COMPLETED	11/01/73	11/01/73	07/23/76
SAMPLED	06/01/74	06/01/74	08/19/76
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2770	2750	2827
WELLHEAD PRESSURE,PSIG	243	306	225
OPEN FLOW, MCFD	4500	4500	4500
COMPONENT, MOLE PCT			
METHANE	72.0	73.1	69.0
ETHANE	5.9	6.3	6.2
PROPANE	3.3	3.8	3.6
N-BUTANE	0.8	1.0	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.5	14.3	18.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.49	0.40	0.46
HEATING VALUE*	987	1026	973
SPECIFIC GRAVITY	0.713	0.715	0.727

	INDEX 1531 SAMPLE 11469	INDEX 1532 SAMPLE 14530	INDEX 1533 SAMPLE 11555
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	BASIL	BELMONT CENTER	COX
WELL NAME	BIRKENBAUGH NO. 1	DUCKWORTH NO. 1	COX NO. 1
LOCATION	SEC. 16, T29S, R7W	SEC. 23, T29S, R8W	SEC. 26, T30S, R10W
OWNER	BARBARA OIL CO.	KEENER OIL CO.	BARBARA OIL CO.
COMPLETED	02/21/68	06/14/75	05/08/68
SAMPLED	05/04/68	11/13/75	06/25/68
FORMATION	MISS-	MISS-	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4156	4208	3085
WELLHEAD PRESSURE,PSIG	1345	1245	1200
OPEN FLOW, MCFD	4200	4707	28000
COMPONENT, MOLE PCT			
METHANE	87.1	87.4	77.9
ETHANE	5.2	5.2	3.7
PROPANE	2.6	2.4	1.9
N-BUTANE	0.9	0.7	0.5
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.7	2.9	14.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.18	0.17	0.36
HEATING VALUE*	1121	1108	960
SPECIFIC GRAVITY	0.653	0.647	0.676

	INDEX 1534 SAMPLE 12709	INDEX 1535 SAMPLE 2541	INDEX 1536 SAMPLE 2892
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	COX	CUNNINGHAM	CUNNINGHAM
WELL NAME	COX NO. 1	LEISMAN NO. 1	F. C. MILES NO. A-5
LOCATION	SEC. 26, T30S, R10W	SEC. 20, T27S, R10W	SEC. 30, T27S, R10W
OWNER	BARBARA OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	12/22/70	NOT GIVEN	NOT GIVEN
SAMPLED	03/1/71	08/25/32	10/04/71
FORMATION	PENN-HOWARD	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2970	4190	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	1385	NOT GIVEN
OPEN FLOW, MCFD	9300	30200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	59.3	67.1
ETHANE	3.4	21.2	15.5
PROPANE	1.8	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	13.2	17.0	15.3
OXYGEN	0.1	0.9	0.7
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.36	1.22	1.23
HEATING VALUE*	959	981	957
SPECIFIC GRAVITY	0.663	0.733	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1537 SAMPLE 2893	INDEX 1538 SAMPLE 2894	INDEX 1539 SAMPLE 2895
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	F. C. MILES NO. 4-B	J. P. RATCLIFF NO. 7	A. J. CONLEY NO. 2
LOCATION	SEC. 19, T27S, R10W	SEC. 30, T27S, R10W	SEC. 20, T27S, R10W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/04/41	10/04/41	10/04/41
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1350	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1340	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.6	62.3	64.2
ETHANE	19.6	21.2	20.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.2	14.8	13.6
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	1.20	1.23	1.15
HEATING VALUE*	996	1011	1023
SPECIFIC GRAVITY	0.712	0.719	0.710

	INDEX 1540 SAMPLE 3630	INDEX 1541 SAMPLE 15583	INDEX 1542 SAMPLE 14155
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	DEWEY	FANNIE
WELL NAME	F. C. MILES D-1	RAMSDALE NO. 2	PRICE NO. 1
LOCATION	NOT GIVEN	SEC. 5, T28S, R5W	SEC. 4, T30S, R10W
OWNER	SKELLY OIL CO.	GEAR PETROLEUM CO.	MALLONEE MAHONEY, INC.
COMPLETED	NOT GIVEN	06/28/78	05/07/74
SAMPLED	NOT GIVEN	03/99/79	09/--/74
FORMATION	ORDO-VIOLA	PERM-INDIAN CAVE	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	1744	4395
WELLHEAD PRESSURE,PSIG	NOT GIVEN	680	1443
OPEN FLOW, MCFD	NOT GIVEN	1500	5200
COMPONENT, MOLE PCT			
METHANE	61.2	70.8	82.3
ETHANE	23.3	2.1	6.6
PROPANE	---	0.7	3.6
N-BUTANE	---	0.2	0.9
ISOBUTANE	---	0.1	0.5
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	13.9	24.9	5.2
OXYGEN	0.2	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.13	0.88	0.27
HEATING VALUE*	1038	788	1115
SPECIFIC GRAVITY	0.727	0.678	0.676

	INDEX 1543 SAMPLE 5881	INDEX 1544 SAMPLE 9639	INDEX 1545 SAMPLE 12254
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	GOETZ	GOETZ	GOETZ E
WELL NAME	KIRBY A NO. 1	GOETZ B-3	GOETZ NO. 1
LOCATION	SEC. 34, T29S, R9W	SEC. 32, T29S, R9W	SEC. 28, T29S, R9W
OWNER	PETROLEUM, INC.	BACHUS OIL CO.	REX & MORRIS DRILLING CO.
COMPLETED	04/07/55	NOT GIVEN	03/09/70
SAMPLED	07/13/55	11/21/64	05/07/70
FORMATION	MISS-CHERT	PERM-INDIAN CAVE	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4167	2346	2930
WELLHEAD PRESSURE,PSIG	1433	883	1150
OPEN FLOW, MCFD	1082	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.1	85.4	65.5
ETHANE	6.0	2.8	3.1
PROPANE	2.0	0.9	1.9
N-BUTANE	0.8	0.2	0.1
ISOBUTANE	0.4	0.1	0.2
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	9.8	9.8	28.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.4
HELIUM	0.55	0.39	0.54
HEATING VALUE*	1042	958	787
SPECIFIC GRAVITY	0.661	0.625	0.714

	INDEX 1546 SAMPLE 13352	INDEX 1547 SAMPLE 1226	INDEX 1548 SAMPLE 2250
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	HENNING	KINGMAN	KINGMAN
WELL NAME	HENNING NO. 1	RICHARDSON NO. 1	F. C. MILES NO. 1
LOCATION	SEC. 19, T28S, R7W	SEC. 16, T27S, R 7W	SEC. 30, T27S, R10W
OWNER	MACK OIL CO.	P. FLEFGER & CARTER OIL CO.	SKELLY OIL CO
COMPLETED	06/01/72	01/--/26	DRILL STEM TEST
SAMPLED	08/10/72	02/28/26	12/21/30
FORMATION	MISS-	MISS-	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4076	3889	2002
WELLHEAD PRESSURE,PSIG	1305	70	675
OPEN FLOW, MCFD	4534	300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.5	66.7	72.2
ETHANE	5.8	31.7	11.4
PROPANE	2.7	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	3.0	0.9	15.8
OXYGEN	0.2	0.5	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.33	0.19	0.51
HEATING VALUE*	1116	1244	936
SPECIFIC GRAVITY	0.652	0.720	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1549 SAMPLE 15307	INDEX 1550 SAMPLE 9637	INDEX 1551 SAMPLE 8981
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	LANDSDOWNE N	NASHVILLE	NEGRO CREEK
WELL NAME	JOHNSON "A" NO. 1	BERTHOLF NO. 1	GREENLEAF NO. 1
LOCATION	SEC. 4, T28S, R5W	SEC. 1, T30S, R10W	SEC. 13, T27S, R7W
OWNER	GEAR PETROLEUM CO.	BACHUS OIL CO.	MESSMAN RINEHART OIL CO.
COMPLETED	05/30/78	10/01/63	12/15/61
SAMPLED	06/22/78	11/21/64	05/27/63
FORMATION	PERM-INDIAN CAVE	PERM-INDIAN CAVE	PENN-TORONTO
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1761	2519	NOT GIVEN
WELLHEAD PRESSURE,PSIG	695	962	1117
OPEN FLOW, MCFD	3490	1020	5000
COMPONENT, MOLE PCT			
METHANE	68.7	82.3	66.2
ETHANE	2.0	3.3	3.6
PROPANE	0.7	1.3	1.6
N-BUTANE	0.2	0.4	0.7
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	TRACE	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	27.0	11.6	24.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.91	0.37	1.90
HEATING VALUE*	769	960	829
SPECIFIC GRAVITY	0.688	0.644	0.711

	INDEX 1552 SAMPLE 14162	INDEX 1553 SAMPLE 14976	INDEX 1554 SAMPLE 5880
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	NEGRO CREEK	NEGRO POOL	SPIVEY-GRABS
WELL NAME	LAKIN NO. 1	LOWE NO. 1	NIRSCHL NO. 1
LOCATION	SEC. 6, T28S, R6W	SEC. 21, T28N, R7W	SEC. 6, T30S, R8W,
OWNER	VULCAN MATERIALS CO.	MACK OIL CO.	PETROLEUM, INC.
COMPLETED	03/22/74	05/24/76	03/20/55
SAMPLED	10/03/74	04/18/77	07/13/55
FORMATION	MISS-	MISS-	MISS-CHERT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3842	3970	4167
WELLHEAD PRESSURE,PSIG	1324	1345	1495
OPEN FLOW, MCFD	3206	668	2520
COMPONENT, MOLE PCT			
METHANE	86.6	86.4	91.2
ETHANE	5.3	5.5	0.3
PROPANE	2.6	2.6	0.4
N-BUTANE	0.9	0.9	0.4
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.3	3.2	6.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.18	0.20	0.38
HEATING VALUE*	1119	1112	983
SPECIFIC GRAVITY	0.656	0.651	0.606

	INDEX 1555 SAMPLE 5916	INDEX 1556 SAMPLE 5928	INDEX 1557 SAMPLE 5967
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SPIVEY-GRABS	SPIVEY-GRABS	SPIVEY-GRABS
WELL NAME	SWINGLE NO. A-1	KEIMIG NO. 1	L. M. WELLS, UNIT NO. 1
LOCATION	SEC. 36, T30S, R9W	SEC. 34, T30S, R9W	SEC. 17, T30S, R8W
OWNER	PICKRELL DRILLING CO.	PICKRELL DRILLING CO.	MAGNOLIA PETROLEUM CO.
COMPLETED	01/26/55	03/07/55	05/11/55
SAMPLED	08/16/55	08/16/55	11/07/55
FORMATION	MISS-	MISS-	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4307	4364	4172
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1300
OPEN FLOW, MCFD	1450	3040	1640
COMPONENT, MOLE PCT			
METHANE	88.7	89.9	88.7
ETHANE	4.8	4.6	4.7
PROPANE	2.1	2.0	2.2
N-BUTANE	0.8	0.6	0.8
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	2.3	2.2	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.13	0.13	0.14
HEATING VALUE*	1111	1085	1117
SPECIFIC GRAVITY	0.642	0.625	0.643

	INDEX 1558 SAMPLE 6162	INDEX 1559 SAMPLE 6531	INDEX 1560 SAMPLE 9071
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SPIVEY-GRABS	SPIVEY-GRABS	SPIVEY-GRABS
WELL NAME	TJADEN A NO. 1	POMEROY UNIT NO. 1	EARL JOHNSON NO. 1
LOCATION	SEC. 13, T30S, R8W	SEC. 5, T30S, R8W	SEC. 18, T30S, R7W
OWNER	NATIONAL COOP. REFIN. ASSOC.	PAN AMERICAN PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	10/28/54	01/12/58	02/02/55
SAMPLED	10/11/56	03/19/58	08/23/63
FORMATION	PENN-MORROW U	MISS-CHERT	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4187	4212	4183
WELLHEAD PRESSURE,PSIG	1400	1442	280
OPEN FLOW, MCFD	315	4300	108
COMPONENT, MOLE PCT			
METHANE	75.5	88.2	73.5
ETHANE	7.6	5.2	7.8
PROPANE	3.9	2.1	3.6
N-BUTANE	1.1	0.7	1.1
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.8	2.2	12.1
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.32	0.20	0.30
HEATING VALUE*	1099	1114	1070
SPECIFIC GRAVITY	0.714	0.644	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1561 SAMPLE 5912	INDEX 1562 SAMPLE 5833	INDEX 1563 SAMPLE 10760
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SUNNYVIEW	WILDCAT	WILDCAT
WELL NAME	HOLCOMB NO. 1	FOLKES NO. 1	BONJOUR NO. 1X
LOCATION	SEC. 26, T30S, R9W	SEC. 32, T30S, R9W	SEC. 26, T27S, R5W
OWNER	PICKRELL DRILLING CO.	TIME PETROLEUM CO.	KEWANEE OIL CO.
COMPLETED	04/21/55	NOT GIVEN	07/05/66
SAMPLED	08/16/55	05/05/55	10/25/66
FORMATION	MISS-	MISS-CHAT	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4384	4424	3740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1400	1300
OPEN FLOW, MCFD	1700	5000	2755
COMPONENT, MOLE PCT			
METHANE	87.8	86.4	82.0
ETHANE	5.1	5.4	6.2
PROPANE	2.3	2.7	2.8
N-BUTANE	0.6	0.8	1.0
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	3.3	3.1	6.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.19	0.28
HEATING VALUE*	1084	1117	1102
SPECIFIC GRAVITY	0.636	0.655	0.679

	INDEX 1564 SAMPLE 15061	INDEX 1565 SAMPLE 15980	INDEX 1566 SAMPLE 10299
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	WILDCAT	WILDCAT	WILLOWDALE
WELL NAME	MILORED-ARNOLD NO. 1	KATZER NO. 1	CONRARDY NO. 1
LOCATION	SEC. 35, T27S, R8W	SEC. 10, T30S, R10W	SEC. 11, T29S, R9W
OWNER	PUBLISHERS PETROLEUM	RAYMOND OIL CO., INC.	BACHUS OIL CO.
COMPLETED	07/--/77	09/01/79	11/09/65
SAMPLED	07/--/77	10/06/80	11/29/65
FORMATION	MISS-	PENN-TOPEKA	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3971	3156	2396
WELLHEAD PRESSURE,PSIG	NOT GIVEN	940	890
OPEN FLOW, MCFD	85	5400	8250
COMPONENT, MOLE PCT			
METHANE	68.6	76.5	84.2
ETHANE	6.2	3.8	3.5
PROPANE	3.3	1.9	1.4
N-BUTANE	0.9	0.6	0.4
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	18.7	15.1	9.4
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.4	0.1
HELIUM	0.77	0.36	0.37
HEATING VALUE*	987	954	9900
SPECIFIC GRAVITY	0.738	0.687	0.641

	INDEX 1567 SAMPLE 11239	INDEX 1568 SAMPLE 14385	INDEX 1569 SAMPLE 14389
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KIOWA	KIOWA
FIELD	ZENDA W	ALFORD	ALFORD
WELL NAME	GOETZ NO. 1	UNRUH D-1	PARKIN NO. 1
LOCATION	SEC. 17, T30S, R9W	SEC. 36, T30S, R18W	SEC. 2, T30S, R19W
OWNER	SIERRA PETROLEUM CO., INC.	MAURICE L. BROWN CO.	MAURICE L. BROWN CO.
COMPLETED	02/25/66	NOT GIVEN	06/20/74
SAMPLED	12/05/67	06/13/75	06/13/75
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	360	360
DEPTH, FEET	4304	4948	5050
WELLHEAD PRESSURE,PSIG	1373	1100	1200
OPEN FLOW, MCFD	1493	NOT GIVEN	4500
COMPONENT, MOLE PCT			
METHANE	83.3	72.2	90.4
ETHANE	6.2	0.2	3.3
PROPANE	3.1	0.2	1.0
N-BUTANE	1.1	0.1	0.3
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	4.8	24.4	4.1
OXYGEN	0.0	2.2	TRACE
ARGON	TRACE	0.3	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.25	0.20	0.20
HEATING VALUE*	1118	747	1036
SPECIFIC GRAVITY	0.673	0.676	0.614

	INDEX 1570 SAMPLE 16107	INDEX 1571 SAMPLE 10120	INDEX 1572 SAMPLE 14143
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	ALFORD	ALFORD SE	ALLSTOTT
WELL NAME	KEENAN NO. 1	TAVES NO. 1	EINSEL NO. 1
LOCATION	SEC. 20, T30S, R19W	SEC. 20, T30S, R18W	SEC. 11, T2AS, R18W
OWNER	J. MARK RICHARDSON	ATLWARD DRILLING CO.	A.L. ABERCROMBIE, INC.
COMPLETED	NOT GIVEN	07/22/65	03/09/74
SAMPLED	10/22/80	08/02/65	09/11/74
FORMATION	MISS-	MISS-	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5090	4967	4166
WELLHEAD PRESSURE,PSIG	700	1467	1290
OPEN FLOW, MCFD	5800	4150	4311
COMPONENT, MOLE PCT			
METHANE	86.7	93.0	79.3
ETHANE	3.8	3.0	3.8
PROPANE	1.0	0.9	1.9
N-BUTANE	0.4	0.3	0.7
ISOBUTANE	0.2	0.2	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.1	1.8	12.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.37	0.13	0.34
HEATING VALUE*	1006	1059	997
SPECIFIC GRAVITY	0.627	0.604	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1573 SAMPLE 6788	INDEX 1574 SAMPLE 13674	INDEX 1575 SAMPLE 4434
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	BARSTOW	BARSTOW	BRENHAM
WELL NAME	WELL NO. 1	JANTZ NO. 1	L. C. REPP NO. 1
LOCATION	SEC. 20, T29S, R17W	SEC. 28, T29S, R17W	SEC. 29, T28S, R17W
OWNER	RUPP-FERGUSON OIL CO.	DAVIES & FITZGERALD	STANOLIND OIL & GAS CO.
COMPLETED	08/19/58	05/16/73	10/01/47
SAMPLED	08/18/58	07/28/73	01/21/48
FORMATION	MISS-	PERM-COTTONWOOD	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4892	2896	4841
WELLHEAD PRESSURE,PSIG	NOT GIVEN	964	1221
OPEN FLOW, MCFD	NOT GIVEN	14000	1488
COMPONENT, MOLE PCT			
METHANE	91.7	78.9	82.4
ETHANE	3.8	2.8	14.0
PROPANE	1.2	1.4	---
N-BUTANE	0.5	0.3	---
ISOBUTANE	0.0	0.3	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.5	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.6	14.9	2.6
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	0.20	0.53	0.31
HEATING VALUE*	1080	920	1086
SPECIFIC GRAVITY	0.617	0.663	0.638

	INDEX 1576 SAMPLE 14011	INDEX 1577 SAMPLE 14144	INDEX 1578 SAMPLE 14146
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	CONKLIN	EINSEL	EINSEL
WELL NAME	CONKLIN NO. 1	GAMBLE NO. 1	MINKS NO. 1
LOCATION	SEC. 15, T29S, R17W	SEC. 11, T28S, R18W	SEC. 13, T28S, R18W
OWNER	MARSH OIL ASSOCIATES	A.L. ABERCROMBIE, INC.	A.L. ABERCROMBIE, INC.
COMPLETED	08/05/73	02/23/74	03/26/74
SAMPLED	05/21/74	09/11/74	09/11/74
FORMATION	PERM-COTTONWOOD	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2866	4776	4766
WELLHEAD PRESSURE,PSIG	945	1392	1360
OPEN FLOW, MCFD	11000	4189	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.2	92.1	92.2
ETHANE	2.2	3.2	3.3
PROPANE	1.0	1.2	1.1
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	18.3	2.2	2.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.59	0.19	0.17
HEATING VALUE*	874	1060	1056
SPECIFIC GRAVITY	0.660	0.609	0.606

	INDEX 1579 SAMPLE 7840	INDEX 1580 SAMPLE 10713	INDEX 1581 SAMPLE 10779
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	GLICK	GLICK	GLICK
WELL NAME	E. O. ROBBINS N NO. 1	BOOTH UNIT NO. 1	KANE NO. 2
LOCATION	SEC. 26, T30S, R16W	SEC. 22, T30S, R17W	SEC. 17, T30S, R17W
OWNER	GULF OIL CORP.	PETROLEUM, INC.	PETROLEUM, INC.
COMPLETED	08/27/60	03/23/66	10/27/66
SAMPLED	02/02/61	09/08/66	11/19/66
FORMATION	MISS-CHERT	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4632	4863	4894
WELLHEAD PRESSURE,PSIG	1496	1493	1472
OPEN FLOW, MCFD	14930	13094	39000
COMPONENT, MOLE PCT			
METHANE	90.8	91.2	91.2
ETHANE	3.7	3.6	3.6
PROPANE	1.2	1.5	1.4
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.8	2.0	2.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	1.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.20	0.18	0.18
HEATING VALUE*	1056	1087	1075
SPECIFIC GRAVITY	0.601	0.620	0.620

	INDEX 1582 SAMPLE 4555	INDEX 1583 SAMPLE 13837	INDEX 1584 SAMPLE 14145
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	GREENSBURG	GREENSBURG	HARDY
WELL NAME	CULLINS NO. 1	MILLER NO. 1	BERTRAM NO. 1
LOCATION	SEC. 20, T28S, R17W	SEC. 5, T27S, R18W	SEC. 14, T28S, R18W
OWNER	J. M. HUBER CORP.	BARNETT OIL CO.	A.L. ABERCROMBIE, INC.
COMPLETED	08/28/48	10/31/73	06/07/73
SAMPLED	09/13/48	12/10/73	09/11/74
FORMATION	MISS-LIME	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4832	4698	4774
WELLHEAD PRESSURE,PSIG	1600	1572	1325
OPEN FLOW, MCFD	1821	10087	7510
COMPONENT, MOLE PCT			
METHANE	78.8	89.0	92.5
ETHANE	9.0	3.2	3.2
PROPANE	---	1.3	1.2
N-BUTANE	---	0.1	0.3
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	10.4	4.8	1.9
OXYGEN	1.5	0.7	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.16	0.18	0.17
HEATING VALUE*	960	1022	1059
SPECIFIC GRAVITY	0.650	0.620	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1585 SAMPLE 5992	INDEX 1586 SAMPLE 13627	INDEX 1587 SAMPLE 15185
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	HAVILAND	MULLINVILLE	MULLINVILLE NW
WELL NAME	BERGNER NO. 1	SHERER E NO. 3	BRENSING NO. 1
LOCATION	SEC. 17, T28S, R16W	SEC. 12, T28S, R20W	SEC. 6, T28S, R20W
OWNER	MURFIN DRILLING CO.	PETROLEUM, INC.	KRM PETROLEUM CORP.
COMPLETED	07/02/55	05/10/73	02/29/77
SAMPLED	12/27/55	06/12/73	12/29/77
FORMATION	MISS-KINDERHOOK	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4761	4868	4959
WELLHEAD PRESSURE,PSIG	1170	1180	1250
OPEN FLOW, MCFD	411	3400	6500
COMPONENT, MOLE PCT			
METHANE	91.3	49.7	83.6
ETHANE	3.7	3.3	4.9
PROPANE	1.2	1.1	1.8
N-BUTANE	0.9	0.2	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.3
NITROGEN	2.0	42.3	7.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.2	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.22	2.77	0.40
HEATING VALUE*	1072	612	1039
SPECIFIC GRAVITY	0.615	0.756	0.656

	INDEX 1588 SAMPLE 12169	INDEX 1589 SAMPLE 5864	INDEX 1590 SAMPLE 6617
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MULLINVILLE SE	NICHOLS	NICHOLS
WELL NAME	PORTER NO. 1	NICHOLS NO. 1	BROWN NO. 1
LOCATION	SEC. 5, T29S, R19W	SEC. 20, T29S, R18W	SEC. 32, T29S, R18W
OWNER	RAYMOND OIL CO., INC.	GULF OIL CORP.	FALCON-SEABOARD DRILLING CO.
COMPLETED	12/06/69	02/27/55	08/06/58
SAMPLED	01/03/70	06/15/55	05/30/58
FORMATION	MISS-	MISS-	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4984	4997	4911
WELLHEAD PRESSURE,PSIG	1380	1400	250
OPEN FLOW, MCFD	4070	7300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.3	94.8	92.4
ETHANE	3.8	1.9	3.3
PROPANE	1.0	0.4	1.0
N-BUTANE	0.3	0.1	0.4
ISOBUTANE	0.2	TRACE	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	22.7	2.3	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	1.31	0.14	0.10
HEATING VALUE*	837	1008	1072
SPECIFIC GRAVITY	0.686	0.578	0.612

	INDEX 1591 SAMPLE 10766	INDEX 1592 SAMPLE 6706	INDEX 1593 SAMPLE 14386
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	NICHOLS SW	NOT GIVEN	NOT GIVEN
WELL NAME	SMITH E NO. 1	BECKER NO. 1	KOEHN NO. 1
LOCATION	SEC. 8, T30S, R19W	SEC. 13, T28S, R19W	SEC. 27, T30S, R18W
OWNER	ANADARKO PRODUCTION CO.	PETROLEUM, INC.	MAURICE L. BROWN CO.
COMPLETED	09/10/66	10/10/57	NOT GIVEN
SAMPLED	11/01/66	07/01/58	06/12/75
FORMATION	MISS-	MISS-CHERT	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5055	4839	5056
WELLHEAD PRESSURE,PSIG	1465	1365	1200
OPEN FLOW, MCFD	7150	3604	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.1	91.7	87.0
ETHANE	3.5	3.3	3.6
PROPANE	1.1	0.9	1.3
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	8.7	2.6	6.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.39	0.20	0.47
HEATING VALUE*	992	1054	1010
SPECIFIC GRAVITY	0.635	0.610	0.627

	INDEX 1594 SAMPLE 10732	INDEX 1595 SAMPLE 14625	INDEX 1596 SAMPLE 14740
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	PARKIN	PLEASANT VALLEY	PLEASANT VALLEY
WELL NAME	PARKIN NO. 2	DURREE NO. 1	PAMAR-MILLER UNITA NO. 1
LOCATION	SEC. 3, T30S, R18W	SEC. 31, T28S, R20W	SEC. 31, T28S, R20W
OWNER	KAE DRILLING, INC.	HALLIBURTON OIL PROD. CO.	DONALD C. SLAWSON
COMPLETED	10/29/65	07/17/[illegible]	04/14/75
SAMPLED	09/26/66	03/24/[illegible]	08/27/76
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4893	5064	5021
WELLHEAD PRESSURE,PSIG	1459	1400	1410
OPEN FLOW, MCFD	18200	8000	44780
COMPONENT, MOLE PCT			
METHANE	90.8	84.7	84.2
ETHANE	3.1	4.9	4.9
PROPANE	1.0	1.8	1.8
N-BUTANE	0.3	0.5	0.6
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.9	6.8	7.1
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.12	0.33	0.34
HEATING VALUE*	1032	1045	1040
SPECIFIC GRAVITY	0.610	0.648	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1597 SAMPLE 7932	INDEX 1598 SAMPLE 13258	INDEX 1599 SAMPLE 13259
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	QUAKER	QUAKER	QUAKER
WELL NAME	DAVIS NO. 1	KERR NO. 1	KERR NO. 1
LOCATION	NOT GIVEN	SEC. 10, T27S, R19W	SEC. 10, T27S, R19W
OWNER	WESTERN PETROLEUM, INC.	PETROLEUM, INC.	PETROLEUM, INC.
COMPLETED	NOT GIVEN	11/11/71	08/01/70
SAMPLED	04/20/61	06/07/72	06/08/72
FORMATION	MISS-	PENN-LANSING-KANSAS CITY	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4792	4242	4790
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1450	1224
OPEN FLOW, MCFD	1630	1020	1390
COMPONENT, MOLE PCT			
METHANE	90.3	68.1	90.6
ETHANE	3.5	2.9	3.2
PROPANE	0.9	2.0	1.1
N-BUTANE	0.3	0.7	0.3
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.8	24.7	3.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.30	0.445	0.27
HEATING VALUE*	1038	856	1041
SPECIFIC GRAVITY	0.614	0.720	0.614

	INDEX 1600 SAMPLE 10729	INDEX 1601 SAMPLE 13457	INDEX 1602 SAMPLE 9205
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	THACH	UNNAMED	URSULA NE
WELL NAME	SWISHER NO. 1-21	BARSTOW NO. 1	KRUSE NO. 1
LOCATION	SEC. 21, T29S, R19W	SEC. 28, T29S, R17W	SEC. 6, T29S, R17W
OWNER	GRAHAM-MICHAELIS DRLG. CO.	DAVIES + FITZGERALD	JAMES F. SMITH
COMPLETED	09/25/65	09/01/72	12/--/63
SAMPLED	08/15/66	10/22/72	12/18/63
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5084	4861	4900
WELLHEAD PRESSURE,PSIG	1327	1460	1380
OPEN FLOW, MCFD	10170	8870	2000
COMPONENT, MOLE PCT			
METHANE	80.1	90.7	90.0
ETHANE	3.8	3.2	3.6
PROPANE	1.5	1.5	1.1
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.1	0.3	TRACE
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	12.9	2.0	3.3
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.60	0.18	0.40
HEATING VALUE*	953	1087	1062
SPECIFIC GRAVITY	0.660	0.624	0.623

	INDEX 1603 SAMPLE 9224	INDEX 1604 SAMPLE 9293	INDEX 1605 SAMPLE 15257
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	URSULA NE	URSULA NE	WELLSFORD NE
WELL NAME	WEDEL NO. 1	WEDEL NO. 1	GRIMM NO. 1
LOCATION	SEC. 1, T29S, R18W	SEC. 1, T29S, R18W	SEC. 2, T28S, R16W
OWNER	APACHE CORP.	APACHE CORP.	IMPERIAL OIL CO.
COMPLETED	10/17/63	10/01/63	07/18/77
SAMPLED	01/22/64	04/09/64	04/--/78
FORMATION	MISS-CHERT	MISS-	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4875	4863	4635
WELLHEAD PRESSURE,PSIG	961	800	1370
OPEN FLOW, MCFD	2420	NOT GIVEN	4550
COMPONENT, MOLE PCT			
METHANE	90.2	94.6	87.0
ETHANE	3.8	TRACE	4.3
PROPANE	1.1	0.1	2.0
N-BUTANE	0.5	TRACE	0.5
ISOBUTANE	0.2	TRACE	0.3
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	3.0	4.7	4.8
OXYGEN	0.3	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.35	0.36
HEATING VALUE*	1060	961	1055
SPECIFIC GRAVITY	0.622	0.573	0.635

	INDEX 1606 SAMPLE 6206	INDEX 1607 SAMPLE 7998	INDEX 1608 SAMPLE 11556
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STEWART NO. 1	SCHRAM NO. 1	ROBBINS NO. 1-34
LOCATION	SEC. 35, T27S, R18W	SEC. 32, T29S, R17W	SEC. 34, T30S, R18W
OWNER	ANSCHUTZ DRILLING CO., INC.	KAISER-FRANCIS	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	10/12/56	NOT GIVEN	07/09/66
SAMPLED	10/15/56	05/25/61	06/17/68
FORMATION	MISS-KINDERHOOK	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4730	NOT GIVEN	5032
WELLHEAD PRESSURE,PSIG	1172	NOT GIVEN	1507
OPEN FLOW, MCFD	2738	NOT GIVEN	3010
COMPONENT, MOLE PCT			
METHANE	92.4	90.9	92.9
ETHANE	3.2	3.9	3.0
PROPANE	0.6	1.4	0.9
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	TRACE	0.3	TRACE
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	2.3	2.1	2.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.19	0.20	0.12
HEATING VALUE*	1047	1077	1059
SPECIFIC GRAVITY	0.604	0.620	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1609 SAMPLE 13749		INDEX 1610 SAMPLE 14997		INDEX 1611 SAMPLE 14998	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KIOWA		KIOWA		KIOWA	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NELSON NO. 1		LONG NO. 1		DAVIS NO. 1	
LOCATION	SEC. 32, T28S, R19W		SEC. 2, T27S, R17W		SEC. 18, T27S, R16W	
OWNER	ALPINE DRILLING CO.		IMPERIAL OIL CO.		IMPERIAL OIL CO.	
COMPLETED	08/01/73		10/08/76		10/22/76	
SAMPLED	10/09/73		05/12/77		05/12/77	
FORMATION	MISS-WARSAW		MISS-		PENN-CHEROKEE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4986		4644		4593	
WELLHEAD PRESSURE,PSIG	1400		1350		1370	
OPEN FLOW, MCFD	1775		4094		3624	
COMPONENT, MOLE PCT						
METHANE	47.3		84.6		87.9	
ETHANE	4.4		5.2		3.7	
PROPANE	0.8		2.7		1.7	
N-BUTANE	0.3		0.6		0.5	
ISOBUTANE	0.3		0.4		0.2	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	43.9		5.3		4.5	
OXYGEN	0.0		0.3		0.3	
ARGON	0.2		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	2.27		0.36		0.37	
HEATING VALUE*	613		1080		1056	
SPECIFIC GRAVITY	0.773		0.657		0.634	

	INDEX 1612 SAMPLE 3193		INDEX 1613 SAMPLE 3195		INDEX 1614 SAMPLE 3206	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	LABETTE		LABETTE		LABETTE	
FIELD	CHERRYVALE S		CHERRYVALE S		CHERRYVALE S	
WELL NAME	JOHN WILMOTH NO. 1		BROWN NO. 1		JOHN WILMOTH NO. 1	
LOCATION	SEC. 12, T34S, R18E		SEC. 13, T34S, R18E		SEC. 12, T34S, R18E	
OWNER	WEEDER SUPPLY & DEVEL. CO.		WEEDER SUPPLY & DEVEL. CO.		WEEDER SUPPLY & DEVEL. CO.	
COMPLETED	09/19/41		10/01/41		--/--/41	
SAMPLED	03/25/42		03/25/42		03/25/42	
FORMATION	PENN-BARTLESVILLE		PENN-SQUIRREL		PENN-OSWEGO	
GEOLOGIC PROVINCE CODE	365		365		365	
DEPTH, FEET	558		370		272	
WELLHEAD PRESSURE,PSIG	220		150		NOT GIVEN	
OPEN FLOW, MCFD	500		200		70	
COMPONENT, MOLE PCT						
METHANE	71.5		97.8		88.8	
ETHANE	23.9		0.0		0.4	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	3.8		1.3		8.3	
OXYGEN	0.3		0.4		1.7	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.5		0.5		0.7	
HELIUM	0.13		0.07		0.13	
HEATING VALUE*	1153		991		907	
SPECIFIC GRAVITY	0.695		0.567		0.606	

	INDEX 1615 SAMPLE 3186		INDEX 1616 SAMPLE 3254		INDEX 1617 SAMPLE 3179	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	LEAVENWORTH		LEAVENWORTH		LEAVENWORTH	
FIELD	LINWOOD		MCLOUTH		ROBERTS	
WELL NAME	SMITH NO. 1		H. J. REGAN NO. 1		ROBERTS NO. 2	
LOCATION	SEC. 14, T12S, R21E		SEC. 3, T9S, R20E		SEC. 12, T11S, R22E	
OWNER	HARRY J. SMITH		MCLOUGHLIN DEVELOPMENT CO.		ROBERTS ESTATE	
COMPLETED	12/--/39		09/--/40		NOT GIVEN	
SAMPLED	03/26/42		03/27/42		03/26/42	
FORMATION	PENN-SQUIRREL		-MCLOUTH		PENN-SQUIRREL	
GEOLOGIC PROVINCE CODE	335		335		335	
DEPTH, FEET	575		1412		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	170		370		105	
OPEN FLOW, MCFD	180		6000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	95.0		92.4		91.0	
ETHANE	0.0		1.0		0.4	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	4.2		5.5		7.7	
OXYGEN	0.3		0.4		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.4		0.3	
HELIUM	0.29		0.33		0.32	
HEATING VALUE*	962		954		929	
SPECIFIC GRAVITY	0.574		0.587		0.592	

	INDEX 1618 SAMPLE 11794		INDEX 1619 SAMPLE 10956		INDEX 1620 SAMPLE 4282	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MARION		MARION		MARION	
FIELD	DURHAM E		GREVE		LEHIGH	
WELL NAME	SCULLY-HANSON NO. 1		GREVE NO. 1		WARKENTIN NO. 1	
LOCATION	SEC. 35, T18S, R2E		SEC. 10, T19S, R2E		SEC. 27, T19S, R1E	
OWNER	ROWNS & STEWART		DIETER PRODUCTION CO.		ANDERSON-PRICHARD OIL CORP.	
COMPLETED	06/29/66		NOT GIVEN		09/03/46	
SAMPLED	03/20/69		05/15/67		02/--/47	
FORMATION	MISS-		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	375		375		375	
DEPTH, FEET	2533		2550		2806	
WELLHEAD PRESSURE,PSIG	180		680		820	
OPEN FLOW, MCFD	65		500		5771	
COMPONENT, MOLE PCT						
METHANE	69.6		79.1		71.4	
ETHANE	5.9		6.3		18.6	
PROPANE	3.6		3.1		---	
N-BUTANE	1.3		1.2		---	
ISOBUTANE	0.6		0.5		---	
N-PENTANE	0.8		0.3		---	
ISOPENTANE	0.3		0.3		---	
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.2		0.2		---	
NITROGEN	16.8		8.1		8.9	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		---	
HYDROGEN	TRACE		TRACE		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2		0.2		0.6	
HELIUM	0.69		0.53		0.44	
HEATING VALUE*	1012		1092		1057	
SPECIFIC GRAVITY	0.736		0.694		0.680	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1621 SAMPLE 5380	INDEX 1622 SAMPLE 1741	INDEX 1623 SAMPLE 1742
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MARION	MARION
FIELD	LEHIGH	LOST SPRINGS	LOST SPRINGS
WELL NAME	WASEMILLER NO. 1	PROPP NO. 1	PROPP NO. 2
LOCATION	SEC. 23, T19S, R1E	SEC. 8, T19S, R4E	SEC. 8, T19S, R4E
OWNER	ANDERSON-PRICHARD OIL CORP.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
COMPLETED	NOT GIVEN	03/--/26	08/--/26
SAMPLED	01/28/53	04/12/29	04/13/29
FORMATION	MISS-	MISS-CHAT	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2770	2360	2360
WELLHEAD PRESSURE, PSIG	800	740	740
OPEN FLOW, MCFD	2310	4250	1250
COMPONENT, MOLE PCT			
METHANE	74.1	62.7	62.0
ETHANE	5.5	23.4	24.4
PROPANE	2.8	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	13.7	13.0	12.6
OXYGEN	1.7	0.2	0.3
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.38	0.56	0.56
HEATING VALUE*	989	1054	1065
SPECIFIC GRAVITY	0.706	0.723	0.729

	INDEX 1624 SAMPLE 7543	INDEX 1625 SAMPLE 3243	INDEX 1626 SAMPLE 1381
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MARION	MCPHERSON
FIELD	LOST SPRINGS	ROBINSON	JOHNSON
WELL NAME	VOGEL NO. 1	ROBINSON NO. 1	ANDERSON NO. 2
LOCATION	SEC. 10, T19, R3E	SEC. 15, T20S, R5E	SEC. 29, T18S, R2W
OWNER	PAN AMERICAN PETROLEUM CORP.	FRANK DIETER & OTHERS	MERRIMAN, REEVES & SHIDEL
COMPLETED	NOT GIVEN	09/23/41	NOT GIVEN
SAMPLED	05/09/60	04/01/42	04/28/27
FORMATION	MISS-	PENN-BARTLESVILLE	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2440	2070	2930
WELLHEAD PRESSURE, PSIG	800	700	950
OPEN FLOW, MCFD	676	935	10300
COMPONENT, MOLE PCT			
METHANE	74.0	58.0	73.7
ETHANE	6.7	21.7	20.1
PROPANE	4.1	---	---
N-BUTANE	2.0	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.7	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.6	---	---
NITROGEN	9.9	18.8	5.6
OXYGEN	0.1	0.4	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.60	0.66	0.34
HEATING VALUE*	1160	976	1107
SPECIFIC GRAVITY	0.754	0.743	0.679

	INDEX 1627 SAMPLE 1878	INDEX 1628 SAMPLE 1877	INDEX 1629 SAMPLE 3228
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MCPHERSON	MCPHERSON	MCPHERSON
FIELD	JOHNSON	RITZ-CANTON	RITZ-CANTON
WELL NAME	C. O. ANDERSON NO. 2	DECKER NO. 1	MYERS 1-B
LOCATION	SEC. 31, T18S, R2W	SEC. 11, T19S, R2W	SEC. 14, T19S, R2W
OWNER	PRAIRIE OIL & GAS CO.	MCPHERSON OIL & GAS DEV. CO.	MCPHERSON OIL & GAS DEV. CO.
COMPLETED	01/01/28	07/10/29	02/20/31
SAMPLED	09/24/29	09/24/29	03/28/42
FORMATION	MISS-CHAT	MISS-CHAT	MISS-LIME
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2972	2887	2889
WELLHEAD PRESSURE, PSIG	665	1000	42
OPEN FLOW, MCFD	3400	18000	977
COMPONENT, MOLE PCT			
METHANE	74.3	72.6	65.4
ETHANE	19.4	20.1	31.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.5	6.6	2.8
OXYGEN	0.2	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.38	0.40	0.24
HEATING VALUE*	1100	1096	1220
SPECIFIC GRAVITY	0.674	0.682	0.722

	INDEX 1630 SAMPLE 3229	INDEX 1631 SAMPLE 3235	INDEX 1632 SAMPLE 4563
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MCPHERSON	MCPHERSON	MCPHERSON
FIELD	RITZ-CANTON	RITZ-CANTON	RITZ-CANTON
WELL NAME	COONS NO. 1	DECKER NO. 2	GRIFFITH NO. 1
LOCATION	SEC. 13, T19S, R1W	SEC. 11, T19S, R2W	SEC. 33, T19S, R1W
OWNER	E. K. CAREY	MCPHERSON OIL & GAS DEV. CO.	DONALD T. INGLING
COMPLETED	10/21/40	NOT GIVEN	05/20/48
SAMPLED	03/28/42	03/28/42	09/28/48
FORMATION	MISS-LIME	MISS-LIME	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	2895	2949
WELLHEAD PRESSURE, PSIG	600	158	700
OPEN FLOW, MCFD	804	4	300
COMPONENT, MOLE PCT			
METHANE	74.8	63.2	60.5
ETHANE	19.2	26.1	24.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.3	9.6	12.5
OXYGEN	0.2	0.3	2.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.39	0.45	0.25
HEATING VALUE*	1102	1108	1054
SPECIFIC GRAVITY	0.672	0.724	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1633 SAMPLE 1939		INDEX 1634 SAMPLE 3219		INDEX 1635 SAMPLE 1724	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MCPHERSON		MCPHERSON		MCPHERSON	
FIELD	VOSHELL		VOSHELL		WEDEL	
WELL NAME	KINNEY NO. 1		KRAEHILL NO. 2		WEDEL NO. 1	
LOCATION	SEC. 34, T20S, R3W		SEC. 4, T21S, R3W		SEC. 12, T20S, R 2W	
OWNER	GYPSY OIL CO.		W. G. MCBRIDE, INC.		MCPHERSON OIL & GAS DEV. CO.	
COMPLETED	12/--/29		07/--/30		02/--/29	
SAMPLED	02/20/30		03/28/42		03/09/29	
FORMATION	MISS-		MISS-LIME		MISS-CHERT	
GEOLOGIC PROVINCE CODE	375		375		375	
DEPTH, FEET	3072		2977		2982	
WELLHEAD PRESSURE,PSIG	450		NOT GIVEN		900	
OPEN FLOW, MCFD	2000		NOT GIVEN		6436	
COMPONENT, MOLE PCT						
METHANE	76.4		65.8		62.9	
ETHANE	17.9		29.7		25.4	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	5.0		3.6		10.6	
OXYGEN	0.2		0.3		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.3		0.5	
HELIUM	0.35		0.26		0.31	
HEATING VALUE*	1095		1199		1092	
SPECIFIC GRAVITY	0.665		0.720		0.729	

	INDEX 1636 SAMPLE 4416		INDEX 1637 SAMPLE 6116		INDEX 1638 SAMPLE 7550	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	ADAMS		ADAMS RANCH		ADAMS RANCH	
WELL NAME	ADAMS NO. 2		ADAMS RANCH NO. 1		H. G. ADAMS NO. 1-25	
LOCATION	SEC. 36, T34S, R30W		SEC. 1, T35S, R29W		SEC. 25, T34S, R30W	
OWNER	HELMERICH & PAYNE, INC.		CARTER OIL CO.		THOMAS & BREWER OIL & GAS CO	
COMPLETED	07/28/47		07/09/55		11/30/59	
SAMPLED	12/30/47		07/23/56		05/09/60	
FORMATION	PENN-MORROW		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5911		6070		5926	
WELLHEAD PRESSURE,PSIG	1250		NOT GIVEN		1650	
OPEN FLOW, MCFD	2860		3500		31650	
COMPONENT, MOLE PCT						
METHANE	76.4		86.0		83.2	
ETHANE	21.1		5.4		7.4	
PROPANE	---		3.1		4.0	
N-BUTANE	---		0.9		1.1	
ISOBUTANE	---		0.5		0.7	
N-PENTANE	---		0.3		0.2	
ISOPENTANE	---		0.2		0.4	
CYCLOPENTANE	---		0.2		0.1	
HEXANES PLUS	---		0.4		0.3	
NITROGEN	1.9		2.7		2.5	
OXYGEN	0.3		0.0		TRACE	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.0	
HELIUM	0.11		0.15		0.10	
HEATING VALUE*	1152		1145		1185	
SPECIFIC GRAVITY	0.670		0.669		0.689	

	INDEX 1639 SAMPLE 7587		INDEX 1640 SAMPLE 10506		INDEX 1641 SAMPLE 7680	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	ADAMS RANCH		ADAMS RANCH		ANGELL	
WELL NAME	ADAMS E-1		ADAMS RANCH NO. 1		MAMIE E. ANGELL NO. 2	
LOCATION	SEC. 10, T35S, R30W		SEC. 1, T35S, R29W		SEC. 30, T32S, R29W	
OWNER	THOMAS & BREWER		HUMBLE OIL & REFINING CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	09/09/59		07/11/55		08/01/60	
SAMPLED	06/23/60		04/05/66		09/19/60	
FORMATION	PENN-MORROW		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5754		6106		5570	
WELLHEAD PRESSURE,PSIG	1520		1006		1486	
OPEN FLOW, MCFD	20500		592		7000	
COMPONENT, MOLE PCT						
METHANE	87.4		85.5		77.1	
ETHANE	6.0		5.7		6.4	
PROPANE	3.1		3.4		4.1	
N-BUTANE	0.9		1.0		1.1	
ISOBUTANE	0.3		0.5		0.8	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	1.3		2.7		9.3	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.10		0.13		0.20	
HEATING VALUE*	1134		1147		1101	
SPECIFIC GRAVITY	0.649		0.671		0.712	

	INDEX 1642 SAMPLE 13090		INDEX 1643 SAMPLE 13205		INDEX 1644 SAMPLE 13479	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	ANGELL		ANGELL		ANGELL	
WELL NAME	ROBERTS NO. 1		ROLLINS NO. 1		COLLINGWOOD NO. 1	
LOCATION	SEC. 29, T32S, R29W		SEC. 28, T32S, R29W		SEC. 6, T33S, R29W	
OWNER	LEREN OIL CO.		LEREN OIL CORP.		IMPERIAL OIL CO.	
COMPLETED	08/30/71		12/27/71		04/11/72	
SAMPLED	10/19/71		05/--/72		11/--/72	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5221		5642		5710	
WELLHEAD PRESSURE,PSIG	1446		1336		1650	
OPEN FLOW, MCFD	5145		4690		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	76.0		72.8		77.5	
ETHANE	4.4		6.3		6.7	
PROPANE	2.4		5.1		4.0	
N-BUTANE	0.7		1.3		0.9	
ISOBUTANE	0.5		1.1		0.6	
N-PENTANE	0.1		0.5		0.2	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	13.1		11.7		9.6	
OXYGEN	2.0		0.7		0.1	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.3	
HELIUM	0.23		0.16		0.21	
HEATING VALUE*	974		1095		1066	
SPECIFIC GRAVITY	0.694		0.738		0.696	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1645 SAMPLE 13480	INDEX 1646 SAMPLE 15469	INDEX 1647 SAMPLE 10226
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ANGELL	BARRAGREE	BORCHERS
WELL NAME	ROBERTS B. NO. 1	ROSS NO. 1	BESSMER NO. 1
LOCATION	SEC. 33, T32S, R29W	SEC. 2, T35S, R28W	SEC. 1, T33S, R29W
OWNER	IMPERIAL OIL CO.	R. J. PATRICK	EDWIN G. BRADLEY
COMPLETED	04/06/72	04/25/78	10/14/65
SAMPLED	NOT GIVEN	10/25/78	10/15/65
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5622	2933	5564
WELLHEAD PRESSURE,PSIG	1600	745	1421
OPEN FLOW, MCFD	NOT GIVEN	3014	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	78.6	78.3
ETHANE	6.3	5.6	5.2
PROPANE	4.8	2.5	3.0
N-BUTANE	1.4	0.7	0.9
ISOBUTANE	0.9	0.3	0.5
N-PENTANE	0.5	0.2	0.1
ISOPENTANE	0.2	0.2	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	11.1	10.9	9.0
OXYGEN	0.2	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	1.1
HELIUM	0.17	0.43	0.17
HEATING VALUE*	1116	1027	1059
SPECIFIC GRAVITY	0.742	0.681	0.695

	INDEX 1648 SAMPLE 7310	INDEX 1649 SAMPLE 10754	INDEX 1650 SAMPLE 7264
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	BORCHERS N	BORCHERS N	BORCHERS NW
WELL NAME	J. S. FLETCHER NO. 3	HALLOCK B NO. 1-36	CARL EVANS NO. 1
LOCATION	SEC. 7, T33S, R28W	SEC. 36, T32S, R29W	SEC. 1, T33S, R29W
OWNER	SHAMROCK OIL & GAS CORP.	HORIZON OIL & GAS CO.	SKELLY OIL CO.
COMPLETED	10/21/59	05/06/66	07/13/59
SAMPLED	12/15/59	10/21/66	10/28/59
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5079	5611	5612
WELLHEAD PRESSURE,PSIG	1429	1675	1709
OPEN FLOW, MCFD	5079	28000	10842
COMPONENT, MOLE PCT			
METHANE	79.1	79.2	84.3
ETHANE	5.6	6.5	5.5
PROPANE	3.6	4.1	3.1
N-BUTANE	0.8	1.1	0.7
ISOBUTANE	0.0	0.6	0.4
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	3.0	0.4	0.3
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.0	0.4	0.1
NITROGEN	7.4	6.8	5.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.20	0.16	0.10
HEATING VALUE*	1154	1140	1088
SPECIFIC GRAVITY	0.721	0.709	0.659

	INDEX 1651 SAMPLE 13483	INDEX 1652 SAMPLE 10814	INDEX 1653 SAMPLE 10815
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	BRUNO	CHERRY	CHERRY
WELL NAME	GIBLER NO. 1	CHERRY NO. 1	CHERRY NO. 1
LOCATION	SEC. 20, T33S, R30W	SEC. 3, T31S, R26W	SEC. 3, T31S, R26W
OWNER	COTTON PETROLEUM CO.	BURK ROYALTY CO.	BURK ROYALTY CO.
COMPLETED	10/24/72	NOT GIVEN	NOT GIVEN
SAMPLED	12/10/72	12/13/66	12/13/66
FORMATION	PENN-MORROW	PENN-KANSAS CITY	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5737	4886	4526
WELLHEAD PRESSURE,PSIG	740	1490	1389
OPEN FLOW, MCFD	2000	2100	2950
COMPONENT, MOLE PCT			
METHANE	86.2	70.5	67.2
ETHANE	5.9	6.3	5.0
PROPANE	2.8	4.3	3.6
N-BUTANE	0.6	1.3	1.1
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.6	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.5	15.8	21.3
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.14	0.23	0.25
HEATING VALUE*	1099	1039	967
SPECIFIC GRAVITY	0.648	0.738	0.747

	INDEX 1654 SAMPLE 14572	INDEX 1655 SAMPLE 14573	INDEX 1656 SAMPLE 14574
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	CIMARRON BEND	CIMARRON BEND	CIMARRON BEND
WELL NAME	H.G. ADAMS III NO. F-4	JESSE S. ADAMS NO. F-2	H. G. ADAMS III NO. F-3
LOCATION	SEC. 4, T35S, R29W	SEC. 10, T35S, R29W	SEC. 9, T35S, R29W
OWNER	R. CLAY UNDERWOOD	R. CLAY UNDERWOOD	R. CLAY UNDERWOOD
COMPLETED	05/15/75	12/15/75	03/25/75
SAMPLED	02/03/76	02/03/76	02/03/76
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5874	5938	5873
WELLHEAD PRESSURE,PSIG	1580	1600	1520
OPEN FLOW, MCFD	1378	1423	765
COMPONENT, MOLE PCT			
METHANE	87.8	87.8	88.6
ETHANE	3.4	5.0	4.8
PROPANE	2.0	2.8	2.3
N-BUTANE	0.5	0.7	0.5
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.4	2.3	2.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.22	0.13	0.13
HEATING VALUE*	1043	1123	1088
SPECIFIC GRAVITY	0.632	0.650	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1657 SAMPLE 14741	INDEX 1658 SAMPLE 14742	INDEX 1659 SAMPLE 14743
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	CIMARRON BEND	CIMARRON BEND	CIMARRON BEND
WELL NAME	ADAMS NO. 1-34	ADAMS NO. 1-2	BARRAGREE NO. 1-8
LOCATION	SEC. 34, T34S, R29W	SEC. 2, T35S, R29W	SEC. 8, T35S, R28W
OWNER	MESA PETROLEUM CO.	MESA PETROLEUM CO.	MESA PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	08/28/76	08/28/76
FORMATION	PENN-MORROW	MISS-CHESTER & PENN-TORONTO	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1523	1290	1110
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	83.3	85.8
ETHANE	6.2	5.3	5.1
PROPANE	3.9	3.0	2.4
N-BUTANE	1.2	0.8	0.6
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	3.8	5.6	4.9
OXYGEN	0.0	0.6	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.13	0.16
HEATING VALUE*	1160	1083	1080
SPECIFIC GRAVITY	0.689	0.667	0.651

	INDEX 1660 SAMPLE 14744	INDEX 1661 SAMPLE 15795	INDEX 1662 SAMPLE 6193
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	CIMARRON BEND	CROOKED CREEK	FINCHAM
WELL NAME	BARRAGREE NO. 1-8	HEINSON NO. 1-27	MARION NO. 1
LOCATION	SEC. 8, T35S, R28W	SEC. 27, T33S, R28W	SEC. 14, T35S, R27W
OWNER	MESA PETROLEUM CO.	MESA PETROLEUM CO.	MONSANTO CHEMICAL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/26/56
SAMPLED	08/28/76	09/27/79	11/30/56
FORMATION	PENN-MORROW	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6257
WELLHEAD PRESSURE,PSIG	1405	1625	1660
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	85.8	87.8	89.7
ETHANE	5.5	4.7	4.4
PROPANE	2.8	2.2	2.5
N-BUTANE	0.8	0.7	0.7
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	3.7	2.6	0.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.7
HELIUM	0.16	0.16	0.12
HEATING VALUE*	1113	1103	1121
SPECIFIC GRAVITY	0.658	0.647	0.641

	INDEX 1663 SAMPLE 6452	INDEX 1664 SAMPLE 7248	INDEX 1665 SAMPLE 14745
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	HOCKETT	HORACE S	HORACE S
WELL NAME	NO. 1 FLAGEL A	H. G. ADAMS B NO. 1	ADAM NO. 1-33
LOCATION	SEC. 20, T31S, R29W	SEC. 26, T34S, R29W	SEC. 33, T34S, R29W
OWNER	NORTHERN NATURAL GAS CO.	TEXACO INC.	MESA PETROLEUM CO.
COMPLETED	10/12/57	09/26/59	NOT GIVEN
SAMPLED	12/02/57	10/12/59	08/28/76
FORMATION	MISS-CHESTER	PENN-TORONTO	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5545	4388	5956
WELLHEAD PRESSURE,PSIG	1296	NOT GIVEN	1365
OPEN FLOW, MCFD	2033	2913	3200
COMPONENT, MOLE PCT			
METHANE	75.7	77.5	82.8
ETHANE	5.6	6.4	6.6
PROPANE	4.2	3.5	4.4
N-BUTANE	1.4	0.9	1.3
ISOBUTANE	1.0	0.5	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.4	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	10.5	10.1	3.1
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.20	0.30	0.12
HEATING VALUE*	1048	1073	1181
SPECIFIC GRAVITY	0.719	0.699	0.696

	INDEX 1666 SAMPLE 14746	INDEX 1667 SAMPLE 14246	INDEX 1668 SAMPLE 6192
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	HORACE S	JOHAN	LESLIE
WELL NAME	ADAM NO. 1-33	JOHANNSEN-BARRY NO. 1	HOLMES NO. 9
LOCATION	SEC. 33, T34S, R29W	SEC. 32, T34S, R27W	SEC. 35, T32S, R30W
OWNER	MESA PETROLEUM CO.	JOHNSON-MIZEL OIL CO.	COLORADO OIL & GAS CORP.
COMPLETED	NOT GIVEN	07/--/74	09/16/56
SAMPLED	08/28/76	12/23/74	11/28/56
FORMATION	PENN-MORROW	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3896	6000	5713
WELLHEAD PRESSURE,PSIG	1140	1500	1350
OPEN FLOW, MCFD	2000	5000	14121
COMPONENT, MOLE PCT			
METHANE	82.8	89.6	83.3
ETHANE	6.6	4.6	5.8
PROPANE	5.8	2.1	2.1
N-BUTANE	1.2	0.6	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.5	0.3	0.7
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	1.1	1.7	5.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.12	0.12	0.14
HEATING VALUE*	1172	1100	1080
SPECIFIC GRAVITY	0.689	0.632	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1669 SAMPLE 6353	INDEX 1670 SAMPLE 10311	INDEX 1671 SAMPLE 10312
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	LESLIE	LESLIE STEVENS	LESLIE STEVENS
WELL NAME	BENNKE-VAIL NO. 1	PAULINE V. HULBURT	WELCOME A. ORR
LOCATION	SEC. 34, T32S, R30W	SEC. 5, T33S, R30W	SEC. 33, T32S, R30W
OWNER	CARTER OIL CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	10/10/56	NOT GIVEN	NOT GIVEN
SAMPLED	07/02/57	12/06/65	12/06/65
FORMATION	PENN-MORROW U	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5625	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	650	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1020	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	83.2	85.8
ETHANE	5.1	6.7	5.8
PROPANE	2.2	3.8	2.8
N-BUTANE	0.5	1.0	0.8
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	4.4	3.2	3.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.16	0.10	0.15
HEATING VALUE*	1069	1170	1113
SPECIFIC GRAVITY	0.645	0.690	0.657

	INDEX 1672 SAMPLE 10329	INDEX 1673 SAMPLE 6326	INDEX 1674 SAMPLE 6844
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	LESLIE STEVENS	MCKINNEY	MCKINNEY
WELL NAME	W. W. LANGHOFER NO. 1	MCKINNEY C NO. 1	PAINTER NO. 1
LOCATION	SEC. 18, T33S, R30W	SEC. 25, T34S, R26W	SEC. 17, T34S, R26W
OWNER	SHAMROCK OIL & GAS CORP.	SKELLY OIL CO.	J. M. HUBER CORP.
COMPLETED	NOT GIVEN	01/02/57	10/23/58
SAMPLED	12/20/65	05/17/57	10/23/58
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5815	5920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1660	1734
OPEN FLOW, MCFD	NOT GIVEN	12730	13
COMPONENT, MOLE PCT			
METHANE	83.7	78.4	84.0
ETHANE	6.6	6.6	5.9
PROPANE	3.5	4.9	3.8
N-BUTANE	0.9	1.7	1.0
ISOBUTANE	0.4	1.2	0.9
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	4.0	6.3	3.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.11	0.18	0.10
HEATING VALUE*	1126	1160	1155
SPECIFIC GRAVITY	0.670	0.717	0.682

	INDEX 1675 SAMPLE 7452	INDEX 1676 SAMPLE 7481	INDEX 1677 SAMPLE 7764
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MCKINNEY	MCKINNEY	MCKINNEY
WELL NAME	C. A. ISAAC NO. 1	LIDDYE BOYD	MERKLE NO. 1
LOCATION	SEC. 18, T33S, R27W	SEC. 3, T33S, R27W	SEC. 23, T34S, R27W
OWNER	SKELLY OIL CO.	SHAMROCK OIL & GAS CORP.	J. M. HUBER CORP.
COMPLETED	01/05/60	12/03/59	09/19/60
SAMPLED	03/19/60	03/30/60	11/02/60
FORMATION	PENN-MORROW	MISS-	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5752	5612	5966
WELLHEAD PRESSURE,PSIG	1650	1585	1739
OPEN FLOW, MCFD	22982	4150	7000
COMPONENT, MOLE PCT			
METHANE	80.6	90.2	90.8
ETHANE	5.8	5.0	4.7
PROPANE	3.7	2.0	1.8
N-BUTANE	1.1	0.6	0.5
ISOBUTANE	0.8	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	6.8	0.7	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1116	1128	1111
SPECIFIC GRAVITY	0.694	0.638	0.627

	INDEX 1678 SAMPLE 15308	INDEX 1679 SAMPLE 9559	INDEX 1680 SAMPLE 9788
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MCKINNEY	MEIERDIERKS	MEYERS
WELL NAME	ROSSON	MEIERDIERKS NO. 1	THONHOFF E NO. 1
LOCATION	SEC. 32, T33S, R27W	SEC. 2, T34S, R28W	SEC. 4, T35S, R27W
OWNER	MESA PETROLEUM CO.	IMPERIAL OIL OF KANSAS INC.	IMPERIAL OIL CO.
COMPLETED	03/21/78	NOT GIVEN	NOT GIVEN
SAMPLED	06/23/78	09/14/64	03/04/65
FORMATION	MISS-CHESTER	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5864	3094	3030
WELLHEAD PRESSURE,PSIG	875	830	825
OPEN FLOW, MCFD	2150	3120	9000
COMPONENT, MOLE PCT			
METHANE	85.9	84.2	82.1
ETHANE	4.8	5.6	5.8
PROPANE	2.3	2.2	2.2
N-BUTANE	0.7	0.8	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.6	5.8	8.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	0.1
HELIUM	0.19	0.31	0.35
HEATING VALUE*	1080	1074	1046
SPECIFIC GRAVITY	0.658	0.657	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1681 SAMPLE 6975	INDEX 1682 SAMPLE 5117	INDEX 1683 SAMPLE 5130
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MOHLER NE	NOT GIVEN	NOT GIVEN
WELL NAME	CORDES NO. 1	GOODNIGHT NO. 1	THEIS B NO. 1
LOCATION	SEC. 24, T33S, R29W	SEC. 3, T34S, R26W	SEC. 11, T34S, R26W
OWNER	SHAMROCK OIL & GAS CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	10/01/58	05/09/51	07/23/51
SAMPLED	02/13/59	10/30/51	10/30/51
FORMATION	PENN-MORROW	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5586	5816	5736
WELLHEAD PRESSURE,PSIG	1661	1907	2055
OPEN FLOW, MCFD	43000	7095	9783
COMPONENT, MOLE PCT			
METHANE	80.1	89.2	81.6
ETHANE	6.4	4.7	5.6
PROPANE	3.7	2.1	3.3
N-BUTANE	0.9	0.1	1.0
ISOBUTANE	0.6	0.1	0.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	7.0	1.4	6.4
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.7	1.2
HELIUM	0.20	0.08	0.13
HEATING VALUE*	1113	1080	1096
SPECIFIC GRAVITY	0.695	0.624	0.703

	INDEX 1684 SAMPLE 7035	INDEX 1685 SAMPLE 12313	INDEX 1686 SAMPLE 15093
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	FLORA BARRAGREE NO. 1	LOEWEN NO. 1-A	CROOKED L. RANCH NO. 1
LOCATION	SEC. 25, T34S, R28W	SEC. 1, T33S, R28W	SEC. 21, T32S, R28W
OWNER	SKELLY OIL CO.	FERGUSON OIL CO., INC.	IMPERIAL OIL CO.
COMPLETED	05/19/59	NOT GIVEN	05/11/77
SAMPLED	04/09/59	07/07/70	09/--/77
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3066	5672	5427
WELLHEAD PRESSURE,PSIG	847	1223	1550
OPEN FLOW, MCFD	13275	11351	5173
COMPONENT, MOLE PCT			
METHANE	80.5	90.0	69.2
ETHANE	5.5	4.7	5.7
PROPANE	2.2	2.2	5.5
N-BUTANE	0.7	0.6	2.1
ISOBUTANE	0.4	0.4	1.2
N-PENTANE	0.2	0.2	0.9
ISOPENTANE	0.2	0.1	0.7
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.3	0.2	0.7
NITROGEN	8.7	1.4	13.3
OXYGEN	1.0	TRACE	0.3
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.09	0.22
HEATING VALUE*	1041	1110	1169
SPECIFIC GRAVITY	0.678	0.630	0.797

	INDEX 1687 SAMPLE 5691	INDEX 1688 SAMPLE 12381	INDEX 1689 SAMPLE 7551
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	NOVINGER	NOVINGER	NOVINGER E
WELL NAME	NOVINGER NO. A-1	SCHONLAU A NO. 1	BALLARD NO. 1
LOCATION	SEC. 26, T33W, R30S	SEC. 14, T34S, R30W	SEC. 31, T33S, R29W
OWNER	COLUMBIAN FUEL CORP.	ANADARKO PRODUCTION CO.	THOMAS & BREWER OIL & GAS CO
COMPLETED	NOT GIVEN	06/13/69	12/11/59
SAMPLED	09/--/54	08/25/70	05/09/60
FORMATION	PENN-MARMATON	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5270	5898	5841
WELLHEAD PRESSURE,PSIG	1259	1645	1600
OPEN FLOW, MCFD	NOT GIVEN	1492	18250
COMPONENT, MOLE PCT			
METHANE	68.4	85.0	85.6
ETHANE	8.0	5.9	5.8
PROPANE	7.6	3.6	3.2
N-BUTANE	2.5	1.1	0.9
ISOBUTANE	1.2	0.5	0.5
N-PENTANE	0.5	0.3	0.1
ISOPENTANE	0.8	0.2	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	9.9	2.7	3.2
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.10	0.12	0.10
HEATING VALUE*	1242	1158	1119
SPECIFIC GRAVITY	0.806	0.672	0.659

	INDEX 1690 SAMPLE 11505	INDEX 1691 SAMPLE 11506	INDEX 1692 SAMPLE 6240
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	NOVINGER SW	NOVINGER SW	SANDERS
WELL NAME	BAKER A NO. 1	FOX C NO. 1	A. D. SANDERS NO. 1
LOCATION	SEC. 8, T34S, R30W	SEC. 17, T34S, R30W	SEC. 13, T32S, R29W
OWNER	NOT GIVEN	ANADARKO PRODUCTION CO.	TEXAS CO.
COMPLETED	05/04/67	11/30/67	10/25/56
SAMPLED	05/17/68	05/14/68	01/21/57
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5808	5802	5548
WELLHEAD PRESSURE,PSIG	1617	1616	1650
OPEN FLOW, MCFD	60000	43500	3208
COMPONENT, MOLE PCT			
METHANE	82.2	83.7	89.9
ETHANE	6.0	6.1	4.9
PROPANE	3.6	3.8	2.1
N-BUTANE	1.2	1.1	0.6
ISOBUTANE	0.8	0.5	0.5
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.1	3.7	1.0
OXYGEN	0.4	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.14	0.13	0.10
HEATING VALUE*	1123	1141	1121
SPECIFIC GRAVITY	0.688	0.679	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1693 SAMPLE 10313	INDEX 1694 SAMPLE 10342	INDEX 1695 SAMPLE 4005
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	SINGLEY	SINGLEY	WILDCAT
WELL NAME	IDA K. HEINSON NO. 8	H. A. HOLMES	A. W. ADAMS NO. 1
LOCATION	SEC. 28, T33S, R29W	SEC. 21, T33S, R29W	SEC. 8, T35S, R30W
OWNER	SHAMROCK OIL & GAS CORP.	GULF OIL CORP.	STANOLIND OIL & GAS CO.
COMPLETED	NOT GIVEN	01/06/56	NOT GIVEN
SAMPLED	12/06/65	12/22/65	NOT GIVEN
FORMATION	NOT GIVEN	PENN-MORROW	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5729	5850
WELLHEAD PRESSURE,PSIG	NOT GIVEN	491	1600
OPEN FLOW, MCFD	NOT GIVEN	1419	1400
COMPONENT, MOLE PCT			
METHANE	79.6	78.9	79.3
ETHANE	6.3	7.5	18.3
PROPANE	4.2	4.4	---
N-BUTANE	1.2	1.0	---
ISOBUTANE	0.6	0.9	---
N-PENTANE	0.3	0.5	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	6.9	6.1	1.4
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.10	0.11	0.12
HEATING VALUE*	1129	1141	1131
SPECIFIC GRAVITY	0.704	0.709	0.657

	INDEX 1696 SAMPLE 4576	INDEX 1697 SAMPLE 5302	INDEX 1698 SAMPLE 5377
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ADAMS A-1	C. E. STEVENS NO. 1	ADAMS K NO. 1
LOCATION	SEC. 24, T34S, R30W	SEC. 32, T32S, R30W	SEC. 11, T35S, R30W
OWNER	WHITE EAGLE OIL CO.	COLUMBIAN FUEL CORP.	COLUMBIAN FUEL CORP.
COMPLETED	04/26/48	09/13/52	11/18/52
SAMPLED	10/04/48	10/30/52	01/12/53
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5891	5570	5760
WELLHEAD PRESSURE,PSIG	1125	1812	1375
OPEN FLOW, MCFD	5200	14250	4245
COMPONENT, MOLE PCT			
METHANE	70.9	83.5	84.4
ETHANE	26.1	5.8	5.7
PROPANE	---	2.9	3.6
N-BUTANE	---	1.0	1.1
ISOBUTANE	---	0.6	0.3
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.7	0.1
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.5	0.2
NITROGEN	2.1	4.0	3.8
OXYGEN	0.5	0.1	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.13	0.10	0.13
HEATING VALUE*	1186	1155	1125
SPECIFIC GRAVITY	0.698	0.690	0.669

	INDEX 1699 SAMPLE 5964	INDEX 1700 SAMPLE 12758	INDEX 1701 SAMPLE 3198
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MONTGOMERY
FIELD	WILDCAT	WILDCAT	BOLTON
WELL NAME	W. W. LANGHOFER NO. 1	J. R. COTTRELL NO. 1-V	PRATHER NO. 5
LOCATION	SEC. 18, T33S, R30W	SEC. 20, T32S, R29W	SEC. 20, T33S, R15E
OWNER	SHAMROCK OIL & GAS CORP.	CLINTON OIL CO.	CONSOLIDATED GAS, OIL & MFG.
COMPLETED	08/25/55	02/14/71	03/10/24
SAMPLED	11/03/55	04/14/71	03/24/42
FORMATION	PENN-MORROW	PENN-MORROW	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	5654	5628	1078
WELLHEAD PRESSURE,PSIG	1603	1518	10
OPEN FLOW, MCFD	6780	11200	10
COMPONENT, MOLE PCT			
METHANE	80.6	74.3	52.6
ETHANE	5.2	6.7	43.7
PROPANE	3.3	4.9	---
N-BUTANE	1.6	1.3	---
ISOBUTANE	0.8	1.0	---
N-PENTANE	0.4	0.3	---
ISOPENTANE	1.4	0.4	---
CYCLOPENTANE	0.5	0.1	---
HEXANES PLUS	1.2	0.3	---
NITROGEN	4.3	10.3	2.7
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.14	0.16	0.09
HEATING VALUE*	1234	1126	1316
SPECIFIC GRAVITY	0.740	0.738	0.788

	INDEX 1702 SAMPLE 3191	INDEX 1703 SAMPLE 3197	INDEX 1704 SAMPLE 2766
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	DEARING	INDEPENDENCE	JEFFERSON
WELL NAME	BAKER NO. 2	UNIV. ATLAS PORT. CEMENT CO.	HESTER 60
LOCATION	SEC. 6, T34S, R15E	SEC. 16, T32S, R15E	SEC. 15, T34S, R15E
OWNER	TRINITY OIL & GAS CO.	SAGAMORE OIL & GAS CO.	GREYSOLON OIL CO.
COMPLETED	07/--/41	02/05/39	--/--/18
SAMPLED	03/24/42	03/24/42	09/13/37
FORMATION	PENN-BARTLESVILLE	PENN-BARTLESVILLE	PENN-WAYSIDE
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1000	1226	440
WELLHEAD PRESSURE,PSIG	4	120	NOT GIVEN
OPEN FLOW, MCFD	75	280	3
COMPONENT, MOLE PCT			
METHANE	93.9	97.7	12.9
ETHANE	1.4	0.0	3.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.4	0.9	82.7
OXYGEN	0.3	0.4	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.9	0.8	0.6
HELIUM	0.08	0.16	0.00
HEATING VALUE*	976	990	186
SPECIFIC GRAVITY	0.591	0.567	0.921

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1705 SAMPLE 3192		INDEX 1706 SAMPLE 3244		INDEX 1707 SAMPLE 3261	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MONTGOMERY		MORRIS		MORRIS	
FIELD	JEFFERSON		WILDE		WILDE	
WELL NAME	SNELL NO. 4		MYERS NO. 2		WILDE NO. 1	
LOCATION	SEC. 5, T36S, R15E		SEC. 23, T17S, R7E		SEC. 15, T17S, R7E	
OWNER	CONSOLIDATED GAS, OIL & MFG.		CENTRAL WEST UTILITY		CENTRAL WEST UTILITY	
COMPLETED	03/27/28		12/--/37		01/--/30	
SAMPLED	03/24/42		04/02/42		04/02/42	
FORMATION	PENN-BARTLESVILLE		-SANDSTONE		-LIMESTONE	
GEOLOGIC PROVINCE CODE	365		370		370	
DEPTH, FEET	1108		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	15		47		362	
OPEN FLOW, MCFD	15		250		730	
COMPONENT, MOLE PCT						
METHANE	91.6		72.0		72.2	
ETHANE	5.7		12.7		13.1	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	1.2		14.1		13.6	
OXYGEN	0.3		0.3		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	1.1		0.2		0.2	
HELIUM	0.08		0.69		0.63	
HEATING VALUE*	1030		957		966	
SPECIFIC GRAVITY	0.600		0.676		0.677	

	INDEX 1708 SAMPLE 1799		INDEX 1709 SAMPLE 1800		INDEX 1710 SAMPLE 1872	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORRIS		MORRIS		MORRIS	
FIELD	WILSEY		WILSEY		WILSEY	
WELL NAME	MEDCALF NO. 1		MEDCALF NO. 3		HAMMER NO. 1	
LOCATION	SEC. 10, T16S, R7E		SEC. 15, T16S, R7E		SEC. 14, T16S, R7E	
OWNER	GENERAL UTILITIES CO.		GENERAL UTILITIES CO.		GENERAL UTILITIES CO.	
COMPLETED	--/--/28		--/--/29		02/18/27	
SAMPLED	06/14/29		06/14/29		09/23/29	
FORMATION	PENN-OSWEGO		PENN-OSWEGO		NOT GIVEN	
GEOLOGIC PROVINCE CODE	370		370		370	
DEPTH, FEET	1400		1400		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	355		355		170	
OPEN FLOW, MCFD	NOT GIVEN		250		500000	
COMPONENT, MOLE PCT						
METHANE	63.3		68.1		66.8	
ETHANE	9.5		12.1		10.6	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	25.8		18.7		21.3	
OXYGEN	0.2		0.2		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.2		0.4	
HELIUM	0.88		0.75		0.81	
HEATING VALUE*	811		907		867	
SPECIFIC GRAVITY	0.707		0.692		0.697	

	INDEX 1711 SAMPLE 7189		INDEX 1712 SAMPLE 7234		INDEX 1713 SAMPLE 5082	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	BERRYMAN		BERRYMAN		BOEHM	
WELL NAME	BERRYMAN B		BERRYMAN B		GREENWOOD B NO. 1	
LOCATION	SEC. 21, T33S, R41W		SEC. 21, T33S, R41W		SEC. 14, T33S, R42W	
OWNER	PANHANDLE EASTERN PIPE LINE		PANHANDLE EASTERN PIPELINE		CITIES SERVICE OIL CO.	
COMPLETED	NOT GIVEN		04/29/59		05/25/51	
SAMPLED	08/--/59		10/07/59		06/26/51	
FORMATION	PENN-WABAUNSEE		PENN-WABAUNSEE		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		2915		4872	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		445		1030	
OPEN FLOW, MCFD	NOT GIVEN		1330		3590	
COMPONENT, MOLE PCT						
METHANE	77.3		64.6		87.4	
ETHANE	5.5		5.2		3.4	
PROPANE	3.4		3.0		1.7	
N-BUTANE	1.0		0.8		0.1	
ISOBUTANE	0.5		0.3		0.0	
N-PENTANE	TRACE		0.2		TRACE	
ISOPENTANE	0.5		0.3		0.0	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.3		1.4	
NITROGEN	10.9		24.4		4.6	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	TRACE		0.3		0.7	
HELIUM	0.60		0.60		0.49	
HEATING VALUE*	1047		903		1071	
SPECIFIC GRAVITY	0.692		0.749		0.647	

	INDEX 1714 SAMPLE 6321		INDEX 1715 SAMPLE 8257		INDEX 1716 SAMPLE 13710	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	BOEHM		BRADSHAW		CIMARRON VALLEY	
WELL NAME	WACKER B NO. 2		E. C. DEAN NO. 1-2		LOW C NO. 4	
LOCATION	SEC. 10, T33S, R42W		SEC. 2, T32S, R42W		SEC. 17, T33S, R40W	
OWNER	CITIES SERVICE OIL CO.		HAMILTON BROS., INC.		ARADARKO PRODUCTION CO.	
COMPLETED	03/20/57		10/16/61		04/10/72	
SAMPLED	05/07/57		12/27/61		08/27/73	
FORMATION	PENN-MORROW		PENN-KEYES		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4458		5050		5388	
WELLHEAD PRESSURE,PSIG	430		NOT GIVEN		1159	
OPEN FLOW, MCFD	11000		NOT GIVEN		8900	
COMPONENT, MOLE PCT						
METHANE	89.1		71.4		87.5	
ETHANE	3.3		4.6		3.4	
PROPANE	1.7		2.8		1.6	
N-BUTANE	0.5		1.0		0.5	
ISOBUTANE	0.3		0.7		0.4	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2		0.3		0.3	
NITROGEN	3.4		16.8		5.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.1		0.1		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		1.2		0.3	
HELIUM	0.47		0.62		0.41	
HEATING VALUE*	1056		976		1055	
SPECIFIC GRAVITY	0.628		0.730		0.640	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1717 SAMPLE 15250	INDEX 1718 SAMPLE 11504	INDEX 1719 SAMPLE 12909
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	CIMARRON VALLEY	CIMARRON VALLEY SW	CIMARRON VALLEY SW
WELL NAME	GODDARD "A" NO. 1	REPUBLIC B NO. 1	REPUBLIC B NO. 1
LOCATION	SEC. 9, T33S, R40W	SEC. 18, T33S, R40W	SEC. 18, T33S, R40W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	12/02/77	06/14/67	06/14/67
SAMPLED	04/04/78	05/16/68	07/21/71
FORMATION	PENN-MORROW	PENN-MORROW G	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5476	5445	5445
WELLHEAD PRESSURE,PSIG	1268	1266	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1736	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.0	87.1	88.0
ETHANE	3.6	3.5	3.3
PROPANE	1.8	1.6	1.4
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	4.7	5.5	5.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.20	0.46	0.41
HEATING VALUE*	1061	1053	1034
SPECIFIC GRAVITY	0.637	0.640	0.629

	INDEX 1720 SAMPLE 14774	INDEX 1721 SAMPLE 5901	INDEX 1722 SAMPLE 7790
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	DUNKLE	ELKHART	ELKHART W
WELL NAME	DUNKLE "A" NO. 1	JONES NO. 1-11	LANDRUM NO. 1-20
LOCATION	SEC. 1, T33S, R41W	SEC. 11, T35S, R43W	SEC. 20, T35S, R43W
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPE LINE	ANADARKO PRODUCTION CO.
COMPLETED	12/03/75	06/03/55	01/27/60
SAMPLED	09/17/76	08/02/55	12/07/60
FORMATION	PENN-WABAUNSEE	PENN-KEYES U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3005	4558	4294
WELLHEAD PRESSURE,PSIG	439	868	1047
OPEN FLOW, MCFD	2248	2579	36964
COMPONENT, MOLE PCT			
METHANE	67.1	74.6	77.0
ETHANE	5.7	3.8	6.8
PROPANE	3.2	2.3	4.1
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.4	0.3	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	21.1	15.1	9.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.58	1.70	0.40
HEATING VALUE*	947	956	1077
SPECIFIC GRAVITY	0.739	0.692	0.699

	INDEX 1723 SAMPLE 5378	INDEX 1724 SAMPLE 5453	INDEX 1725 SAMPLE 5709
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	BOEHM NO. A-1	INTERSTATE A-1	INTERSTATE NO. A-1
LOCATION	SEC. 11, T33S, R42W	SEC. 19, T34S, R43W	SEC. 19, T34S, R43W
OWNER	AMERICAN GAS PRODUCTION CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	11/06/52	05/02/53	05/02/53
SAMPLED	01/20/53	04/29/53	10/15/54
FORMATION	PENN-TOPEKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3158	4238	4328
WELLHEAD PRESSURE,PSIG	431	1148	1145
OPEN FLOW, MCFD	6600	8150	7385
COMPONENT, MOLE PCT			
METHANE	60.8	72.2	73.0
ETHANE	6.0	6.1	5.8
PROPANE	4.2	4.9	4.5
N-BUTANE	1.4	1.1	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	25.7	13.8	13.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.57	0.70	0.73
HEATING VALUE*	929	1062	1037
SPECIFIC GRAVITY	0.777	0.732	0.717

	INDEX 1726 SAMPLE 5710	INDEX 1727 SAMPLE 5711	INDEX 1728 SAMPLE 5729
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	GREENWOOD NO. B-1	GREENWOOD NO. C-1	U.S.A. NO. 1
LOCATION	SEC. 14, T33S, R42W	SEC. 15, T33S, R42W	SEC. 29, T34S, R43W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	STANOLIND OIL&GAS CO. ET AL.
COMPLETED	05/25/51	06/--/51	09/04/54
SAMPLED	10/15/54	10/15/54	11/13/54
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4854	4866	2838
WELLHEAD PRESSURE,PSIG	1015	1012	405
OPEN FLOW, MCFD	21699	2504	3615
COMPONENT, MOLE PCT			
METHANE	88.7	88.1	66.4
ETHANE	3.2	3.3	6.1
PROPANE	1.6	1.7	3.4
N-BUTANE	0.6	0.6	1.0
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.9	4.2	21.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	0.48	0.53	0.46
HEATING VALUE*	1059	1054	935
SPECIFIC GRAVITY	0.633	0.633	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1729 SAMPLE 5961	INDEX 1730 SAMPLE 6033	INDEX 1731 SAMPLE 6034
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	HANNA UNIT NO. 1	KNOEBER A NO. 1	BOYD NO. 1
LOCATION	SEC. 5, T31S, R42W	SEC. 33, T32S, R42W	SEC. 33, T31S, R42W
OWNER	SUPERIOR OIL CO.	CITIES SERVICE OIL CO.	SUPERIOR OIL CO.
COMPLETED	11/24/54	12/20/55	12/11/55
SAMPLED	10/27/55	03/06/56	06/19/56
FORMATION	PENN-TOPEKA	PENN-LANSING	PENN-WABAUNSEE & ELMONT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3174	2932	2800
WELLHEAD PRESSURE,PSIG	417	413	437
OPEN FLOW, MCFD	1617	19400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.3	65.8	64.6
ETHANE	5.7	6.7	6.1
PROPANE	3.6	4.0	3.6
N-BUTANE	1.2	1.2	1.3
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	27.1	20.2	22.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.62	0.49	0.55
HEATING VALUE*	892	983	954
SPECIFIC GRAVITY	0.766	0.754	0.760

	INDEX 1732 SAMPLE 6038	INDEX 1733 SAMPLE 6046	INDEX 1734 SAMPLE 6125
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	FULLERTON NO. 1	JONES NO. 1-11	KENNEDY NO. 1-8
LOCATION	SEC. 21, T34S, R42W	SEC. 11, T35S, R43W	SEC. 8, T35S, R43W
OWNER	COLORADO OIL & GAS CORP.	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	11/21/55	02/02/56	07/12/56
SAMPLED	02/25/56	04/04/56	08/15/56
FORMATION	PENN-TOPEKA & ELMONT	PENN-SHAWNEE	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2878	2884	2854
WELLHEAD PRESSURE,PSIG	915	472	414
OPEN FLOW, MCFD	5450	NOT GIVEN	1250
COMPONENT, MOLE PCT			
METHANE	66.8	67.5	64.8
ETHANE	5.9	5.9	6.1
PROPANE	3.5	3.6	3.4
N-BUTANE	1.0	1.1	1.1
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	22.9	19.9	22.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.61	0.67	0.65
HEATING VALUE*	919	969	948
SPECIFIC GRAVITY	0.744	0.740	0.753

	INDEX 1735 SAMPLE 6144	INDEX 1736 SAMPLE 6220	INDEX 1737 SAMPLE 6221
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	RILEY C 01	RATCLIFF NO. 1-12	LEWIS NO. 1-5
LOCATION	SEC. 26, T34S, R42W	SEC. 12, T34S, R42W	SEC. 5, T35S, R43W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	07/19/56	11/09/56	10/10/56
SAMPLED	10/03/56	12/31/56	12/31/56
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2861	2920	2771
WELLHEAD PRESSURE,PSIG	424	408	417
OPEN FLOW, MCFD	3076	8	1335
COMPONENT, MOLE PCT			
METHANE	65.1	65.2	68.3
ETHANE	6.4	6.6	5.7
PROPANE	3.5	4.7	1.7
N-BUTANE	1.0	1.6	1.3
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.2	0.8	0.0
ISOPENTANE	0.2	0.0	0.9
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	21.8	19.7	20.5
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.5
HELIUM	0.59	0.42	0.44
HEATING VALUE*	955	1012	930
SPECIFIC GRAVITY	0.749	0.766	0.728

	INDEX 1738 SAMPLE 6275	INDEX 1739 SAMPLE 6348	INDEX 1740 SAMPLE 6889
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	JACKSON NO. 1-34	MAYWARD	HAAG NO. 1
LOCATION	SEC. 34, T31S, R42W	SEC. 23, T31S, R42W	SEC. 6, T35S, R42W
OWNER	COLORADO OIL & GAS CORP.	COLORADO OIL & GAS CORP.	COLORADO OIL & GAS CORP.
COMPLETED	01/24/57	08/11/57	11/05/58
SAMPLED	03/04/57	07/25/57	12/11/58
FORMATION	PENN-TOPEKA	PENN-MORROW	PENN-ELMONT & TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2803	5196	2900
WELLHEAD PRESSURE,PSIG	415	1265	376
OPEN FLOW, MCFD	6400	10617	2950
COMPONENT, MOLE PCT			
METHANE	58.5	83.6	63.1
ETHANE	6.3	3.5	7.6
PROPANE	3.7	1.8	5.4
N-BUTANE	1.1	0.5	1.7
ISOBUTANE	0.5	0.3	0.8
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	28.3	6.2	19.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.1	0.2
HELIUM	0.71	0.66	0.60
HEATING VALUE*	878	997	1031
SPECIFIC GRAVITY	0.772	0.661	0.782

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1741 SAMPLE 7401	INDEX 1742 SAMPLE 7705	INDEX 1743 SAMPLE 7717
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	DUDGEON NO. 1	HOOPINGARNER B-1	SCHWEIZER NO. 1
LOCATION	SEC. 5, T35S, R42W	SEC. 5, T35S, R41W	SEC. 6, T35S, R43W
OWNER	COLORADO OIL & GAS CORP.	CITIES SERVICE OIL CO.	VICKERS PETROLEUM CO.
COMPLETED	10/20/59	06/24/60	07/27/60
SAMPLED	02/16/60	10/14/60	10/05/60
FORMATION	PENN-ELMONT	PENN-TOPEKA	-GREENWOOD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2910	3090	2747
WELLHEAD PRESSURE,PSIG	337	415	346
OPEN FLOW, MCFD	3150	24000	3900
COMPONENT, MOLE PCT			
METHANE	62.3	64.8	61.7
ETHANE	5.4	7.7	6.2
PROPANE	3.6	4.5	3.8
N-BUTANE	1.5	1.4	1.2
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	23.7	19.5	25.2
OXYGEN	1.0	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.60	0.50	0.60
HEATING VALUE*	946	1018	919
SPECIFIC GRAVITY	0.776	0.766	0.764

	INDEX 1744 SAMPLE 7777	INDEX 1745 SAMPLE 7872	INDEX 1746 SAMPLE 7905
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	WALSH NO. B-1	FULKERSON NO. B-1	WEBB A-3
LOCATION	SEC. 25, T33S, R42W	SEC. 6, T35S, R41W	SEC. 28, T34S, R41W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	10/25/60	11/16/60	01/11/61
SAMPLED	11/21/60	02/25/61	05/01/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3088	3096	3096
WELLHEAD PRESSURE,PSIG	311	396	384
OPEN FLOW, MCFD	2900	18500	5000
COMPONENT, MOLE PCT			
METHANE	67.7	65.0	69.9
ETHANE	7.7	6.8	7.8
PROPANE	4.5	4.0	4.5
N-BUTANE	1.5	1.2	1.5
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.8	21.0	14.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.2	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.50	0.60	0.40
HEATING VALUE*	1058	973	1071
SPECIFIC GRAVITY	0.758	0.756	0.746

	INDEX 1747 SAMPLE 7906	INDEX 1748 SAMPLE 7918	INDEX 1749 SAMPLE 8045
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	FULKERSON NO. B-1	MCCLUNG A-1	WALSH A NO. 1-30
LOCATION	SEC. 6, T35S, R41W	SEC. 7, T35S, R41W	SEC. 30, T33S, R41W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	11/16/60	01/19/61	04/13/61
SAMPLED	03/20/61	05/04/61	06/29/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3186	3158	3018
WELLHEAD PRESSURE,PSIG	396	395	423
OPEN FLOW, MCFD	21000	9000	3500
COMPONENT, MOLE PCT			
METHANE	65.5	58.2	62.6
ETHANE	6.8	6.2	7.8
PROPANE	3.8	3.7	4.9
N-BUTANE	1.1	1.0	1.5
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	20.9	26.9	21.0
OXYGEN	0.0	2.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.50	0.50
HEATING VALUE*	964	873	1007
SPECIFIC GRAVITY	0.747	0.776	0.775

	INDEX 1750 SAMPLE 11069	INDEX 1751 SAMPLE 12911	INDEX 1752 SAMPLE 12923
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	KANSAS 2-13	MINOR NO. 1	WESTERFIELD NO. 1-B
LOCATION	SEC. 13, T34S, R43W	SEC. 31, T33S, R41W	SEC. 8, T34S, R41W
OWNER	DAVIS DRILLING INC., ET AL.	CLINTON OIL CO.	PANHANDLE EASTERN PIPE LINE
COMPLETED	12/11/66	NOT GIVEN	07/07/57
SAMPLED	08/3/67	07/21/71	07/21/71
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3275	NOT GIVEN	3044
WELLHEAD PRESSURE,PSIG	544	NOT GIVEN	194
OPEN FLOW, MCFD	3400	NOT GIVEN	1252
COMPONENT, MOLE PCT			
METHANE	72.2	62.3	65.9
ETHANE	7.2	6.7	7.2
PROPANE	3.7	5.1	5.1
N-BUTANE	0.9	1.6	1.4
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.2	0.4	0.5
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	14.2	21.9	18.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.44	0.49	0.45
HEATING VALUE*	1026	1012	1050
SPECIFIC GRAVITY	0.715	0.785	0.768

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1753 SAMPLE 12930	INDEX 1754 SAMPLE 12931	INDEX 1755 SAMPLE 14773
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	PAN-KANSAS NO. 1-13	PAN-INTERSTATE NO. 1-14	KANSAS REGENTS NO. 2
LOCATION	SEC. 13, T34S, R43W	SEC. 14, T34S, R43W	SEC. 15, T34S, R42W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	PAN EASTERN EXPLORATION CO.
COMPLETED	08/09/55	09/01/55	08/18/76
SAMPLED	07/21/71	07/21/71	09/22/76
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-WABAUNSEE & TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2735	2772	2612
WELLHEAD PRESSURE,PSIG	210	220	124
OPEN FLOW, MCFD	148	288	1750
COMPONENT, MOLE PCT			
METHANE	64.8	66.4	65.3
ETHANE	5.6	5.8	6.4
PROPANE	3.8	3.6	4.1
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.6	0.3	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	22.9	21.7	20.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.61	0.58	0.54
HEATING VALUE*	940	940	983
SPECIFIC GRAVITY	0.751	0.730	0.757

	INDEX 1756 SAMPLE 4795	INDEX 1757 SAMPLE 4822	INDEX 1758 SAMPLE 4915
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	COMMISSIONERS NO. 1-A	COMMISSIONERS B NO. 1	GERBER NO. 1-9
LOCATION	SEC. 2, T34S, R41W	SEC. 15, T34S, R41W	SEC. 9, T35S, R40W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PANHANDLE EASTERN PIPE LINE
COMPLETED	07/12/49	11/20/49	09/11/50
SAMPLED	10/10/49	01/17/50	09/19/50
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2224	2244	2529
WELLHEAD PRESSURE,PSIG	409	NOT GIVEN	419
OPEN FLOW, MCFD	8520	9980	18083
COMPONENT, MOLE PCT			
METHANE	72.0	71.9	74.8
ETHANE	6.4	6.0	6.3
PROPANE	3.7	3.4	3.5
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.3	16.0	12.9
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.41	0.42	0.37
HEATING VALUE*	1015	995	1025
SPECIFIC GRAVITY	0.722	0.717	0.708

	INDEX 1759 SAMPLE 12857	INDEX 1760 SAMPLE 12917	INDEX 1761 SAMPLE 12918
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BECKER E-1	BLUCHER UNIT NO. 1-34	MYERS UNIT
LOCATION	SEC. 24, T34S, R41W	SEC. 34, T32S, R40W	SEC. 35, T32S, R40W
OWNER	CITIES SERVICE OIL CO.	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	NOT GIVEN	06/05/51	06/04/51
SAMPLED	06/23/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2252	2243
WELLHEAD PRESSURE,PSIG	NOT GIVEN	260	271
OPEN FLOW, MCFD	NOT GIVEN	1000	1550
COMPONENT, MOLE PCT			
METHANE	74.0	74.4	74.2
ETHANE	6.0	6.0	6.0
PROPANE	3.2	3.6	3.6
N-BUTANE	1.6	1.0	1.0
ISOBUTANE	0.0	0.4	0.3
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.9	13.8	13.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.39	0.40	0.40
HEATING VALUE*	1029	1020	1019
SPECIFIC GRAVITY	0.713	0.705	0.705

	INDEX 1762 SAMPLE 12919	INDEX 1763 SAMPLE 12920	INDEX 1764 SAMPLE 12921
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	SIMMONS UNIT NO. 1-2	EVANS NO. 1-3	LOW NO. 1
LOCATION	SEC. 2, T33S, R40W	SEC. 3, T33S, R40W	SEC. 18, T33S, R40W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	06/10/54	07/20/53	08/10/53
SAMPLED	07/21/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2241	2257	2272
WELLHEAD PRESSURE,PSIG	296	279	251
OPEN FLOW, MCFD	974	754	476
COMPONENT, MOLE PCT			
METHANE	73.4	74.5	71.7
ETHANE	6.0	6.0	5.6
PROPANE	3.5	3.6	3.4
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	10.9	13.7	17.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.0
HELIUM	0.40	0.35	0.48
HEATING VALUE*	999	1025	981
SPECIFIC GRAVITY	0.705	0.707	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1765 SAMPLE 12922	INDEX 1766 SAMPLE 12924	INDEX 1767 SAMPLE 12925
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	EAGLEY NO. 1-23	BARKER NO. 2-24	KNELLER NO. 1-30
LOCATION	SEC. 23, T33S, R41W	SEC. 24, T33S, R41W	SEC. 30, T33S, R40W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	06/21/56	12/19/66	06/07/55
SAMPLED	07/21/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2114	2186	2252
WELLHEAD PRESSURE,PSIG	248	253	253
OPEN FLOW, MCFD	461	529	724
COMPONENT, MOLE PCT			
METHANE	71.0	70.5	73.5
ETHANE	5.6	5.8	5.6
PROPANE	3.4	4.1	3.3
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.4	0.7	0.4
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.1	0.9	0.1
NITROGEN	17.6	15.1	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.51	0.76	0.44
HEATING VALUE*	973	1072	985
SPECIFIC GRAVITY	0.716	0.751	0.702

	INDEX 1768 SAMPLE 12926	INDEX 1769 SAMPLE 12927	INDEX 1770 SAMPLE 13003
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	KNELLER NO. 1-31	BOHN NO. 1	DREW C-1
LOCATION	SEC. 31, T33S, R40W	SEC. 28, T34S, R40W	SEC. 28, T32S, R39W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	AMOCO PRODUCTION CO.
COMPLETED	03/26/54	05/19/53	NOT GIVEN
SAMPLED	07/21/71	07/21/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2300	2531	NOT GIVEN
WELLHEAD PRESSURE,PSIG	264	230	NOT GIVEN
OPEN FLOW, MCFD	637	1029	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	75.4	72.9
ETHANE	5.9	6.0	6.0
PROPANE	3.5	3.6	3.6
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.4	12.8	15.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.39	0.37	0.41
HEATING VALUE*	1024	1030	1001
SPECIFIC GRAVITY	0.703	0.701	0.710

	INDEX 1771 SAMPLE 13004	INDEX 1772 SAMPLE 13005	INDEX 1773 SAMPLE 8541
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	INTERSTATE
WELL NAME	TILLETT GAS UNIT NO. 1	TILLETT B	INTERSTATE
LOCATION	SEC. 19, T32S, R39W	SEC. 19, T32S, R39W	SEC. 21, T34S, R43W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/13/62
SAMPLED	08/24/71	08/24/71	05/02/62
FORMATION	PERM-CHASE GROUP	PENN-MORROW	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1184
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	335
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3480
COMPONENT, MOLE PCT			
METHANE	72.6	86.9	51.9
ETHANE	5.9	3.7	2.0
PROPANE	3.5	1.9	1.1
N-BUTANE	0.9	0.4	0.6
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	15.9	6.3	41.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.41	0.25	1.15
HEATING VALUE*	994	1033	646
SPECIFIC GRAVITY	0.711	0.634	0.765

	INDEX 1774 SAMPLE 8810	INDEX 1775 SAMPLE 9241	INDEX 1776 SAMPLE 9732
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	INTERSTATE	INTERSTATE	INTERSTATE
WELL NAME	INTERSTATE F	HUMBLE A NO. 5	INTERSTATE I -2
LOCATION	SEC. 20, T34S, R43W	SEC. 17, T34S, R43W	SEC. 10, T34S, R43W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	06/07/62	12/31/63	11/13/64
SAMPLED	12/18/62	02/19/64	02/12/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1210	1264	1281
WELLHEAD PRESSURE,PSIG	318	333	338
OPEN FLOW, MCFD	1875	647	1190
COMPONENT, MOLE PCT			
METHANE	53.2	52.5	49.7
ETHANE	2.1	1.9	1.6
PROPANE	1.3	1.1	0.9
N-BUTANE	0.6	0.7	1.3
ISOBUTANE	0.3	0.1	0.6
N-PENTANE	0.3	0.2	2.0
ISOPENTANE	0.2	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	2.6
NITROGEN	40.0	41.5	38.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.6	0.4	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.94	0.90	0.87
HEATING VALUE*	678	658	8850
SPECIFIC GRAVITY	0.767	0.770	0.879

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1777 SAMPLE 12910	INDEX 1778 SAMPLE 7333	INDEX 1779 SAMPLE 7660
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	INTERSTATE	KINSLER	KINSLER
WELL NAME	U.S.A. NO. D-2	OSBORNE GAS UNIT B NO. 2	SHARP GAS UNIT NO. 1
LOCATION	SEC. 29, T34S, R43W	SEC. 33, T31S, R40W	SEC. 29, T31S, R40W
OWNER	CLINTON OIL CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/20/66	11/02/59	07/14/60
SAMPLED	07/19/71	01/05/60	08/29/60
FORMATION	PERM-RED CAVE	MISS-ST. LOUIS	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5556	4370
WELLHEAD PRESSURE,PSIG	130	1258	840
OPEN FLOW, MCFD	NOT GIVEN	8400	802
COMPONENT, MOLE PCT			
METHANE	50.8	79.2	69.1
ETHANE	1.8	4.5	6.2
PROPANE	1.5	2.6	4.3
N-BUTANE	0.7	0.7	1.1
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	42.6	10.3	17.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	TRACE
HELIUM	1.08	1.20	0.30
HEATING VALUE*	663	1007	1008
SPECIFIC GRAVITY	0.785	0.666	0.740

	INDEX 1780 SAMPLE 7933	INDEX 1781 SAMPLE 7935	INDEX 1782 SAMPLE 7936
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KINSLER	KINSLER	KINSLER
WELL NAME	G. L. HAYWARD B	ATKINSON B	COWAN B
LOCATION	SEC. 35, T31S, R40W	SEC. 15, T31S, R40W	SEC. 34, T31S, R40W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/21/61	11/19/60	11/27/60
SAMPLED	04/18/61	04/18/61	04/18/61
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5322	5400	5310
WELLHEAD PRESSURE,PSIG	1330	1275	1090
OPEN FLOW, MCFD	17500	8112	1150
COMPONENT, MOLE PCT			
METHANE	76.7	78.1	77.6
ETHANE	8.1	6.1	6.6
PROPANE	4.8	3.0	3.5
N-BUTANE	1.0	0.8	0.8
ISOBUTANE	0.7	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.5	10.0	10.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.5
HELIUM	0.10	0.30	0.20
HEATING VALUE*	1126	1049	1054
SPECIFIC GRAVITY	0.710	0.687	0.694

	INDEX 1783 SAMPLE 7934	INDEX 1784 SAMPLE 8026	INDEX 1785 SAMPLE 7376
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KINSLER SE	KINSLER SE	NOT GIVEN
WELL NAME	FIDELITY SAVINGS B	DREW GAS UNIT D NO. 1	A. C. SPARKS NO. 1
LOCATION	SEC. 13, T32S, R40W	SEC. 20, T32S, R39W	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PIONEER NATURAL GAS CO.
COMPLETED	11/10/60	04/12/61	NOT GIVEN
SAMPLED	04/18/61	06/14/61	NOT GIVEN
FORMATION	PENN-MORROW	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5484	5504	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1320	1263	NOT GIVEN
OPEN FLOW, MCFD	27000	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	69.9	73.6
ETHANE	3.9	6.0	8.2
PROPANE	1.3	3.9	4.3
N-BUTANE	0.3	0.9	1.1
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.8	17.5	11.0
OXYGEN	TRACE	0.2	0.2
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	0.3	0.3	0.0
HELIUM	0.30	0.30	0.40
HEATING VALUE*	1037	981	1077
SPECIFIC GRAVITY	0.617	0.727	0.720

	INDEX 1786 SAMPLE 7931	INDEX 1787 SAMPLE 14798	INDEX 1788 SAMPLE 7924
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	PANOMA	PANOMA	PATSEY
WELL NAME	BREEDING C	KREY "A" NO. 1	HARRISON NO. 1
LOCATION	SEC. 13, T31S, R39W	SEC. 6, T33S, R40W	SEC. 20, T31S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	ANADARKO PRODUCTION CO.	THOMAS & BREWER
COMPLETED	10/24/60	05/10/76	NOT GIVEN
SAMPLED	04/17/61	10/06/76	04/04/61
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PENN-WABAUNSEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2602	2897
WELLHEAD PRESSURE,PSIG	NOT GIVEN	203	NOT GIVEN
OPEN FLOW, MCFD	547	2136	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.6	68.0	0.3
ETHANE	6.6	5.0	0.6
PROPANE	3.3	3.3	6.1
N-BUTANE	1.0	1.0	1.9
ISOBUTANE	0.6	0.3	1.1
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.2	1.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.4	19.3	78.7
OXYGEN	0.1	0.7	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.50	0.47	9.90
HEATING VALUE*	965	948	444
SPECIFIC GRAVITY	0.738	0.729	1.036

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1789 SAMPLE 6303	INDEX 1790 SAMPLE 6513	INDEX 1791 SAMPLE 6342
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	PATSY	REYER	RICHFIELD
WELL NAME	PATSY RUTH MURPHY NO. 1	DREYER NO. 1	KANSAS UNIV. G.U.E. NO. 1
LOCATION	SEC. 16, T31S, R41W	SEC. 17, T32S, R43W	SEC. 23, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	J. M. HUBER CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/19/57	11/18/58	04/25/57
SAMPLED	04/15/57	02/27/58	06/12/57
FORMATION	PENN-MORROW BASAL	PENN-MARMATON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5362	3993	5200
WELLHEAD PRESSURE,PSIG	1110	745	1070
OPEN FLOW, MCFD	5200	2402	4810
COMPONENT, MOLE PCT			
METHANE	82.2	58.4	84.1
ETHANE	3.4	4.7	4.3
PROPANE	1.7	3.0	2.1
N-BUTANE	0.6	0.8	0.9
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.3	0.2	0.5
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	9.6	31.0	5.3
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	1.01	0.70	0.30
HEATING VALUE*	1007	825	1130
SPECIFIC GRAVITY	0.656	0.768	0.688

	INDEX 1792 SAMPLE 6343	INDEX 1793 SAMPLE 6350	INDEX 1794 SAMPLE 8450
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	BOWKER GAS UNIT NO. 2	BOWKER UNIT NO. 1	E. C. DEAN NO. 1-2
LOCATION	SEC. 35, T32S, R41W	SEC. 27, T32S, R41W	SEC. 2, T32S, R42W
OWNER	PAN AMERICAN PETROLEUM CORP.	VICKERS PETROLEUM CO.	HAMILTON BROS., INC.
COMPLETED	04/04/57	05/17/57	11/07/62
SAMPLED	06/12/57	07/02/57	03/07/62
FORMATION	PENN-MORROW	NOT GIVEN	PENN-MORROW G
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5200	NOT GIVEN	4974
WELLHEAD PRESSURE,PSIG	1102	1024	980
OPEN FLOW, MCFD	58500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.6	76.7	91.0
ETHANE	6.6	6.5	3.1
PROPANE	3.3	3.5	1.4
N-BUTANE	1.1	1.2	0.5
ISOBUTANE	0.7	0.7	0.2
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	10.2	9.9	2.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.38	0.37	0.30
HEATING VALUE*	1086	1080	1064
SPECIFIC GRAVITY	0.712	0.707	0.620

	INDEX 1795 SAMPLE 11659	INDEX 1796 SAMPLE 11678	INDEX 1797 SAMPLE 11679
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	JOHNS NO. 1-3	MURPHY GAS UNIT C NO. 1	LEMON GAS UNIT E NO. 1
LOCATION	SEC. 3, T32S, R41W	SEC. 14, T32S, R41W	SEC. 27, T32S, R41W
OWNER	GRAHAM-MICHAELIS DRILLING CO	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/05/68	03/21/62	12/07/56
SAMPLED	09/30/68	11/06/68	11/06/68
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5224	5179	5259
WELLHEAD PRESSURE,PSIG	715	617	449
OPEN FLOW, MCFD	6680	2047	12591
COMPONENT, MOLE PCT			
METHANE	87.7	90.2	80.9
ETHANE	3.9	3.2	5.1
PROPANE	2.0	1.5	3.2
N-BUTANE	0.6	0.5	1.1
ISOBUTANE	0.3	0.2	0.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	4.2	3.1	7.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.26	0.28	0.37
HEATING VALUE*	1072	1066	1089
SPECIFIC GRAVITY	0.639	0.624	0.686

	INDEX 1798 SAMPLE 11686	INDEX 1799 SAMPLE 11701	INDEX 1800 SAMPLE 11702
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	MURPHY A NO. 2	GOING NO. 1-26	GOING NO. 1-35
LOCATION	SEC. 15, T32S, R41W	SEC. 26, T32S, R41W	SEC. 35, T32S, R41W
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	05/22/62	10/09/56	07/11/57
SAMPLED	11/27/68	12/11/68	12/11/68
FORMATION	PENN-MORROW G	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5200	5191
WELLHEAD PRESSURE,PSIG	581	457	458
OPEN FLOW, MCFD	496	14740	3405
COMPONENT, MOLE PCT			
METHANE	85.4	75.8	78.0
ETHANE	3.1	6.3	5.9
PROPANE	1.6	4.1	3.8
N-BUTANE	0.5	1.1	1.1
ISOBUTANE	0.2	1.1	1.0
N-PENTANE	0.3	0.6	0.5
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	6.8	9.6	8.8
OXYGEN	0.9	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.28	0.38	0.35
HEATING VALUE*	1021	1115	1115
SPECIFIC GRAVITY	0.647	0.724	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1801 SAMPLE 11732	INDEX 1802 SAMPLE 11733	INDEX 1803 SAMPLE 11739
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	JENSEN GAS UNIT NO. 1	DANIEL GAS UNIT NO. 1	KREY A NO. 1
LOCATION	SEC. 25, T32S, R41W	SEC. 23, T32S, R41W	SEC. 36, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	NATIONAL COOP. REFINERY ASSN
COMPLETED	05/08/57	03/01/57	NOT GIVEN
SAMPLED	01/15/69	01/15/69	01/16/69
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5280	5185	5187
WELLHEAD PRESSURE,PSIG	467	524	453
OPEN FLOW, MCFD	1047	7461	895
COMPONENT, MOLE PCT			
METHANE	81.5	90.2	90.5
ETHANE	4.6	3.1	3.1
PROPANE	3.5	1.5	1.3
N-BUTANE	1.2	0.5	0.5
ISOBUTANE	0.9	0.2	0.2
N-PENTANE	0.8	0.3	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.9	0.3	0.1
NITROGEN	5.5	3.1	3.1
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.25	0.28	0.45
HEATING VALUE*	1166	1068	1052
SPECIFIC GRAVITY	0.712	0.628	0.617

	INDEX 1804 SAMPLE 8445	INDEX 1805 SAMPLE 8447	INDEX 1806 SAMPLE 6226
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD W	RICHFIELD W	SPARKS
WELL NAME	L. D. RUSSELL NO. 1-1	L. D. RUSSELL NO. 1-1	COLLINGWOOD NO. 1
LOCATION	SEC. 1, T32S, R42W	SEC. 1, T32S, R42W	SEC. 11, T31S, R42W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	J. M. HUBER CORP.
COMPLETED	02/12/62	02/12/62	06/18/56
SAMPLED	03/07/62	03/07/62	01/14/57
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4924	5004	5207
WELLHEAD PRESSURE,PSIG	1060	994	1103
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2900
COMPONENT, MOLE PCT			
METHANE	91.5	71.7	83.3
ETHANE	3.0	4.7	3.8
PROPANE	1.3	3.2	2.3
N-BUTANE	0.4	1.1	0.5
ISOBUTANE	0.1	0.5	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.5	16.5	7.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	1.3
HELIUM	0.29	0.59	0.75
HEATING VALUE*	1049	987	1025
SPECIFIC GRAVITY	0.609	0.726	0.659

	INDEX 1807 SAMPLE 13002	INDEX 1808 SAMPLE 10745	INDEX 1809 SAMPLE 6021
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	SPARKS	SPARKS S	TALOGA
WELL NAME	WHITE 2-1	CLANCY A UNIT NO. 1	RILEY 1-27
LOCATION	SEC. 25, T32S, R40W	SEC. 27, T31S, R42W	SEC. 27, T34S, R42W
OWNER	AMOCO PRODUCTION CO.	EDWIN L. COX & O. J. STONE	PANHANDLE EASTERN PIPE LINE
COMPLETED	NOT GIVEN	08/17/66	12/21/55
SAMPLED	08/24/71	10/20/66	02/07/56
FORMATION	PERM-CHASE GROUP	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4860	4501
WELLHEAD PRESSURE,PSIG	NOT GIVEN	939	891
OPEN FLOW, MCFD	NOT GIVEN	3902	61387
COMPONENT, MOLE PCT			
METHANE	73.4	61.6	72.5
ETHANE	5.9	4.5	4.8
PROPANE	3.5	3.6	4.4
N-BUTANE	0.8	1.2	2.8
ISOBUTANE	0.4	0.6	1.3
N-PENTANE	0.2	0.2	1.4
ISOPENTANE	0.1	0.4	1.3
CYCLOPENTANE	TRACE	TRACE	0.6
HEXANES PLUS	TRACE	0.2	2.1
NITROGEN	15.3	21.3	6.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	3.4	0.7
HELIUM	0.41	2.82	0.85
HEATING VALUE*	993	895	1319
SPECIFIC GRAVITY	0.704	0.766	0.829

	INDEX 1810 SAMPLE 6056	INDEX 1811 SAMPLE 6196	INDEX 1812 SAMPLE 6419
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	TALOGA	TALOGA	TALOGA
WELL NAME	CENTRAL LIFE 1-34	WATSON NO. 02-35	FOWLER NO. 1-3
LOCATION	SEC. 34, T34S, R42W	SEC. 35, T34S, R42W	SEC. 3, T35S, R42W
OWNER	COLORADO OIL & GAS CORP.	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	09/11/55	10/22/56	07/19/57
SAMPLED	05/--/56	12/03/56	10/16/57
FORMATION	PENN-KEYES	PENN-MORROW U	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4429	4182	4559
WELLHEAD PRESSURE,PSIG	1217	1230	1487
OPEN FLOW, MCFD	NOT GIVEN	25000	236
COMPONENT, MOLE PCT			
METHANE	80.9	81.6	78.0
ETHANE	3.9	7.0	4.3
PROPANE	2.5	2.5	2.6
N-BUTANE	0.8	1.2	0.6
ISOBUTANE	0.3	0.5	0.7
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	8.8	4.9	11.1
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.3	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.4
HELIUM	1.08	0.19	1.10
HEATING VALUE*	1041	1122	1026
SPECIFIC GRAVITY	0.673	0.689	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1813 SAMPLE 7409	INDEX 1814 SAMPLE 12898	INDEX 1815 SAMPLE 11154
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	TALOGA	TALOGA	TALOGA N
WELL NAME	STEWART A-1	KANSAS NO. 2-13	GOVERNMENT NO. 1-9
LOCATION	SEC. 29, T34S, R41W	SEC. 13, T34S, R43W	SEC. 9, T34S, R42W
OWNER	CITIES SERVICE OIL CO.	DAVIS DRILLING, INC.	COLORADO OIL CO.
COMPLETED	02/11/59	12/11/66	09/28/67
SAMPLED	02/15/60	07/21/71	10/09/67
FORMATION	PENN-MORROW L	PENN-LANSING	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4822	NOT GIVEN	4280
WELLHEAD PRESSURE,PSIG	1325	NOT GIVEN	1233
OPEN FLOW, MCFD	52000	NOT GIVEN	2130
COMPONENT, MOLE PCT			
METHANE	82.7	72.9	73.2
ETHANE	7.0	6.7	5.8
PROPANE	3.9	4.1	4.0
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.0	13.8	14.3
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.20	0.46	0.40
HEATING VALUE*	1133	1043	1015
SPECIFIC GRAVITY	0.676	0.720	0.712

	INDEX 1816 SAMPLE 15521	INDEX 1817 SAMPLE 7778	INDEX 1818 SAMPLE 11354
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	TALOGA NE	WILBURTON	WILBURTON
WELL NAME	E. P. LEWIS "B" NO. 1	WEBB NO. A-2	SIDES A NO. 2
LOCATION	SEC. 18, T34S, R41W	SEC. 28, T34S, R41W	SEC. 10, T35S, R41W
OWNER	ANADARKO PRODUCTION CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	04/10/78	10/26/60	07/17/67
SAMPLED	11/17/78	11/21/60	03/06/68
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4390	4930	5462
WELLHEAD PRESSURE,PSIG	909	1250	1256
OPEN FLOW, MCFD	2300	5000	7100
COMPONENT, MOLE PCT			
METHANE	74.6	80.0	81.5
ETHANE	5.9	6.9	7.3
PROPANE	4.8	4.3	4.4
N-BUTANE	1.3	1.0	1.2
ISOBUTANE	0.4	0.6	0.2
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.2	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.6	6.0	3.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.31	0.20	0.17
HEATING VALUE*	1078	1122	1166
SPECIFIC GRAVITY	0.720	0.690	0.695

	INDEX 1819 SAMPLE 14287	INDEX 1820 SAMPLE 15563	INDEX 1821 SAMPLE 4856
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	PAWNEE
FIELD	WILBURTON	WINTER	ASH CREEK
WELL NAME	GORE NO. D-2	WINTER NO. C-2	BIRMINGHAM-BARTLET,WISE NO.1
LOCATION	SEC. 4, T35S, R41W	SEC. 30, T33S, R42W	SEC. 1, T21S, R16W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE CO.	A. R. JONES OIL & OPR. CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/03/75	02/02/79	05/05/50
FORMATION	PENN-TOPEKA	PENN-MORROW	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	360	360	385
DEPTH, FEET	3216	4559	3767
WELLHEAD PRESSURE,PSIG	160	1258	NOT GIVEN
OPEN FLOW, MCFD	2505	3247	620
COMPONENT, MOLE PCT			
METHANE	62.6	68.2	86.0
ETHANE	8.8	4.8	3.9
PROPANE	6.7	3.9	1.6
N-BUTANE	2.1	0.9	0.5
ISOBUTANE	0.8	0.4	0.2
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	17.4	20.4	5.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.47	0.55	0.79
HEATING VALUE*	1112	957	1031
SPECIFIC GRAVITY	0.804	0.736	0.637

	INDEX 1822 SAMPLE 4860	INDEX 1823 SAMPLE 4295	INDEX 1824 SAMPLE 8054
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ASH CREEK	BENSON	BENSON
WELL NAME	ANDERSON PRICHARD, WISE NO.1	BECKER B NO. 1	BAUMANN NO. 1
LOCATION	SEC. 1, T21S, R16W	SEC. 32, T23S, R15W	SEC. 32, T23S, R15W
OWNER	A. R. JONES OIL & OPR. CO.	CITIES SERVICE OIL CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	NOT GIVEN	12/29/46	NOT GIVEN
SAMPLED	05/05/50	04/21/47	07/01/61
FORMATION	CAMO-ARBUCKLE	CAMO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4021	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1210	NOT GIVEN
OPEN FLOW, MCFD	475	23800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.0	19.5	81.5
ETHANE	3.8	69.1	3.3
PROPANE	1.5	---	1.3
N-BUTANE	0.5	---	0.5
ISOBUTANE	0.1	---	0.4
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.5	9.9	11.6
OXYGEN	0.1	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.6	0.2
HELIUM	0.79	0.55	0.50
HEATING VALUE*	1036	1436	967
SPECIFIC GRAVITY	0.628	0.942	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1825 SAMPLE 8522	INDEX 1826 SAMPLE 8523	INDEX 1827 SAMPLE 8528
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	PETRO NO. 1	PETRO NO. 1	HALL NO. 1
LOCATION	SEC. 29, T23S, R15W	SEC. 29, T23S, R15W	SEC. 40, BLK. M-20, G&M SUR.
OWNER	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/24/62	04/25/62	05/03/62
FORMATION	PENN-TARKIO	PENN-TARKIO	PENN-TARKIO
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3020	3060	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2830	437	1140
COMPONENT, MOLE PCT			
METHANE	82.2	79.5	81.5
ETHANE	3.1	3.1	3.2
PROPANE	1.4	1.3	1.4
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	11.1	14.0	11.9
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.49	0.50	0.53
HEATING VALUE*	983	943	973
SPECIFIC GRAVITY	0.656	0.661	0.658

	INDEX 1828 SAMPLE 8529	INDEX 1829 SAMPLE 8553	INDEX 1830 SAMPLE 8554
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	HALL NO. 1	PETRO NO. 1	BAUMANN NO. 1
LOCATION	SEC. 30, T23S, R15W	SEC. 29, T23S, R15W	SEC. 32, T23S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	04/29/62	04/28/62
FORMATION	PERM-COUNCIL GROVE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2610	4027	4069
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	3310	7120	7120
COMPONENT, MOLE PCT			
METHANE	86.8	62.4	62.8
ETHANE	2.8	4.5	4.5
PROPANE	1.0	2.2	2.2
N-BUTANE	0.3	0.8	0.7
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	8.2	25.5	26.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.40	2.79	2.23
HEATING VALUE*	977	849	832
SPECIFIC GRAVITY	0.621	0.733	0.726

	INDEX 1831 SAMPLE 8572	INDEX 1832 SAMPLE 8573	INDEX 1833 SAMPLE 8574
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	HILL	HALL	PETRO
LOCATION	SEC. 1, T23S, R15W	SEC. 30, T23S, R15W	SEC. 29, T23S, R15W
OWNER	LESTER WILKINSON	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	NOT GIVEN	05/25/62	05/26/62
SAMPLED	06/04/62	06/04/62	06/04/62
FORMATION	PENN-HOWARD	PENN-TARKIO	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1012	1110
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	82.0	60.9
ETHANE	3.2	3.2	4.4
PROPANE	1.4	1.4	2.2
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.2	11.3	27.0
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.51	0.51	2.72
HEATING VALUE*	956	973	815
SPECIFIC GRAVITY	0.650	0.652	0.734

	INDEX 1834 SAMPLE 9389	INDEX 1835 SAMPLE 15372	INDEX 1836 SAMPLE 12767
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BERSCHEIDT (NIXON)
WELL NAME	WILES NO. 1	WURM A NO. 1	BERSCHEIDT NO. 1
LOCATION	SEC. 19, T23S, R15W	SEC. 19, T23S, R15W	SEC. 32, T23S, R16W
OWNER	TOM ALLAN OIL CO.	ALPINE DRILLING CO.	LEBEN OIL CORP.
COMPLETED	06/08/64	10/19/77	10/05/70
SAMPLED	06/08/64	09/11/78	04/14/71
FORMATION	PENN-HOWARD	-CONGLOMERATE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3021	4036	4182
WELLHEAD PRESSURE,PSIG	1179	1000	1252
OPEN FLOW, MCFD	1930	120	2705
COMPONENT, MOLE PCT			
METHANE	75.6	63.9	88.4
ETHANE	2.8	4.1	3.6
PROPANE	1.4	1.8	1.4
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	17.7	25.3	4.8
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.2	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.0
HELIUM	0.56	2.89	0.50
HEATING VALUE*	913	820	1047
SPECIFIC GRAVITY	0.683	0.713	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1837 SAMPLE 7902	INDEX 1838 SAMPLE 8012	INDEX 1839 SAMPLE 8066
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BOW	BURDETT	BURDETT
WELL NAME	BARSTOW NO. 2-A	DITUS	DITUS
LOCATION	SEC. 32, T22S, R15W	SEC. 4, T22S, R20W	SEC. 4, T22S, R20W
OWNER	HELLAR DRILLING CO., INC.	D. R. LAUCK OIL CO., INC.	D. R. LAUCK OIL CO., INC.
COMPLETED	03/15/61	05/19/61	06/28/61
SAMPLED	03/11/61	05/17/61	07/07/61
FORMATION	PENN-LANSING-KANSAS CITY	MISS-	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3537	4335	4306
WELLHEAD PRESSURE,PSIG	1270	1240	1240
OPEN FLOW, MCFD	295000	NOT GIVEN	3
COMPONENT, MOLE PCT			
METHANE	68.4	58.8	57.5
ETHANE	2.7	3.8	4.0
PROPANE	1.4	1.6	1.6
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.4	31.6	32.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	1.00	2.80	2.70
HEATING VALUE*	811	746	740
SPECIFIC GRAVITY	0.698	0.729	0.737

	INDEX 1840 SAMPLE 8181	INDEX 1841 SAMPLE 8607	INDEX 1842 SAMPLE 15060
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BURDETT	CARPENTER	CARPENTER
WELL NAME	JONES	BARSTOW NO. 1	PARAMORE NO. 2
LOCATION	SEC. 9, T22S, R20W	SEC. 24, T23S, R17W	SEC. 7, T23S, R16W
OWNER	D. R. LAUCK OIL CO., INC.	PICKRELL DRILLING CO.	KEWANEE OIL CO.
COMPLETED	08/13/61	DRILL STEM TEST	06/10/77
SAMPLED	08/21/61	06/17/62	07/22/77
FORMATION	MISS-	MISS-	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4345	4140	4076
WELLHEAD PRESSURE,PSIG	1180	NOT GIVEN	1030
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4146
COMPONENT, MOLE PCT			
METHANE	55.8	86.4	82.3
ETHANE	3.9	3.5	3.7
PROPANE	1.6	1.3	1.5
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	34.2	6.8	9.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.4
HELIUM	2.90	0.80	1.06
HEATING VALUE*	721	1014	987
SPECIFIC GRAVITY	0.743	0.631	0.649

	INDEX 1843 SAMPLE 15371	INDEX 1844 SAMPLE 5471	INDEX 1845 SAMPLE 8402
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	CARPENTER	EVERS NE	EVERS S
WELL NAME	WURM B NO. 1	HAUSER NO. 1	BOYD NO. 1
LOCATION	SEC. 32, T23S, R16W	SEC. 31, T21S, R15W	SEC. 12, T22S, R16W
OWNER	ALPINE DRILLING CO.	PETROLEUM, INC.	MESSMAN RINEHART OIL CO.
COMPLETED	07/19/77	NOT GIVEN	NOT GIVEN
SAMPLED	09/21/78	05/12/53	02/2/62
FORMATION	MISS-	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4183	3915	3920
WELLHEAD PRESSURE,PSIG	1000	1175	1145
OPEN FLOW, MCFD	275	500	1180
COMPONENT, MOLE PCT			
METHANE	87.7	85.6	86.4
ETHANE	3.8	4.0	3.5
PROPANE	1.5	1.6	1.4
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.0	6.0	6.5
OXYGEN	0.2	0.1	0.3
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.3
HELIUM	0.49	0.69	0.61
HEATING VALUE*	1037	1027	1012
SPECIFIC GRAVITY	0.629	0.642	0.632

	INDEX 1846 SAMPLE 5734	INDEX 1847 SAMPLE 5735	INDEX 1848 SAMPLE 5736
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GARFIELD	GARFIELD
WELL NAME	L. J. SHARTZ NO. 1	HUTCHINSON NO. B-5	FERGIS NO. 1
LOCATION	SEC. 8, T23S, R17W	SEC. 17, T23S, R17W	SEC. 16, T23, R17
OWNER	HILTON DRILLING CO.	HILTON DRILLING CO.	HILTON DRLG. CO. & SUNRAY DX
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/23/54	11/06/54	10/27/54
FORMATION	MISS-	CAMO-CONGLOMERATE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.3	82.6	76.8
ETHANE	3.3	5.3	3.5
PROPANE	1.2	2.0	1.3
N-BUTANE	0.5	0.6	0.4
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	9.8	8.2	15.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.2	0.1	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.97	0.32	1.78
HEATING VALUE*	979	1041	929
SPECIFIC GRAVITY	0.643	0.663	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1849 SAMPLE 5741	INDEX 1850 SAMPLE 5743	INDEX 1851 SAMPLE 6328
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GARFIELD	GARFIELD
WELL NAME	FERGUS B NO. 1	BOYD NO. 1	SHOEMAKE NO. A
LOCATION	SEC. 16, T23S, R17W	SEC. 35, T22, R17W	SEC. 19, T23W, R19S
OWNER	HILTON DRILLING CO., ET AL.	COLORADO OIL & GAS CORP.	HILTON DRILLING CO.
COMPLETED	10/11/54	11/11/54	NOT GIVEN
SAMPLED	11/23/54	12/16/54	05/20/57
FORMATION	MISS-	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4248	4131	4265
WELLHEAD PRESSURE,PSIG	1000	1100	1100
OPEN FLOW, MCFD	500	3682	2000
COMPONENT, MOLE PCT			
METHANE	84.9	84.4	83.9
ETHANE	2.4	3.2	3.3
PROPANE	0.5	1.1	1.0
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	10.6	9.2	9.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	1.09	0.96	1.01
HEATING VALUE*	928	975	966
SPECIFIC GRAVITY	0.616	0.632	0.635

	INDEX 1852 SAMPLE 6602	INDEX 1853 SAMPLE 6603	INDEX 1854 SAMPLE 11802
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GARFIELD	GIVENS
WELL NAME	HUTCHINSON E LEASE	J. A. BOYD NO. 1	E. J. GIVENS NO. 1
LOCATION	SEC. 9, T23S, R17W	SEC. 35, T22S, R17W	SEC. 19, T22S, R19W
OWNER	COLORADO OIL & GAS CO.	COLORADO OIL & GAS CO.	G & L OIL CO.
COMPLETED	NOT GIVEN	04/--/58	12/10/68
SAMPLED	05/AA/58	05/18/58	03/26/69
FORMATION	PENN-MISS	PENN-L	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4200	4131	4444
WELLHEAD PRESSURE,PSIG	NOT GIVEN	550	1180
OPEN FLOW, MCFD	NOT GIVEN	5210	1250
COMPONENT, MOLE PCT			
METHANE	80.7	82.7	62.8
ETHANE	6.4	1.1	3.4
PROPANE	3.1	0.1	1.4
N-BUTANE	1.3	0.1	0.6
ISOBUTANE	0.7	TRACE	0.3
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.6	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	5.6	14.4	28.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.43	1.16	2.38
HEATING VALUE*	1138	864	782
SPECIFIC GRAVITY	0.699	0.618	0.716

	INDEX 1855 SAMPLE 11803	INDEX 1856 SAMPLE 8733	INDEX 1857 SAMPLE 9373
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GIVENS	GODFREY	GODFREY
WELL NAME	E. J. GIVENS NO. 2	EDDY NO. 1	EDDY NO. 1
LOCATION	SEC. 19, T22S, 19W	SEC. 13, T22S, R18W	SEC. 13, T22S, R18W
OWNER	G & L OIL CO.	BELL BROTHERS	BELL BROTHERS
COMPLETED	12/10/68	NOT GIVEN	11/08/62
SAMPLED	03/26/69	11/15/62	04/21/64
FORMATION	MISS-	CAMO-CONGLOMERATE	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4444	4084	4084
WELLHEAD PRESSURE,PSIG	1180	963	1200
OPEN FLOW, MCFD	NOT GIVEN	2310	2675
COMPONENT, MOLE PCT			
METHANE	62.2	82.0	81.4
ETHANE	3.3	5.3	3.5
PROPANE	1.4	1.2	1.4
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	29.0	10.6	11.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	2.37	1.32	1.32
HEATING VALUE*	780	963	962
SPECIFIC GRAVITY	0.722	0.640	0.645

	INDEX 1858 SAMPLE 9374	INDEX 1859 SAMPLE 5584	INDEX 1860 SAMPLE 8570
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GODFREY	HEARN	HEARN
WELL NAME	FAIRCHILD NO. 1	HEARN NO. 1	HEARN
LOCATION	SEC. 13, T22S, R18W	SEC. 35, T23S, R15W	SEC. 35, T23S, R15W
OWNER	BELL BROTHERS	NATURAL GAS & OIL CORP.	NATURAL GAS & OIL CORP.
COMPLETED	09/26/63	10/14/53	NOT GIVEN
SAMPLED	04/21/64	12/28/53	06/04/62
FORMATION	PENN-CHEROKEE	PENN-LANSING	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4110	3833	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1264	990	790
OPEN FLOW, MCFD	4325	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	79.5	81.7
ETHANE	3.6	5.2	4.3
PROPANE	1.4	1.6	2.0
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	11.0	12.7	8.9
OXYGEN	TRACE	TRACE	0.2
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	1.32	1.56	1.06
HEATING VALUE*	960	946	1012
SPECIFIC GRAVITY	0.642	0.649	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1861 SAMPLE 15370	INDEX 1862 SAMPLE 4710	INDEX 1863 SAMPLE 14322
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	HEARN N	LARNED	LUCAS
WELL NAME	IRMA SMITH NO. 1	CORA BROWN NO. 1	FINGER NO. 1
LOCATION	SEC. 26, T23S, R15W	SEC. 28, T21S, R16W	SEC. 31, T20S, R16W
OWNER	ALPINE DRILLING CO.	SUNRAY DX OIL CO.	FRONTIER OIL CO.
COMPLETED	04/28/78	06/18/49	09/06/74
SAMPLED	09/11/78	07/26/49	04/23/74
FORMATION	CAMO-ARBUCKLE	CAMO-	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4121	3863	3811
WELLHEAD PRESSURE,PSIG	1000	1075	1000
OPEN FLOW, MCFD	206	4256	10000
COMPONENT, MOLE PCT			
METHANE	72.4	4.5	22.8
ETHANE	4.4	1.9	3.2
PROPANE	2.3	0.5	1.3
N-BUTANE	0.8	0.5	0.8
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.0	0.1
NITROGEN	15.8	86.1	66.0
OXYGEN	0.6	0.1	0.0
ARGON	0.1	0.3	0.2
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	0.5
HELIUM	1.97	4.92	3.98
HEATING VALUE*	961	137	391
SPECIFIC GRAVITY	0.702	0.934	0.876

	INDEX 1864 SAMPLE 6156	INDEX 1865 SAMPLE 5624	INDEX 1866 SAMPLE 6619
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	NEWSOM	NOT GIVEN	ORANGE
WELL NAME	NEWSOM NO. 1	SIEGFRIED NO. 1	MILLER NO. 1
LOCATION	SEC. 25, T20S, R20W	NOT GIVEN	SEC. 33, T23, R17
OWNER	HONAKER DAVIS DRILLING CO.	KANSAS-NEBRASKA NAT. GAS CO.	HONAKER DAVIS
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/30/56	06/17/54	05/29/58
FORMATION	PENN-CHEROKEE	NOT GIVEN	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4250	NOT GIVEN	4260
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	1300
OPEN FLOW, MCFD	5000	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	26.2	52.9	75.7
ETHANE	3.4	6.5	4.1
PROPANE	3.0	4.8	1.6
N-BUTANE	1.0	2.1	0.6
ISOBUTANE	0.7	1.5	0.4
N-PENTANE	0.7	0.8	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.4	0.8	0.2
NITROGEN	60.7	26.6	15.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.2	0.2	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	0.2
HELIUM	3.46	2.09	1.40
HEATING VALUE*	503	1002	942
SPECIFIC GRAVITY	0.886	0.849	0.680

	INDEX 1867 SAMPLE 10795	INDEX 1868 SAMPLE 10817	INDEX 1869 SAMPLE 3105
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PARAMORE	PARAMORE E	PAWNEE
WELL NAME	PARAMORE NO. 1	PARAMORE NO. 1-X	G. P. SMITH NO. 1
LOCATION	SEC. 11, T23S, R17W	SEC. 1, T23S, R17W	SEC. 13, T20S, R16W
OWNER	MESSMAN-RINEHART OIL CO.	KEWANEE OIL CO.	MID-CONTINENT PET. CORP.
COMPLETED	12/02/65	06/28/66	12/10/37
SAMPLED	11/23/66	12/14/66	02/26/42
FORMATION	CAMO-CONGLOMERATE	CAMO-CONGLOMERATE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4067	4106	3762
WELLHEAD PRESSURE,PSIG	1200	1230	NOT GIVEN
OPEN FLOW, MCFD	2500	6300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	87.4	82.7
ETHANE	3.4	3.4	9.2
PROPANE	1.4	1.4	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	TRACE	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.1	---
NITROGEN	6.4	6.1	6.3
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.71	0.71	0.99
HEATING VALUE*	1027	1028	1003
SPECIFIC GRAVITY	0.633	0.629	0.627

	INDEX 1870 SAMPLE 3054	INDEX 1871 SAMPLE 3055	INDEX 1872 SAMPLE 3094
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	M. L. GATES NO. 3	NELLIE BELT NO. 3	NELSON NO. 1
LOCATION	SEC. 13, T20S, R16W	SEC. 13, T20S, R16W	SEC. 14, T20S, R16W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	CONTINENTAL OIL CO.
COMPLETED	05/15/41	01/27/41	NOT GIVEN
SAMPLED	12/17/41	12/17/41	02/27/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3792	3801	3772
WELLHEAD PRESSURE,PSIG	975	850	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.7	80.7	73.5
ETHANE	40.8	11.5	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	6.1	5.5
OXYGEN	0.2	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.6	0.5
HELIUM	0.34	1.02	1.30
HEATING VALUE*	1285	1024	1063
SPECIFIC GRAVITY	0.777	0.639	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1873 SAMPLE 3095	INDEX 1874 SAMPLE 3097	INDEX 1875 SAMPLE 3117
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	BOWYER NO. 3	G. P. SMITH 2-8	M. G. BIXBY NO. 2
LOCATION	SEC. 12, T20S, R16W	SEC. 13, T20S, R16W	SEC. 24, T20S, R16W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	MID-CONTINENT PETROLEUM CORP
COMPLETED	09/09/41	02/03/42	07/19/41
SAMPLED	02/27/42	02/27/42	02/26/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3732	3747	3796
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.8	85.8	77.9
ETHANE	9.9	3.5	13.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	8.8	7.1
OXYGEN	0.7	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.14	1.35	0.90
HEATING VALUE*	1063	932	1033
SPECIFIC GRAVITY	0.615	0.605	0.650

	INDEX 1876 SAMPLE 4499	INDEX 1877 SAMPLE 4814	INDEX 1878 SAMPLE 4874
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	STERLING CLIMSON NO. 3	STERLING CLEMSON NO. 3	NO. 1 &2, DIRKS LEASE
LOCATION	SEC. 12, T20N, R16W	SEC. 12, T20S, R16W	SEC. 23, T20S, R16W
OWNER	STERLING DRILLING CO.	KANSAS-NEBRASKA NAT. GAS CO.	VICKERS PETROLEUM CO.
COMPLETED	10/15/47	NOT GIVEN	09/09/49
SAMPLED	06/--/48	01/10/50	04/25/50
FORMATION	CAMO-ARBUCKLE	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3643	NOT GIVEN	3744
WELLHEAD PRESSURE,PSIG	712	NOT GIVEN	990
OPEN FLOW, MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.2	84.1	58.5
ETHANE	13.6	4.1	8.4
PROPANE	---	1.7	6.7
N-BUTANE	---	0.6	2.5
ISOBUTANE	---	0.3	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.4	2.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.0	0.3
NITROGEN	6.5	7.2	18.7
OXYGEN	0.2	0.2	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.3	0.7
HELIUM	0.42	0.98	1.80
HEATING VALUE*	1036	1020	1109
SPECIFIC GRAVITY	0.652	0.648	0.829

	INDEX 1879 SAMPLE 4875	INDEX 1880 SAMPLE 4907	INDEX 1881 SAMPLE 5215
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	UNRUH NO. 1	DIRKS A NO. 1	UNRUH B
LOCATION	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W
OWNER	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.
COMPLETED	09/01/49	08/02/49	NOT GIVEN
SAMPLED	04/25/50	06/01/50	06/10/52
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3746	3775	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	990	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.8	58.3	64.7
ETHANE	13.1	3.6	3.7
PROPANE	7.0	1.8	1.9
N-BUTANE	1.9	0.7	0.8
ISOBUTANE	1.5	0.2	0.4
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.5
NITROGEN	8.9	30.7	24.2
OXYGEN	0.1	0.3	0.1
ARGON	0.1	0.2	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.5	0.6
HELIUM	0.13	3.24	2.65
HEATING VALUE*	1237	965	848
SPECIFIC GRAVITY	0.813	0.733	0.723

	INDEX 1882 SAMPLE 5216	INDEX 1883 SAMPLE 5217	INDEX 1884 SAMPLE 5243
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	UNRUH A	DIRKS B	DIRKS A
LOCATION	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W	SEC. 20, T20S, R15W
OWNER	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/10/52	06/10/52	06/10/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.3	69.0	55.8
ETHANE	4.3	4.1	4.8
PROPANE	3.2	2.3	3.3
N-BUTANE	1.2	1.0	1.3
ISOBUTANE	2.6	0.5	0.9
N-PENTANE	2.3	0.3	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	21.9	19.0	29.3
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.2
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	2.36	2.42	3.06
HEATING VALUE*	917	927	842
SPECIFIC GRAVITY	0.737	0.716	0.774

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1885 SAMPLE 5388	INDEX 1886 SAMPLE 6163	INDEX 1887 SAMPLE 4068
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	RYAN
WELL NAME	WILDCAT	HANSON NO. 1	NELSON NO. 3
LOCATION	SEC. 14, T20S, R16W	SEC. 15, T20S, R16W	SEC. 2, T20S, R16W
OWNER	JAYHAWK DRILLING CO.	ROACH & LICHTY DRILLING INC.	GULF OIL CORP.
COMPLETED	02/02/53	10/23/56	06/30/45
SAMPLED	02/05/53	10/22/56	09/21/45
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3793	3750	3736
WELLHEAD PRESSURE,PSIG	1080	1070	800
OPEN FLOW, MCFD	2500	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.6	54.6	74.2
ETHANE	3.2	3.9	6.0
PROPANE	1.7	2.0	---
N-BUTANE	0.5	0.7	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	52.3	33.8	8.3
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.2	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.4	0.3
HELIUM	4.10	3.47	1.19
HEATING VALUE*	520	739	859
SPECIFIC GRAVITY	0.817	0.754	0.561

	INDEX 1888 SAMPLE 5050	INDEX 1889 SAMPLE 5053	INDEX 1890 SAMPLE 5428
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	RYAN	RYAN	RYAN
WELL NAME	HAGERMAN NO. 1	HAGERMAN A	A. FLESKE NO. 1
LOCATION	SEC. 4, T20S, R16W	SEC. 4, T20S, R16W	SEC. 3, T20S, R16W
OWNER	BRACK OIL CO.	BRACK OIL CO.	BEN F. BRACK OIL CO.
COMPLETED	NOT GIVEN	03/18/51	03/14/53
SAMPLED	04/18/51	05/05/51	03/25/53
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3700	3700	3700
WELLHEAD PRESSURE,PSIG	900	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	NOT GIVEN	654
COMPONENT, MOLE PCT			
METHANE	44.6	44.6	69.3
ETHANE	3.5	3.5	4.0
PROPANE	1.9	1.8	2.0
N-BUTANE	0.8	0.6	0.8
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	43.6	44.0	19.2
OXYGEN	0.1	0.1	TRACE
ARGON	0.2	0.2	0.5
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	0.5	0.6
HELIUM	3.69	3.62	2.35
HEATING VALUE*	631	626	898
SPECIFIC GRAVITY	0.796	0.793	0.706

	INDEX 1891 SAMPLE 8092	INDEX 1892 SAMPLE 8401	INDEX 1893 SAMPLE 5526
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SHADY N	SHADY N	SWEENEY
WELL NAME	SCHARTZ NO. 1	SCHARTZ NO. 1	SWEENEY NO. 1
LOCATION	SEC. 14, T22S, R16W	SEC. 14, T22S, R16W	SEC. 8, T21S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.	VICKERS EXPLORATION LTD.
COMPLETED	02/27/55	NOT GIVEN	NOT GIVEN
SAMPLED	07/18/61	02/21/62	07/25/53
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4045	4020	3716
WELLHEAD PRESSURE,PSIG	1167	1167	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1880	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	83.4	82.9
ETHANE	4.0	3.4	3.8
PROPANE	1.4	1.5	1.3
N-BUTANE	0.5	0.4	0.7
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	6.1	9.4	8.4
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.2
HELIUM	0.30	0.73	1.01
HEATING VALUE*	1031	982	1032
SPECIFIC GRAVITY	0.642	0.643	0.661

	INDEX 1894 SAMPLE 5527	INDEX 1895 SAMPLE 5597	INDEX 1896 SAMPLE 5882
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY	SWEENEY	SWEENEY
WELL NAME	SWEENEY NO. 1	DUFFORD NO. A-1	SPRUILL NO. 1
LOCATION	SEC. 8, T21S, R15W	SEC. 7, T21S, R15W	SEC. 25, T21S, R16W
OWNER	VICKERS EXPLORATION LTD.	GRAHAM-MESSMAN-RINEHART OIL	HARMS-BURT DRLG. CO. & ASSOC
COMPLETED	08/25/53	03/02/54	07/05/55
SAMPLED	07/29/53	03/15/54	07/15/55
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3792	3808	3870
WELLHEAD PRESSURE,PSIG	1150	1220	1000
OPEN FLOW, MCFD	6160	5000	375
COMPONENT, MOLE PCT			
METHANE	86.1	87.0	86.9
ETHANE	4.0	3.6	4.2
PROPANE	1.5	1.4	1.6
N-BUTANE	0.5	0.4	0.7
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.1	5.9	4.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.78	0.78	0.52
HEATING VALUE*	1030	1023	1058
SPECIFIC GRAVITY	0.637	0.629	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1897 SAMPLE 6214	INDEX 1898 SAMPLE 6620	INDEX 1899 SAMPLE 7029
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY	SWEENEY	SWEENEY
WELL NAME	SPRETER NO. 2	UNRUH NO. 1	UNRUH NO. 1
LOCATION	SEC. 5, T21S, R15W	SEC. 30, T21, R15	SEC. 24, T21S, R16W
OWNER	ALKAY OIL CO.	JOHN W. MCKNAB	ANSCHUTZ DRILLING CO.
COMPLETED	12/01/56	04/--/58	--/--/55
SAMPLED	12/03/56	05/27/58	04/21/59
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3769	NOT GIVEN	3847
WELLHEAD PRESSURE,PSIG	847	NOT GIVEN	1090
OPEN FLOW, MCFD	4735	NOT GIVEN	7000
COMPONENT, MOLE PCT			
METHANE	68.7	81.9	86.1
ETHANE	2.6	TRACE	3.8
PROPANE	1.1	TRACE	1.4
N-BUTANE	0.6	TRACE	0.5
ISOBUTANE	TRACE	0.0	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	24.0	15.3	6.3
OXYGEN	1.2	0.8	0.0
ARGON	0.3	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.6
HELIUM	0.66	1.50	0.80
HEATING VALUE*	805	834	1018
SPECIFIC GRAVITY	0.700	0.618	0.635

	INDEX 1900 SAMPLE 6601	INDEX 1901 SAMPLE 8345	INDEX 1902 SAMPLE 5612
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY W	SWEENEY W	TORRACE (SWEENEY)
WELL NAME	HANEY NO. 1	HANEY NO. 2	H. BIRD NO. 1
LOCATION	SEC. 13, T21S, R16W	SEC. 13, T21S, R16W	SEC. 19, T21S, R15W
OWNER	O. R. LAUCK OIL CO.	STICKLE DRILLING CO.	NADEL & GUSSMAN OIL CO.
COMPLETED	04/--/58	12/13/61	11/04/52
SAMPLED	05/18/58	12/21/61	04/28/54
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3817	3807	3910
WELLHEAD PRESSURE,PSIG	1060	1100	12
OPEN FLOW, MCFD	6000	NOT GIVEN	3700
COMPONENT, MOLE PCT			
METHANE	81.0	86.2	87.0
ETHANE	0.1	3.7	3.7
PROPANE	0.1	1.5	1.5
N-BUTANE	0.1	0.5	0.5
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	15.6	5.6	5.2
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	2.60	1.32	0.68
HEATING VALUE*	828	1023	1037
SPECIFIC GRAVITY	0.612	0.629	0.632

	INDEX 1903 SAMPLE 5590	INDEX 1904 SAMPLE 5878	INDEX 1905 SAMPLE 3738
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	WILDCAT	WILDCAT	ZOOK
WELL NAME	DE ROO NO. 1	DIX NO. 1	ROSENE SMITH NO. 1
LOCATION	SEC. 17, T21S, R16W	SEC. 21, T21S, R15W	SEC. 16, T23S, R16W
OWNER	TRANS-ERA PETROLEUM CO.	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	NOT GIVEN	05/12/55	12/15/43
SAMPLED	01/26/54	07/18/55	03/02/44
FORMATION	CAMO-ARBUCKLE	PENN-BASAL	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3798	3741	4060
WELLHEAD PRESSURE,PSIG	1160	1158	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4410	14950
COMPONENT, MOLE PCT			
METHANE	1.4	84.7	86.6
ETHANE	1.7	3.3	7.1
PROPANE	0.8	1.2	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.7	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	87.7	8.6	5.3
OXYGEN	TRACE	TRACE	0.5
ARGON	0.2	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.5	0.0
HELIUM	5.84	1.02	0.53
HEATING VALUE*	132	982	1004
SPECIFIC GRAVITY	0.947	0.634	0.612

	INDEX 1906 SAMPLE 3740	INDEX 1907 SAMPLE 10759	INDEX 1908 SAMPLE 12204
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ZOOK	ZOOK	ZOOK
WELL NAME	C. H. GILKISON NO. 1	IRMA NO. 1	CAUBLE UNIT NO. 1
LOCATION	SEC. 5, T23S, R16W	SEC. 16, T23S, R16W	SEC. 22, T23S, R16W
OWNER	STANOLIND OIL & GAS CO.	KEWANEE OIL CO.	ROBERT E. WHITE
COMPLETED	12/15/43	07/01/66	01/03/70
SAMPLED	03/02/44	10/23/66	02/20/70
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4063	4061	4044
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1186	1300
OPEN FLOW, MCFD	6400	8000	3000
COMPONENT, MOLE PCT			
METHANE	82.2	88.8	88.6
ETHANE	11.1	3.5	3.5
PROPANE	---	1.5	1.4
N-BUTANE	---	0.3	0.4
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	5.8	4.6	4.7
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.53	0.52	0.51
HEATING VALUE*	1202	1044	1039
SPECIFIC GRAVITY	0.639	0.623	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1909 SAMPLE 13747	INDEX 1910 SAMPLE 15369	INDEX 1911 SAMPLE 11211
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ZOOK	ZOOK	ZOOK NW
WELL NAME	GILKINSON NO. 1	JOYCE ZOOK NO. 1	SHARTZ NO. 1
LOCATION	SEC. 15, T23S, R16W	SEC. 9, T23S, R16W	SEC. 8, T23S, R16W
OWNER	ALPINE DRILLING CO.	ALPINE DRILLING CO.	HALLIBURTON OIL PROD. CO.
COMPLETED	07/20/73	06/08/78	08/31/67
SAMPLED	10/08/73	09/11/78	10/25/67
FORMATION	CAMO-CONGLOMERATE	-CONGLOMERATE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4040	4023	4130
WELLHEAD PRESSURE,PSIG	1163	1000	1170
OPEN FLOW, MCFD	1320	300	4180
COMPONENT, MOLE PCT			
METHANE	85.1	86.6	86.7
ETHANE	3.7	3.4	3.4
PROPANE	1.5	1.3	1.1
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.7	6.4	6.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.9
HELIUM	0.74	0.84	0.73
HEATING VALUE*	1009	1010	1007
SPECIFIC GRAVITY	0.634	0.625	0.631

	INDEX 1912 SAMPLE 11529	INDEX 1913 SAMPLE 3217	INDEX 1914 SAMPLE 8737
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PHILLIPS	PRATT
FIELD	ZOOK NW	RAY	BARNES
WELL NAME	HARRIS NO. 1	NOEL NO. 2	BARNES NO. 1
LOCATION	SEC. 34, T22S, R16W	SEC. 29, T5S, R20W	SEC. 25, T27S, R12W
OWNER	HALLIBURTON OIL PRODUCING CO	CITIES SERVICE OIL CO.	D.R. LAUCK DRILLING CO., INC
COMPLETED	12/01/67	10/30/41	NOT GIVEN
SAMPLED	06/04/68	03/23/42	10/30/62
FORMATION	PENN-MISS	CAMB-REAGAN	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4028	3576	4373
WELLHEAD PRESSURE,PSIG	1137	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1450
COMPONENT, MOLE PCT			
METHANE	85.8	4.2	48.1
ETHANE	3.7	14.5	8.6
PROPANE	1.3	---	5.2
N-BUTANE	0.3	---	1.7
ISOBUTANE	0.2	---	0.8
N-PENTANE	0.2	---	0.4
ISOPENTANE	0.1	---	0.5
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	7.1	76.7	31.9
OXYGEN	0.0	0.2	0.4
ARGON	TRACE	---	0.2
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	1.7	0.3
HELIUM	0.73	2.74	1.57
HEATING VALUE*	1013	302	918
SPECIFIC GRAVITY	0.634	0.949	0.846

	INDEX 1915 SAMPLE 15545	INDEX 1916 SAMPLE 5799	INDEX 1917 SAMPLE 3683
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	BRANT	CARVER-ROBBINS	CHATWOOD
WELL NAME	BRANT NO. A-1	M. ROBBINS NO. 1	CHITWOOD NO. 1
LOCATION	SEC. 31, T28S, R11W	SEC. 21, T27S, R15W	SEC. 23, T28S, R12W
OWNER	RAYMOND OIL CO., INC.	NATIONAL COOP. REF. ASSOC.	LION OIL REFINING CO.
COMPLETED	06/22/78	12/22/54	NOT GIVEN
SAMPLED	12/23/78	03/29/55	10/06/43
FORMATION	PERM-INDIAN CAVE	PENN-BASAL	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2624	4472	4396
WELLHEAD PRESSURE,PSIG	840	1320	1490
OPEN FLOW, MCFD	2060	7600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	88.6	61.6
ETHANE	3.8	3.1	27.9
PROPANE	2.2	1.3	---
N-BUTANE	0.6	0.4	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	16.9	5.1	9.0
OXYGEN	0.4	TRACE	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.41	0.46	0.82
HEATING VALUE*	935	1026	1124
SPECIFIC GRAVITY	0.690	0.619	0.732

	INDEX 1918 SAMPLE 3715	INDEX 1919 SAMPLE 3913	INDEX 1920 SAMPLE 3959
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	CHITWOOD NO. 5	BARKER NO. 2	BROSSWOOD NO. 1
LOCATION	SEC. 23, T28S, R12W	SEC. 23, T28S, R12W	SEC. 23, T28S, R12W
OWNER	LION OIL CO.	CITIES SERVICE OIL CO.	LION OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	10/11/44	10/11/44
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4200	4200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	286	319
COMPONENT, MOLE PCT			
METHANE	73.5	72.9	69.5
ETHANE	15.9	17.3	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	8.2	14.4
OXYGEN	0.4	0.4	1.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.9	0.3	0.4
HELIUM	0.86	0.89	0.64
HEATING VALUE*	1029	1049	941
SPECIFIC GRAVITY	0.681	0.675	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE	1921 3960	INDEX SAMPLE	1922 4058	INDEX SAMPLE	1923 4060
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	PRATT		PRATT		PRATT	
FIELD	CHITWOOD		CHITWOOD		CHITWOOD	
WELL NAME	RAWDSLEY NO. 1		CHITWOOD NO. 3		CHITWOOD NO. 5	
LOCATION	SEC. 22, T28S, R12W		SEC. 23, T28S, R12W		SEC. 23, T28S, R12W	
OWNER	LION OIL CO.		LION OIL CO.		LION OIL CO.	
COMPLETED	NOT GIVEN		--/--/44		--/--/44	
SAMPLED	10/11/44		06/01/45		06/01/45	
FORMATION	ORDO-VIOLA		ORDO-VIOLA		ORDO-VIOLA	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	4200		4500		4500	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1400		1400	
OPEN FLOW, MCFD	846		21500		6495	
COMPONENT, MOLE PCT						
METHANE	74.4		---		69.4	
ETHANE	15.5		---		20.5	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	8.5		---		9.1	
OXYGEN	0.5		---		0.0	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		---		0.1	
HELIUM	0.85		0.82		0.87	
HEATING VALUE*	1031		0		1070	
SPECIFIC GRAVITY	0.667		0.001		0.691	

	INDEX SAMPLE	1924 4061	INDEX SAMPLE	1925 4062	INDEX SAMPLE	1926 4063
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	PRATT		PRATT		PRATT	
FIELD	CHITWOOD		CHITWOOD		CHITWOOD	
WELL NAME	CHITWOOD B-1		EVANS NO. 2		EVANS NO. 1	
LOCATION	SEC. 27, T28S, R12W		SEC. 27, T28S, R12W		SEC. 27, T28S, R12W	
OWNER	LION OIL CO.		GULF OIL CORP.		SKELLY OIL CO.	
COMPLETED	--/--/45		--/--/44		10/--/44	
SAMPLED	06/01/45		06/01/45		06/01/45	
FORMATION	ORDO-VIOLA		ORDO-VIOLA		ORDO-VIOLA	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	4500		4500		4323	
WELLHEAD PRESSURE,PSIG	1400		1400		1400	
OPEN FLOW, MCFD	9000		NOT GIVEN		15075	
COMPONENT, MOLE PCT						
METHANE	74.3		69.1		74.4	
ETHANE	17.0		21.0		17.2	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	7.9		9.0		7.4	
OXYGEN	0.0		0.0		0.1	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.74		0.77		0.79	
HEATING VALUE*	1057		1076		1062	
SPECIFIC GRAVITY	0.669		0.693		0.668	

	INDEX SAMPLE	1927 4084	INDEX SAMPLE	1928 4091	INDEX SAMPLE	1929 14494
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	PRATT		PRATT		PRATT	
FIELD	CHITWOOD		CHITWOOD		CHITWOOD	
WELL NAME	FISSEL NO. 3		CHITWOOD B-2		CHITWOOD NO. S-1	
LOCATION	SEC. 22, T28S, R12W		SEC. 27, T28S, R12W		SEC. 23, T28S, R12W	
OWNER	CITIES SERVICE OIL CO.		LION OIL CO.		RAYMOND OIL CO., INC.	
COMPLETED	--/--/45		--/--/45		05/02/75	
SAMPLED	06/01/45		06/01/45		10/1/75	
FORMATION	ORDO-VIOLA		ORDO-VIOLA		PERM-INDIAN CAVE	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	4429		4500		2646	
WELLHEAD PRESSURE,PSIG	922		1400		880	
OPEN FLOW, MCFD	14782		9370		3300	
COMPONENT, MOLE PCT						
METHANE	71.3		71.6		83.0	
ETHANE	17.4		19.0		3.2	
PROPANE	---		---		1.4	
N-BUTANE	---		---		0.3	
ISOBUTANE	---		---		0.2	
N-PENTANE	---		---		TRACE	
ISOPENTANE	---		---		0.1	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		TRACE	
NITROGEN	10.1		8.5		10.8	
OXYGEN	0.1		0.0		0.0	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3		0.1		0.3	
HELIUM	0.82		0.04		0.43	
HEATING VALUE*	1034		1066		956	
SPECIFIC GRAVITY	0.682		0.681		0.638	

	INDEX SAMPLE	1930 A461	INDEX SAMPLE	1931 6060	INDEX SAMPLE	1932 2897
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	PRATT		PRATT		PRATT	
FIELD	COATS W		CULLISON		CUNNINGHAM	
WELL NAME	MOSS NO. 1		JOHNSON NO. 1		C. H. LAKIN NO. 1	
LOCATION	SEC. 23, T29S, R14W		SEC. 25, T28S, R15W		SEC. 36, T27S, R11W	
OWNER	WILKINSON DRILLING, INC.		BANKOFF OIL CO.		SKELLY OIL CO.	
COMPLETED	NOT GIVEN		01/19/56		NOT GIVEN	
SAMPLED	03/08/62		05/22/56		10/04/41	
FORMATION	ORDO-SIMPSON		MISS-CHAT		ORDO-VIOLA	
GEOLOGIC PROVINCE CODE	385		385		385	
DEPTH, FEET	4522		4558		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1525		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		875		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	57.5		69.4		65.5	
ETHANE	8.1		5.8		19.7	
PROPANE	3.2		3.5		---	
N-BUTANE	0.9		1.1		---	
ISOBUTANE	0.4		0.4		---	
N-PENTANE	0.2		0.3		---	
ISOPENTANE	0.2		0.3		---	
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.2		0.2		---	
NITROGEN	26.9		17.7		13.2	
OXYGEN	0.0		0.0		0.2	
ARGON	0.1		0.1		---	
HYDROGEN	0.0		0.1		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	1.88		1.23		1.11	
HEATING VALUE*	886		948		1017	
SPECIFIC GRAVITY	0.766		0.730		0.706	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1933 SAMPLE 2911	INDEX 1934 SAMPLE 2925	INDEX 1935 SAMPLE 2926
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	BOWERS NO. 1	STEFFEN C NO. 1	LUNT A NO. 1
LOCATION	SEC. 2, T28S, R11W	SEC. 35, T27S, R11W	SEC. 18, T28S, R11W
OWNER	DRILLERS GAS CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/06/41	10/25/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.8	62.2	72.4
ETHANE	22.2	23.2	17.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.5	13.3	8.7
OXYGEN	0.2	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.10	1.07	0.82
HEATING VALUE*	1034	1046	1051
SPECIFIC GRAVITY	0.718	0.721	0.678

	INDEX 1936 SAMPLE 2927	INDEX 1937 SAMPLE 2928	INDEX 1938 SAMPLE 2929
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	C. D. GOYEN C NO. 1	KREHBIEL B NO. 1	GILCHRIST NO. 1
LOCATION	SEC. 8S, T28S, R11W	SEC. 11, T28S, R11W	SEC. 7, T28S, R11W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/25/41	10/25/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.2	64.9	71.6
ETHANE	19.3	21.3	17.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.1	12.4	10.1
OXYGEN	0.2	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.00	1.05	0.85
HEATING VALUE*	1037	1039	1034
SPECIFIC GRAVITY	0.695	0.708	0.679

	INDEX 1939 SAMPLE 2933	INDEX 1940 SAMPLE 2934	INDEX 1941 SAMPLE 2936
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	ARMITSTEAD A NO. 1	C. D. GOYEN B NO. 1	MORRISON NO. 1
LOCATION	SEC. 2, T28S, R11W	SEC. 17, T28S, R11W	SEC. 9, T28S, R11W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/25/41	10/25/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.2	68.2	66.5
ETHANE	21.0	19.7	21.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.3	10.5	10.9
OXYGEN	0.1	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	1.05	0.97	0.96
HEATING VALUE*	1037	1044	1054
SPECIFIC GRAVITY	0.708	0.692	0.704

	INDEX 1942 SAMPLE 3056	INDEX 1943 SAMPLE 12936	INDEX 1944 SAMPLE 8276
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	FRISBIE NE	GEREKE N
WELL NAME	SOUTH MAXEDON NO. 3	GRIFFITH A NO. 1	PARKS NO. 1
LOCATION	SEC. 25, T27S, R11W	SEC. 10, T26S, R13W	SEC. 1, T26S, R15W
OWNER	SKELLY OIL CO.	VINCENT OIL CORP.	SCHERMERHORN OIL CORP.
COMPLETED	05/11/40	05/13/71	NOT GIVEN
SAMPLED	12/04/41	07/19/71	11/10/61
FORMATION	ORDO-VIOLA	MISS-	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4000	4132	3807
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1210	1550
OPEN FLOW, MCFD	67000	4300	4000
COMPONENT, MOLE PCT			
METHANE	47.7	66.0	79.5
ETHANE	38.2	5.2	4.0
PROPANE	---	2.5	2.1
N-BUTANE	---	0.8	0.8
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	12.7	21.5	11.8
OXYGEN	0.2	1.3	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	1.01	1.39	0.40
HEATING VALUE*	1168	895	1003
SPECIFIC GRAVITY	0.795	0.731	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1945 SAMPLE 16138	INDEX 1946 SAMPLE 15983	INDEX 1947 SAMPLE 3594
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	HOPEWELL	HOPWELL	IUKA
WELL NAME	DOGGETT NO. 4	STAMBAUGH "A" NO. 1	TRITSCH NO. 1
LOCATION	SEC. 17, T26S, R5W	SEC. 8, T26S, R15W	SEC. 11, T27S, R13W
OWNER	MULL DRILLING CO.	CITIES SERVICE CO.	ATLANTIC REFINING CO.
COMPLETED	05/23/80	03/18/80	NOT GIVEN
SAMPLED	12/04/80	06/09/80	09/11/42
FORMATION	MISS-	MISS-CHERT	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4350	4357	4304
WELLHEAD PRESSURE,PSIG	950	1040	NOT GIVEN
OPEN FLOW, MCFD	9000	4260	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.3	88.0	67.0
ETHANE	3.7	3.8	24.7
PROPANE	1.5	1.4	---
N-BUTANE	0.5	0.5	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	4.7	4.9	7.5
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.58	0.62	0.17
HEATING VALUE*	1046	1051	1121
SPECIFIC GRAVITY	0.627	0.631	0.711

	INDEX 1948 SAMPLE 3594A	INDEX 1949 SAMPLE 3601	INDEX 1950 SAMPLE 3602A
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	IUKA	IUKA	IUKA
WELL NAME	TRITSCH NO. 1	HARRELL NO. B-1	BECK NO. 1
LOCATION	SEC. 11, T27S, R13W	SEC. 2, T27S, R13W	SEC. 6, T27S, R12W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	HANNUM DRILLING CO.
COMPLETED	NOT GIVEN	06/30/41	06/14/42
SAMPLED	09/11/42	09/11/42	09/11/42
FORMATION	ORDO-SIMPSON	ORDO-SIMPSON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4304	4255	4242
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.9	61.0	62.8
ETHANE	9.7	21.8	20.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.0	15.3	14.9
OXYGEN	0.5	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.68	1.20	1.10
HEATING VALUE*	922	1009	1002
SPECIFIC GRAVITY	0.666	0.725	0.718

	INDEX 1951 SAMPLE 3605	INDEX 1952 SAMPLE 15024	INDEX 1953 SAMPLE 7869
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	IUKA	IUKA-CARMI	JEM
WELL NAME	HEMMKE-GETTY NO. 1	ALBERT HOEME NO. 1	MOORE NO. 1
LOCATION	SEC. 1, T27S, R13W	SEC. 25, T26S, R12W	SEC. 29, T29S, R13W
OWNER	SKELLY OIL CO.	W. L. KIRKMAN, INC.	KENWOOD OIL CO.
COMPLETED	NOT GIVEN	10/31/76	02/17/61
SAMPLED	09/11/42	06/09/77	02/13/61
FORMATION	CAMO-ARBUCKLE	PENN-HOWARD & SEVERY	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4453
WELLHEAD PRESSURE,PSIG	NOT GIVEN	947	780
OPEN FLOW, MCFD	NOT GIVEN	4800	1100
COMPONENT, MOLE PCT			
METHANE	28.9	64.7	74.9
ETHANE	43.3	4.5	8.6
PROPANE	---	4.1	3.7
N-BUTANE	---	1.5	1.3
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.6	0.4
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	25.5	23.1	9.3
OXYGEN	0.6	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	0.2	0.2
HELIUM	3.30	0.46	0.60
HEATING VALUE*	1028	953	1109
SPECIFIC GRAVITY	0.887	0.764	0.717

	INDEX 1954 SAMPLE 3632	INDEX 1955 SAMPLE 14636	INDEX 1956 SAMPLE 7685
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	NOT GIVEN	ROLLINGSON	SAWYER
WELL NAME	FORD NO. 1	MOORE "A" NO. 1	J. W. COMBS NO. 1
LOCATION	SEC. 12, T26S, R12W	SEC. 35, T27S, R13W	SEC. 26, T29S, R13W
OWNER	MONSANTO CO.	RAYMOND OIL CO., INC.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	10/07/75	09/25/60
SAMPLED	04/07/43	04/10/76	09/12/60
FORMATION	NOT GIVEN	PERM-RED EAGLE	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	2592	4130
WELLHEAD PRESSURE,PSIG	NOT GIVEN	820	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.8	68.7	75.5
ETHANE	32.0	5.8	6.0
PROPANE	---	2.1	3.1
N-BUTANE	---	0.5	1.0
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	11.8	23.6	12.7
OXYGEN	0.3	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.13	0.63	0.30
HEATING VALUE*	1135	854	1034
SPECIFIC GRAVITY	0.767	0.706	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1957 SAMPLE 14633	INDEX 1958 SAMPLE 3250	INDEX 1959 SAMPLE 13787
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	UNNAMED	WARD	WOOLFOLK
WELL NAME	BUCKLIN ESTATE NO. 1	WARD NO. B-1	WOOLFOLK NO. 7
LOCATION	SEC. 17, T25S, R12W	SEC. 11, T26S, R12W	SEC. 15, T28S, R14W
OWNER	D. R. LAUCK OIL CO., INC.	N. APPLEMAN CO.	TEXAS ENERGIES
COMPLETED	04/11/75	09/15/41	DRILL STEM TEST NO.
SAMPLED	04/05/76	04/01/42	10/12/73
FORMATION	PERM-INDIAN CAVE	ORDO-VIOLA	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2684	4105	3954
WELLHEAD PRESSURE,PSIG	937	1130	1462
OPEN FLOW, MCFD	959	3700	411
COMPONENT, MOLE PCT			
METHANE	72.1	60.5	69.9
ETHANE	2.4	17.9	3.8
PROPANE	0.8	---	2.3
N-BUTANE	0.2	---	0.7
ISOBUTANE	0.2	---	0.4
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.1
NITROGEN	23.6	19.5	21.7
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.56	1.46	0.51
HEATING VALUE*	808	934	895
SPECIFIC GRAVITY	0.676	0.722	0.711

	INDEX 1960 SAMPLE 2237	INDEX 1961 SAMPLE 2316	INDEX 1962 SAMPLE 10338
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	BURRTON	BURRTON	FRIENDSHIP
WELL NAME	HAURY NO. 1	BLAKE NO. 1	W. R. BLOCKER NO. 1
LOCATION	SEC. 1, T23, R4W	SEC. 23, T23, R4W	SEC. 19, T25S, R4W
OWNER	CITIES SERVICE OIL CO.	CONTINENTAL OIL & SHELL PET.	TESORO PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	02/02/62
SAMPLED	11/07/30	04/23/31	12/21/65
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3303	3271	3554
WELLHEAD PRESSURE,PSIG	1200	1100	720
OPEN FLOW, MCFD	23000	8500	520
COMPONENT, MOLE PCT			
METHANE	80.1	78.8	70.1
ETHANE	16.0	12.8	7.4
PROPANE	---	---	5.0
N-BUTANE	---	---	3.1
ISOBUTANE	---	---	1.0
N-PENTANE	---	---	1.1
ISOPENTANE	---	---	1.8
CYCLOPENTANE	---	---	1.0
HEXANES PLUS	---	---	2.0
NITROGEN	3.5	7.9	6.8
OXYGEN	0.0	0.2	0.2
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.31	0.33	0.28
HEATING VALUE*	1098	1028	1375
SPECIFIC GRAVITY	0.648	0.650	0.857

	INDEX 1963 SAMPLE 8266	INDEX 1964 SAMPLE 8464	INDEX 1965 SAMPLE 8612
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	HINSHAW	HUNTSVILLE	HUNTSVILLE TOWNSITE
WELL NAME	HINSHAW NO. 1	SMITH NO. 1	LAVIELLE NO. 1
LOCATION	SEC. 16, T23S, R10W	SEC. 20, T23S, R9W	SEC. 8, T23S, R9W
OWNER	WILKINSON DRILLING, INC.	MULL DRILLING CO., INC.	MULL DRILLING CO., INC.
COMPLETED	NOT GIVEN	NOT GIVEN	08/05/62
SAMPLED	03/01/61	03/20/62	08/04/62
FORMATION	ORDO-VIOLA	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3596	3680	3573
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1320
OPEN FLOW, MCFD	802	240	750
COMPONENT, MOLE PCT			
METHANE	64.5	73.7	74.0
ETHANE	7.1	6.2	7.4
PROPANE	3.6	3.1	3.7
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	21.4	13.3	11.4
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	1.17	0.95	0.78
HEATING VALUE*	947	1028	1062
SPECIFIC GRAVITY	0.741	0.712	0.711

	INDEX 1966 SAMPLE 8613	INDEX 1967 SAMPLE 10392	INDEX 1968 SAMPLE 10393
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	HUNTSVILLE TOWNSITE	LERADO	LERADO
WELL NAME	LAVIELLE NO. 1	MONTFORD C. NO. 1	MURPHY NO. 2
LOCATION	SEC. 8, T23S, R9W	SEC. 16, T26S, R9W	SEC. 14, T26W, R9S
OWNER	MULL DRILLING CO., INC.	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.
COMPLETED	08/05/62	05/10/58	09/17/65
SAMPLED	08/04/62	02/10/66	02/10/66
FORMATION	MISS-	MISS-	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3573	3888	2203
WELLHEAD PRESSURE,PSIG	1320	1100	780
OPEN FLOW, MCFD	750	6000	1000
COMPONENT, MOLE PCT			
METHANE	74.0	76.0	76.4
ETHANE	6.5	6.8	6.0
PROPANE	3.0	3.7	2.7
N-BUTANE	0.9	1.2	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	13.5	10.1	12.6
OXYGEN	0.2	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.78	0.68	0.43
HEATING VALUE*	1001	1082	1020
SPECIFIC GRAVITY	0.699	0.709	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1969 SAMPLE 10786	INDEX 1970 SAMPLE 2046	INDEX 1971 SAMPLE 2486
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	LERADO	NOT GIVEN	NOT GIVEN
WELL NAME	COLE-JUSTUS NO. 1	TREMBLY NO. 1	NO. 1
LOCATION	SEC. 14, T26S, R9W	SEC. 34, T24, R7W	SEC. 26, T23S, R4W
OWNER	MESSMAN-RINEHART OIL CO.	SKELLY OIL CO.	OLSEN OIL CO. & SHELL OIL
COMPLETED	06/25/66	DRILL STEM TEST	NOT GIVEN
SAMPLED	11/22/66	06/13/30	04/11/32
FORMATION	PERM-FORAKER	NOT GIVEN	BURR-TON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2002	2075	3237
WELLHEAD PRESSURE,PSIG	735	NOT GIVEN	1180
OPEN FLOW, MCFD	9000	1800	86600
COMPONENT, MOLE PCT			
METHANE	67.3	52.8	76.3
ETHANE	5.1	5.3	15.7
PROPANE	2.3	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	23.6	40.2	7.1
OXYGEN	0.1	0.3	0.3
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.65	0.85	0.34
HEATING VALUE*	856	630	1054
SPECIFIC GRAVITY	0.712	0.749	0.665

	INDEX 1972 SAMPLE 3238	INDEX 1973 SAMPLE 3224	INDEX 1974 SAMPLE 10711
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	PEACE CREEK	PEACE CREEK NE	SHUFF
WELL NAME	HOLLENBACK NO. 1	MCMURREY	SHUFF NO. 1
LOCATION	SEC. 28, T23S, R10W	SEC. 10, T23S, R10W	SEC. 34, T23S, R9W
OWNER	SIMPSON OIL CO.	LEADER OIL CO.	SIERRA PETROLEUM CO., INC.
COMPLETED	01/12/42	01/15/42	06/12/66
SAMPLED	03/30/42	03/30/42	09/06/66
FORMATION	ORDO-VIOLA	ORDO-VIOLA	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3798	3767	3762
WELLHEAD PRESSURE,PSIG	1170	840	1225
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	10.3	32.3	77.8
ETHANE	78.2	57.7	6.4
PROPANE	---	---	3.5
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	9.5	9.1	9.5
OXYGEN	0.3	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.5	0.3	TRACE
HELIUM	0.15	0.17	0.85
HEATING VALUE*	1506	1361	1072
SPECIFIC GRAVITY	0.996	0.882	0.690

	INDEX 1975 SAMPLE 8719	INDEX 1976 SAMPLE 14525	INDEX 1977 SAMPLE 3230
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	WILDCAT	WISBY NW	YODER
WELL NAME	FRENCH NO. 1	PROFFITT NO. 1	SHOWALTER NO. 1
LOCATION	SEC. 34, T26S, R6W	SEC. 12, T22S, R10W	SEC. 34, T24S, R5W
OWNER	MULL DRILLING CO., INC.	SHIELDS OIL PRODUCERS, INC.	DRILLERS GAS CO.
COMPLETED	NOT GIVEN	04/20/75	11/09/37
SAMPLED	10/17/62	11/05/75	03/30/42
FORMATION	MISS-	PENN-KANSAS CITY	MISS-LIME
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3709	3120	3393
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	750
OPEN FLOW, MCFD	NOT GIVEN	2500	4723
COMPONENT, MOLE PCT			
METHANE	75.3	70.8	79.2
ETHANE	4.9	4.1	17.6
PROPANE	2.4	2.0	---
N-BUTANE	0.9	0.5	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	12.8	21.0	2.6
OXYGEN	2.2	0.0	0.1
ARGON	0.1	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.18	0.91	0.30
HEATING VALUE*	991	883	1118
SPECIFIC GRAVITY	0.705	0.697	0.653

	INDEX 1978 SAMPLE 3237	INDEX 1979 SAMPLE 3225	INDEX 1980 SAMPLE 3239
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RICE	RICE
FIELD	YODER	ALDEN	ALDEN
WELL NAME	HAYNES NO. 1	SMALL NO. 1	FAIR NO. 1
LOCATION	SEC. 33, T24S, R5W	SEC. 22, T21S, R9W	SEC. 28, T21S, R9W
OWNER	DRILLERS GAS CO.	SHARON DRILLING CO.	INGLING & PARKER
COMPLETED	03/26/38	04/--/41	03/09/41
SAMPLED	03/30/42	03/25/42	03/25/42
FORMATION	MISS-LIME	DEVO-MISENER	DEVO-MISENER
GEOLOGIC PROVINCE CODE	375	385	385
DEPTH, FEET	3408	3317	3313
WELLHEAD PRESSURE,PSIG	1025	772	681
OPEN FLOW, MCFD	2322	3962	8619
COMPONENT, MOLE PCT			
METHANE	80.2	65.3	61.9
ETHANE	16.1	22.4	23.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.0	11.1	12.8
OXYGEN	0.3	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.29	0.76	0.76
HEATING VALUE*	1101	1063	1052
SPECIFIC GRAVITY	0.648	0.710	0.727

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1981 SAMPLE 8660	INDEX 1982 SAMPLE 15037	INDEX 1983 SAMPLE 15045
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	BELL	BOY	BOY
WELL NAME	BOY NO. 1	L. BOY NO. 2	FLORA NO. 2
LOCATION	SEC. 21, T21S, R10W	SEC. 17, T21S, R10W	SEC. 21, T21S, R10W
OWNER	ICER ADDIS CO.	LEBSACK OIL PRODUCTION, INC.	LEBSACK OIL PRODUCTION, INC.
COMPLETED	DRILL STEM TEST	--/--/76	NOT GIVEN
SAMPLED	08/27/62	06/28/77	06/28/77
FORMATION	PENN-SEVERY	PENN-SEVERY	PENN-SEVERY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2530	2500	2525
WELLHEAD PRESSURE,PSIG	NOT GIVEN	800	800
OPEN FLOW, MCFD	NOT GIVEN	2000	2500
COMPONENT, MOLE PCT			
METHANE	61.0	62.2	61.9
ETHANE	1.9	1.9	1.8
PROPANE	0.8	0.7	0.7
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	34.8	33.7	34.1
OXYGEN	0.3	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.74	1.00	0.96
HEATING VALUE*	679	697	692
SPECIFIC GRAVITY	0.720	0.715	0.716

	INDEX 1984 SAMPLE 10251	INDEX 1985 SAMPLE 14137	INDEX 1986 SAMPLE 3226
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	CANZONERI	CENTENNIAL	CHASE-SILICA
WELL NAME	CANZONERI NO. 1	ENGELLAND NO. 1	DOLL NO. 1
LOCATION	SEC. 10, T21S, R9W	SEC. 3, T20S, R7W	SEC. 19, T19S, R10W
OWNER	LEBSACK OIL PROD.	MESSMAN-RINEHART OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/17/65	09/12/73	12/11/41
SAMPLED	10/21/65	08/26/74	03/25/42
FORMATION	MISS-KINDERHOOK	MISS-	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3271	3278	3030
WELLHEAD PRESSURE,PSIG	997	1080	1039
OPEN FLOW, MCFD	2500	6200	3330
COMPONENT, MOLE PCT			
METHANE	73.2	65.8	59.8
ETHANE	5.9	6.5	19.5
PROPANE	2.8	4.7	---
N-BUTANE	0.3	1.4	---
ISOBUTANE	0.3	0.9	---
N-PENTANE	TRACE	0.3	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	6.7	19.1	19.3
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	TRACE	0.2
HELIUM	0.45	0.99	0.88
HEATING VALUE*	9490	1009	955
SPECIFIC GRAVITY	0.595	0.757	0.730

	INDEX 1987 SAMPLE 3248	INDEX 1988 SAMPLE 3249	INDEX 1989 SAMPLE 4290
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	CHASE-SILICA	CHASE-SILICA	CHASE-SILICA
WELL NAME	DIPPEL NO. 1 B	WEINS NO. 1	DINSMORE NO.1
LOCATION	SEC. 26, T19S, R10W	SEC. 6, T19S, R9W	SEC. 36, T19S, R9W
OWNER	DUWE & FARRIS	DUWE & FARRIS	DRILLERS GAS CO.
COMPLETED	05/24/40	04/14/39	02/16/47
SAMPLED	03/30/42	03/30/42	04/07/47
FORMATION	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3018	2978	2117
WELLHEAD PRESSURE,PSIG	800	1071	697
OPEN FLOW, MCFD	7000	3208	3445
COMPONENT, MOLE PCT			
METHANE	47.2	45.8	58.1
ETHANE	19.9	22.5	4.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	31.2	30.1	35.7
OXYGEN	0.2	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.8
HELIUM	1.10	1.01	1.03
HEATING VALUE*	835	867	660
SPECIFIC GRAVITY	0.782	0.790	0.727

	INDEX 1990 SAMPLE 4291	INDEX 1991 SAMPLE 15084	INDEX 1992 SAMPLE 8236
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	CHASE-SILICA	FITZPATRICK	GENESEO-EDWARDS
WELL NAME	LOWREY NO. 1	DILL NO. 1	KALINA NO. 5
LOCATION	SEC. 36, T19S, R9W	SEC. 24, T21S, R9W	SEC. 3, T18S, R8W
OWNER	DRILLERS GAS CO.	LEBSACK OIL PRODUCTION	LEE PHILLIPS OIL CO.
COMPLETED	02/25/47	NOT GIVEN	NOT GIVEN
SAMPLED	04/07/47	01/24/80	10/06/61
FORMATION	PENN-	MISS-	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2114	3319	NOT GIVEN
WELLHEAD PRESSURE,PSIG	693	1023	NOT GIVEN
OPEN FLOW, MCFD	7100	4518	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.8	65.7	48.0
ETHANE	4.6	13.3	4.7
PROPANE	---	9.7	2.5
N-BUTANE	---	3.3	0.6
ISOBUTANE	---	1.5	0.4
N-PENTANE	---	1.0	0.1
ISOPENTANE	---	0.4	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.4	0.1
NITROGEN	37.6	4.3	23.3
OXYGEN	0.6	TRACE	0.2
ARGON	---	0.0	0.1
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.0	19.1
HELIUM	1.01	0.29	0.80
HEATING VALUE*	648	1402	683
SPECIFIC GRAVITY	0.735	0.846	0.905

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1993 SAMPLE 8555	INDEX 1994 SAMPLE 9294	INDEX 1995 SAMPLE 2732
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	GENESEO-EDWARDS	KEPLEY	LERADO
WELL NAME	PULLIAM NO. 1	KEPLEY	F. L. REESE NO. 1
LOCATION	SEC. 35, T16S, R8W	SEC. 5, T19S, R7W	SEC. 11, T19S, R9W
OWNER	KANSAS PETROLEUM, INC.	IMPERIAL OIL OF KANSAS, INC.	SHELL OIL CO.
COMPLETED	NOT GIVEN	03/25/64	NOT GIVEN
SAMPLED	05/03/62	03/24/64	04/19/36
FORMATION	CAMO-ARBUCKLE	MISS-KINDERHOOK	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3204	3290	4139
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1515
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.9	65.1	0.0
ETHANE	7.8	5.1	0.0
PROPANE	7.3	2.9	---
N-BUTANE	2.6	1.0	---
ISOBUTANE	1.6	0.4	---
N-PENTANE	0.5	0.1	---
ISOPENTANE	0.9	0.6	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	33.4	23.4	0.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	1.83	0.95	0.15
HEATING VALUE*	968	917	0
SPECIFIC GRAVITY	0.888	0.744	0.000

	INDEX 1996 SAMPLE 2368	INDEX 1997 SAMPLE 2369	INDEX 1998 SAMPLE 2901
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LITTLE RIVER	LITTLE RIVER	LYONS
WELL NAME	JENNINGS NO. 1	JENNINGS NO. 2	PULLIAM A
LOCATION	SEC. 29, T18S, R6W	SEC. 29, T18S, R6W	SEC. 35, T19S, R8W
OWNER	MCFADDEN & SHELL OIL CO.	MCFADDEN & SHELL OIL CO.	ATLANTIC REFINING CO.
COMPLETED	06/16/31	08/03/31	NOT GIVEN
SAMPLED	08/03/31	08/03/31	10/03/41
FORMATION	PERM-	PERM-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	1115	1156	NOT GIVEN
WELLHEAD PRESSURE,PSIG	265	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	26	33	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.7	74.5	34.6
ETHANE	7.9	9.5	29.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	34.0	14.6	34.2
OXYGEN	0.0	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	1.39	0.87	1.78
HEATING VALUE*	716	925	870
SPECIFIC GRAVITY	0.728	0.661	0.835

	INDEX 1999 SAMPLE 2904	INDEX 2000 SAMPLE 2905	INDEX 2001 SAMPLE 9282
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LYONS	LYONS	LYONS
WELL NAME	WILLIAMS NO. 1	LYON NO. 1	HUTCHINS NO. 1
LOCATION	SEC. 14, T20S, R8W	SEC. 2, T20S, R8W	SEC. 21, T20S, R8W
OWNER	DERBY OIL CO.	DRILLERS GAS CO.	BEN C. W. HYDE, JR.
COMPLETED	NOT GIVEN	NOT GIVEN	03/20/64
SAMPLED	10/03/41	10/03/41	03/20/64
FORMATION	ORDO-SIMPSON	CAMO-ARBUCKLE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3275
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1050
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.2	25.4	58.2
ETHANE	28.2	38.6	15.8
PROPANE	---	---	12.7
N-BUTANE	---	---	4.1
ISOBUTANE	---	---	1.8
N-PENTANE	---	---	0.7
ISOPENTANE	---	---	1.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	26.5	33.7	4.8
OXYGEN	0.3	0.2	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	1.45	1.78	0.07
HEATING VALUE*	943	949	1498
SPECIFIC GRAVITY	0.802	0.881	0.916

	INDEX 2002 SAMPLE 9281	INDEX 2003 SAMPLE 9283	INDEX 2004 SAMPLE 3227
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LYONS W	MC CLINTOCK	ORTH
WELL NAME	WILKINS NO. 1	MCCLINTOCK	CULBERTSON NO. 1
LOCATION	SEC. 31, T19S, R8W	SEC. 18, T21S, R8W	SEC. 26, T18S, R10W
OWNER	BEN C. W. HYDE, JR.	BEN C. W. HYDE, JR.	CITIES SERVICE OIL CO.
COMPLETED	03/20/64	05/28/62	06/06/41
SAMPLED	03/20/64	03/20/64	03/25/42
FORMATION	MISS-KINDERHOOK	DEVO-MISENER	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3206	3280	2873
WELLHEAD PRESSURE,PSIG	1000	650	1050
OPEN FLOW, MCFD	5000	750	2430
COMPONENT, MOLE PCT			
METHANE	86.0	45.6	52.5
ETHANE	5.2	5.8	21.2
PROPANE	1.3	4.3	---
N-BUTANE	1.0	1.3	---
ISOBUTANE	0.4	0.6	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	4.2	39.9	24.9
OXYGEN	0.5	0.0	0.3
ARGON	TRACE	0.1	---
HYDROGEN	1.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	1.19	1.41	0.97
HEATING VALUE*	1114	776	912
SPECIFIC GRAVITY	0.814	0.833	0.761

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2005 SAMPLE 10958	INDEX 2006 SAMPLE 2702	INDEX 2007 SAMPLE 8269
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	ORTH	RICKARD	TOBIAS
WELL NAME	ROELFS NO. 4	GOULDNER NO. 1	SCHUYLER NO. 1
LOCATION	SEC. 26, T18S, R10W	SEC. 16, T18S, R9W	SEC. 3, T21S, R9W
OWNER	SUNRAY DX OIL CO.	VICKERS PETROLEUM CO.	RENFRO DRILLING CO.
COMPLETED	05/10/67	NOT GIVEN	NOT GIVEN
SAMPLED	05/17/67	05/17/35	11/06/61
FORMATION	PENN-LANSING-KANSAS CITY	NOT GIVEN	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2882	2965	2948
WELLHEAD PRESSURE,PSIG	645	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	1960	1500
COMPONENT, MOLE PCT			
METHANE	61.2	41.0	66.6
ETHANE	6.6	24.1	5.7
PROPANE	3.5	---	3.0
N-BUTANE	1.2	---	1.0
ISOBUTANE	0.4	---	0.6
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.4	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	24.6	33.3	21.5
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.5	0.2
HELIUM	0.96	1.08	0.78
HEATING VALUE*	925	847	956
SPECIFIC GRAVITY	0.770	0.811	0.737

	INDEX 2008 SAMPLE 8669	INDEX 2009 SAMPLE 4926	INDEX 2010 SAMPLE 7693
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RUSH
FIELD	TOBIAS	UNION	BASGALL
WELL NAME	LIPP NO. 1	GRAHAM NO. 1	BASGALL NO. 1
LOCATION	SEC. 11, T21S, R9W	SEC. 28, T20S, R8W	SEC. 5, T16S, R17W
OWNER	I. O. MILLER	BRUNSON DRILLING CO., INC.	LARIO OIL & GAS
COMPLETED	NOT GIVEN	07/10/50	NOT GIVEN
SAMPLED	08/23/62	08/16/50	09/27/60
FORMATION	PENN-KANSAS CITY	PENN-SOOY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2923	3278	2967
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1130	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1327	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.5	70.4	66.1
ETHANE	5.8	7.0	2.3
PROPANE	3.4	3.8	1.0
N-BUTANE	1.1	1.1	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	24.2	15.3	26.3
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.82	0.90	2.40
HEATING VALUE*	920	1015	798
SPECIFIC GRAVITY	0.754	0.725	0.705

	INDEX 2011 SAMPLE 12194	INDEX 2012 SAMPLE 7835	INDEX 2013 SAMPLE 8619
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BASGALL	BASGALL-REICHEL	BASGALL-REICHEL
WELL NAME	BASGALL C NO. 1	BASGALL NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 10, T16S, R17W	SEC. 5, T16S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	LARIO OIL & GAS CO.	FRONTIER OIL CO.
COMPLETED	--/--/69	10/26/60	NOT GIVEN
SAMPLED	02/16/70	01/30/61	07/23/62
FORMATION	PENN-TOPEKA	CAMO-ARBUCKLE	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3556	3240
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	12.0	61.8
ETHANE	2.0	2.3	3.1
PROPANE	0.8	0.4	1.5
N-BUTANE	0.3	0.2	0.8
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	30.5	77.2	29.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	1.86	6.50	1.78
HEATING VALUE*	733	207	796
SPECIFIC GRAVITY	0.706	0.882	0.737

	INDEX 2014 SAMPLE 8838	INDEX 2015 SAMPLE 6414	INDEX 2016 SAMPLE 6920
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BASGALL-REICHEL	BISON	BISON
WELL NAME	HARTMAN	CARL REINHARDT NO. 1	ROBINSON WELL NO. 1
LOCATION	SEC. 7, T16S, R17W	SEC. 3, T18S, R17W	SEC. 2, T18S, R17W
OWNER	FRONTIER OIL CO.	AYLWARD DRILLING CO.	AYLWARD DRILLING CO.
COMPLETED	NOT GIVEN	09/30/57	01/11/59
SAMPLED	01/16/63	09/29/57	01/14/59
FORMATION	PENN-KANSAS CITY	CAMO-CONGLOMERATE	PENN-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3564	3588
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	881
OPEN FLOW, MCFD	NOT GIVEN	7340	12832
COMPONENT, MOLE PCT			
METHANE	68.9	76.9	78.4
ETHANE	2.6	3.7	3.6
PROPANE	1.3	1.3	1.4
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	24.2	14.5	13.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.73	1.90	1.70
HEATING VALUE*	816	932	937
SPECIFIC GRAVITY	0.691	0.663	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2017 SAMPLE 7078	INDEX 2018 SAMPLE 14550	INDEX 2019 SAMPLE 5264
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BISON	OYER	HUNGRY HOLLOW
WELL NAME	RHEINHARDT NO. 2	OYER NO. 1	MARIE WILLIAMS NO. 1
LOCATION	SEC. 3, T18S, R17W	SEC. 12, T19S, R16W	SEC. 6, T16S, R17W
OWNER	AYLWARD DRILLING CO.	ICER ADDIS	NORTH AMERICAN PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	06/--/52
SAMPLED	05/20/59	12/--/75	09/10/52
FORMATION	CAMO-SANDY CONGLOMERATE	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3564	NOT GIVEN	3460
WELLHEAD PRESSURE,PSIG	960	NOT GIVEN	953
OPEN FLOW, MCFD	9500	NOT GIVEN	1360
COMPONENT, MOLE PCT			
METHANE	76.0	81.4	14.6
ETHANE	3.7	4.0	2.3
PROPANE	1.7	1.7	0.6
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	15.3	10.1	74.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.3
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	1.80	1.54	5.75
HEATING VALUE*	927	980	243
SPECIFIC GRAVITY	0.668	0.646	0.881

	INDEX 2020 SAMPLE 4024	INDEX 2021 SAMPLE 4025	INDEX 2022 SAMPLE 12195
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	LORETTO	LORETTO	LORETTO
WELL NAME	URBAN NO. 1	URBAN NO. 1	HOFFMAN NO. 2
LOCATION	SEC. 21, T16S, R17W	SEC. 21, T16S, R17W	SEC. 29, T16S, R17W
OWNER	ELDORADO REFINING CO.	ELDORADO REFINING CO.	FRONTIER OIL CO.
COMPLETED	09/--/45	09/--/45	01/21/70
SAMPLED	09/18/45	09/05/45	02/16/70
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3537	3537	3267
WELLHEAD PRESSURE,PSIG	950	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2510
COMPONENT, MOLE PCT			
METHANE	13.1	11.0	70.4
ETHANE	7.7	8.8	4.0
PROPANE	---	---	2.2
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	71.0	73.0	18.3
OXYGEN	0.6	0.1	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.9	0.1	TRACE
HELIUM	6.74	7.02	2.05
HEATING VALUE*	271	269	946
SPECIFIC GRAVITY	0.870	0.872	0.710

	INDEX 2023 SAMPLE 12197	INDEX 2024 SAMPLE 2962	INDEX 2025 SAMPLE 2963
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	LORETTO NE	OTIS	OTIS
WELL NAME	URBAN J NO. 3	BUTHERUS NO. 1	MOHR NO. 1
LOCATION	SEC. 14, T16S, R17W	SEC. 15, T18S, R16W	SEC. 10, T18S, R16W
OWNER	FRONTIER OIL CO.	SCHERMERHORN OIL CORP.	INTERSTATE PRODUCTION CO.
COMPLETED	01/26/70	12/29/33	01/29/35
SAMPLED	02/16/70	11/07/41	11/07/41
FORMATION	PENN-TOPEKA	CAMB-REAGAN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3161	3460	3480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1020	995
OPEN FLOW, MCFD	2890	39000	42000
COMPONENT, MOLE PCT			
METHANE	65.0	75.3	71.8
ETHANE	2.1	11.2	13.9
PROPANE	0.9	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	29.0	11.4	12.2
OXYGEN	0.0	0.2	0.2
ARGON	0.1	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.3	0.3
HELIUM	1.85	1.57	1.62
HEATING VALUE*	758	963	976
SPECIFIC GRAVITY	0.704	0.654	0.671

	INDEX 2026 SAMPLE 2965	INDEX 2027 SAMPLE 2966	INDEX 2028 SAMPLE 2968
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	MOHR-BUTHERUS NO. 1	SCHMIDT NO. 1	HARTMAN NO. 1
LOCATION	SEC. 15, T18S, R16W	SEC. 9, T18S, R16W	SEC. 4, T18S, R16W
OWNER	INTERSTATE PRODUCTION CO.	D. F. FLYNN ET AL.	SCHERMERHORN OIL CORP.
COMPLETED	10/29/34	07/03/36	09/18/35
SAMPLED	11/07/41	11/07/41	11/07/41
FORMATION	NOT GIVEN	PENN-SOOY	PENN-SOOY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3469	3498	3510
WELLHEAD PRESSURE,PSIG	1030	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	43000	5600	13000
COMPONENT, MOLE PCT			
METHANE	76.5	72.1	74.1
ETHANE	11.2	14.4	10.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.2	11.8	13.8
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	1.69	1.54	1.70
HEATING VALUE*	958	988	932
SPECIFIC GRAVITY	0.669	0.669	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2029 SAMPLE 2970	INDEX 2030 SAMPLE 2973	INDEX 2031 SAMPLE 2979
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	CROWELL NO. 1	PHILLIP J. BRACK NO. 1	SCHERMERHORN-MAULER NO. 1
LOCATION	SEC. 23, T18S, R16W	SEC. 24, T18S, R16W	SEC. 14, T18S, R16W
OWNER	INTERSTATE-FLYNN	HERNDON DRILLING CO.	SCHERMERHORN OIL CORP.
COMPLETED	11/19/35	11/09/36	07/18/34
SAMPLED	11/08/41	11/06/41	11/06/41
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3483	3466	3493
WELLHEAD PRESSURE,PSIG	973	960	NOT GIVEN
OPEN FLOW, MCFD	37000	38000	48000
COMPONENT, MOLE PCT			
METHANE	73.7	74.4	75.5
ETHANE	13.0	12.1	10.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.3	11.5	11.8
OXYGEN	0.2	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	1.52	1.59	1.59
HEATING VALUE*	980	971	960
SPECIFIC GRAVITY	0.663	0.658	0.652

	INDEX 2032 SAMPLE 2996	INDEX 2033 SAMPLE 3002	INDEX 2034 SAMPLE 3007
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	CROWELL NO. 1	MANETH NO. 3	MAULER NO. 1
LOCATION	SEC. 23, T18S, R16W	SEC. 22, T18S, R16W	SEC. 12, T18S, R16W
OWNER	INTERSTATE-FLYNN	KENWOOD OIL CO.	OHIO OIL CO.
COMPLETED	11/19/35	01/26/40	NOT GIVEN
SAMPLED	11/08/41	11/08/41	NOT GIVEN
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3483	3550	NOT GIVEN
WELLHEAD PRESSURE,PSIG	973	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	37000	17000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	74.0	74.4
ETHANE	12.5	12.8	10.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.0	11.1	12.7
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	1.53	1.53	1.61
HEATING VALUE*	978	979	947
SPECIFIC GRAVITY	0.660	0.662	0.658

	INDEX 2035 SAMPLE 3008	INDEX 2036 SAMPLE 3010	INDEX 2037 SAMPLE 3016
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	SCHEURMAN NO. 1	AYLWARD REIDL NO. 1	HAGELGANTZ
LOCATION	SEC. 5, T18S, R16W	SEC. 13, T18S, R16W	SEC. 11, T18S, R16W
OWNER	SINCLAIR PRAIRIE OIL CO.	KANSAS-NEBRASKA NAT. GAS CO.	KENWOOD OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	CAMB-REAGAN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	72.2	73.1
ETHANE	13.2	13.2	11.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.8	12.6	12.9
OXYGEN	0.1	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	1.54	1.56	1.58
HEATING VALUE*	978	968	954
SPECIFIC GRAVITY	0.665	0.669	0.664

	INDEX 2038 SAMPLE 3025	INDEX 2039 SAMPLE 8431	INDEX 2040 SAMPLE 8609
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	J. J. DIRKS NO. 1	HUENERGARDT NO. 1	HUENERGARDT NO. 2
LOCATION	SEC. 25, T18S, R16W	SEC. 18, T18S, R16W	SEC. 18, T16S, R18W
OWNER	OHIO OIL CO.	HALIBURTON OIL CO.	MORRISON PRODUCING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	02/26/62	06/13/62
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3543
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.7	72.7	77.0
ETHANE	11.7	10.0	3.7
PROPANE	---	5.9	1.4
N-BUTANE	---	2.3	0.5
ISOBUTANE	---	1.7	0.4
N-PENTANE	---	0.5	0.1
ISOPENTANE	---	0.6	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.1
NITROGEN	11.5	5.3	14.4
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	1.55	0.31	1.85
HEATING VALUE*	966	1270	939
SPECIFIC GRAVITY	0.657	0.778	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2041 SAMPLE 8610	INDEX 2042 SAMPLE 6599	INDEX 2043 SAMPLE 8618
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS-ALBERT	PECHANEC
WELL NAME	HUENERGARDT NO. 2	BETZ NO. 1	PECHANEC NO. 1
LOCATION	SEC. 18, T16S, R18W	SEC. 8, T18S, R16W	SEC. 18, T18S, R16W
OWNER	MORRISON PRODUCING CO.	SOLAR OIL CO.	MORRISION PRODUCING CO.
COMPLETED	DRILL STEM TEST	12/12/57	NOT GIVEN
SAMPLED	06/13/62	05/21/58	07/24/62
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3538	3529	3539
WELLHEAD PRESSURE,PSIG	NOT GIVEN	600	915
OPEN FLOW, MCFD	NOT GIVEN	3	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.1	78.5	75.7
ETHANE	3.7	4.1	3.8
PROPANE	1.4	1.5	1.5
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.4	12.6	15.3
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.84	1.60	1.74
HEATING VALUE*	937	972	934
SPECIFIC GRAVITY	0.662	0.668	0.675

	INDEX 2044 SAMPLE 8738	INDEX 2045 SAMPLE 12196	INDEX 2046 SAMPLE 4810
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	PECHANEC	PLEASANT VIEW	REICHEL
WELL NAME	SCHNEIDER NO. 1	BURGARDT A NO. 4	MAGNOLIA THALHEIM NO. 1
LOCATION	SEC. 17, T18S, R16W	SEC. 15, T16S, R17W	SEC. 28, T19S, R16W
OWNER	MORRISON PRODUCING CO.	FRONTIER OIL CO.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	10/29/62	11/24/69	NOT GIVEN
SAMPLED	10/29/62	02/16/70	01/10/58
FORMATION	CAMB-REAGAN	PENN-TOPEKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3519	3206	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4500	15900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.0	66.0	52.8
ETHANE	3.7	2.1	3.6
PROPANE	1.4	0.9	1.7
N-BUTANE	0.5	0.3	0.6
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	15.1	27.5	36.6
OXYGEN	0.3	0.0	0.1
ARGON	0.1	0.1	0.2
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.4
HELIUM	1.69	1.95	3.31
HEATING VALUE*	934	782	690
SPECIFIC GRAVITY	0.675	0.703	0.752

	INDEX 2047 SAMPLE 5389	INDEX 2048 SAMPLE 5406	INDEX 2049 SAMPLE 5413
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	REICHEL NO. 1	KLEWENO NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 23, T17S, R17W	SEC. 23, T17S, R17W
OWNER	R. G. MORRISON, JR.	R. G. MORRISON, JR.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	02/04/53	NOT GIVEN
SAMPLED	02/04/53	02/22/53	03/11/53
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3445
WELLHEAD PRESSURE,PSIG	1150	1150	NOT GIVEN
OPEN FLOW, MCFD	29000	29000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	69.3	61.9
ETHANE	3.1	2.9	3.1
PROPANE	1.5	1.0	1.6
N-BUTANE	0.6	0.4	0.7
ISOBUTANE	0.3	1.3	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	22.9	22.3	29.2
OXYGEN	0.8	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	1.88	1.98	1.88
HEATING VALUE*	844	864	798
SPECIFIC GRAVITY	0.704	0.704	0.733

	INDEX 2050 SAMPLE 5496	INDEX 2051 SAMPLE 5553	INDEX 2052 SAMPLE 5561
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	THIELENHAUS NO. 1	GILLIG NO. 1	THIELENHAUS NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 24, T17S, R17W	SEC. 14, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON DRILLING CO.	MORRISON PRODUCING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/15/53	09/10/53	11/03/53
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3000	3028	3000
WELLHEAD PRESSURE,PSIG	930	NOT GIVEN	920
OPEN FLOW, MCFD	2400	NOT GIVEN	2400
COMPONENT, MOLE PCT			
METHANE	72.8	70.0	73.3
ETHANE	4.6	5.3	5.2
PROPANE	1.2	1.2	1.2
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.1	21.7	18.8
OXYGEN	0.1	0.4	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.03	2.04	2.04
HEATING VALUE*	975	842	876
SPECIFIC GRAVITY	0.677	0.687	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2053 SAMPLE 5562	INDEX 2054 SAMPLE 5733	INDEX 2055 SAMPLE 5738
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	BIENER NO. 1	BIEBER NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	NOT GIVEN	NOT GIVEN
SAMPLED	11/13/53	11/08/54	11/23/54
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3308	3330
WELLHEAD PRESSURE,PSIG	1150	1110	NOT GIVEN
OPEN FLOW, MCFD	29000	6500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.9	70.6	77.2
ETHANE	3.3	3.2	3.6
PROPANE	1.6	1.1	1.4
N-BUTANE	0.7	0.4	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	28.3	21.5	14.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.86	2.11	1.74
HEATING VALUE*	791	842	928
SPECIFIC GRAVITY	0.724	0.680	0.661

	INDEX 2056 SAMPLE 5739	INDEX 2057 SAMPLE 5740	INDEX 2058 SAMPLE 5745
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	THIELENHAUS NO. 1	ROTHE NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 14, T17S, R17W	SEC. 31, T17S, R16W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	NOT GIVEN	12/19/54
SAMPLED	12/22/54	12/22/54	12/20/54
FORMATION	PENN-KANSAS CITY	PENN-TOPEKA	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3444
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1125
OPEN FLOW, MCFD	29000	2400	3500
COMPONENT, MOLE PCT			
METHANE	68.0	74.1	76.4
ETHANE	3.4	3.3	3.3
PROPANE	1.6	1.2	1.3
N-BUTANE	0.6	0.4	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	23.3	18.0	15.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.84	2.00	1.84
HEATING VALUE*	856	878	903
SPECIFIC GRAVITY	0.707	0.666	0.660

	INDEX 2059 SAMPLE 5746	INDEX 2060 SAMPLE 6191	INDEX 2061 SAMPLE 6585
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ROTHE NO. 1	LOHREY NO. 1	OBORHY NO. 1
LOCATION	SEC. 31, T17S, R16W	SEC. 35, T17S, R17W	SEC. 34, T17, R17W
OWNER	MORRISON PRODUCING CO.	AYLWARD DRILLING CO.	SUN OIL CO.
COMPLETED	12/19/54	11/20/56	03/11/57
SAMPLED	12/05/54	11/26/56	05/--/58
FORMATION	PENN-TOPEKA	PENN-BASAL	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2965	3574	NOT GIVEN
WELLHEAD PRESSURE,PSIG	970	1140	1003
OPEN FLOW, MCFD	396	8882	1693
COMPONENT, MOLE PCT			
METHANE	58.9	78.1	77.8
ETHANE	1.7	3.4	3.7
PROPANE	0.6	1.6	1.4
N-BUTANE	0.1	0.8	0.5
ISOBUTANE	0.1	TRACE	0.4
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	36.1	12.8	13.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.7
HELIUM	1.85	1.68	1.65
HEATING VALUE*	667	952	944
SPECIFIC GRAVITY	0.721	0.664	0.666

	INDEX 2062 SAMPLE 6586	INDEX 2063 SAMPLE 6587	INDEX 2064 SAMPLE 6926
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	LOHREY NO. 1	TIMKEN EST. NO. 1	ROTHWEILER NO. 1
LOCATION	SEC. 35, T17S, R17W	SEC. 3, T18S, R17W	SEC. 11, T18S, R17W
OWNER	ALYWARD DRILLING CO.	ALYWARD DRILLING CO.	AYLWARD DRILLING CO.
COMPLETED	11/26/56	11/30/57	01/18/59
SAMPLED	05/--/58	05/--/58	01/20/59
FORMATION	NOT GIVEN	NOT GIVEN	PENN-BASAL
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3564
WELLHEAD PRESSURE,PSIG	1012	970	NOT GIVEN
OPEN FLOW, MCFD	8826	13034	4600
COMPONENT, MOLE PCT			
METHANE	78.2	78.4	77.5
ETHANE	3.8	3.8	3.7
PROPANE	1.3	1.2	1.3
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	13.2	13.3	13.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	1.63	1.66	1.70
HEATING VALUE*	947	950	943
SPECIFIC GRAVITY	0.665	0.664	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2065 SAMPLE 7273	INDEX 2066 SAMPLE 7278	INDEX 2067 SAMPLE 8004
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	GILLIG NO. 1	KLEWENO NO. 1	THOLHEIN NO. 1
LOCATION	SEC. 24, T17S, R17W	SEC. 23, T17S, R17W	SEC. 26, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	FRONTIER OIL CO.
COMPLETED	11/01/59	11/07/59	NOT GIVEN
SAMPLED	11/02/59	11/09/59	05/25/61
FORMATION	PERM-GRANITE WASH	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3000	3036
WELLHEAD PRESSURE,PSIG	900	700	NOT GIVEN
OPEN FLOW, MCFD	4800	750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.3	63.0	60.7
ETHANE	3.5	2.6	2.5
PROPANE	1.2	0.9	0.9
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	14.3	30.1	32.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.80	2.10	2.20
HEATING VALUE*	908	742	717
SPECIFIC GRAVITY	0.646	0.708	0.719

	INDEX 2068 SAMPLE 8010	INDEX 2069 SAMPLE 8052	INDEX 2070 SAMPLE 8053
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KLEWENO NO. 1	BIEBER NO. 1	BIEBER NO. 1
LOCATION	SEC. 25, T17S, R17W	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	06/31/51	NOT GIVEN	NOT GIVEN
SAMPLED	05/14/61	07/05/61	07/04/61
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3028	3397	3340
WELLHEAD PRESSURE,PSIG	710	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.9	76.4	74.2
ETHANE	2.7	3.7	3.8
PROPANE	1.0	1.4	1.4
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	31.0	14.8	16.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	2.20	1.90	1.90
HEATING VALUE*	736	934	912
SPECIFIC GRAVITY	0.715	0.669	0.679

	INDEX 2071 SAMPLE 8056	INDEX 2072 SAMPLE 8065	INDEX 2073 SAMPLE 8108
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	BIEBER NO. 1	BIEBER NO. 1	REICHEL NO. 1
LOCATION	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W	SEC. 22, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/02/61	07/07/61	08/04/61
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3055	3516	3336
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.8	76.2	75.9
ETHANE	3.2	3.9	3.9
PROPANE	1.2	1.4	1.4
N-BUTANE	0.4	0.5	0.4
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	24.7	15.0	15.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	2.30	1.90	1.90
HEATING VALUE*	816	935	919
SPECIFIC GRAVITY	0.700	0.671	0.666

	INDEX 2074 SAMPLE 8109	INDEX 2075 SAMPLE 8115	INDEX 2076 SAMPLE 8172
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	SCHNEIDER NO. 1	HANHARDT NO. 1
LOCATION	SEC. 22, T17S, R17W	SEC. 13, T17S, R17W	SEC. 24, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/02/61	08/09/61	08/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3032	3036	3427
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.2	70.5	75.5
ETHANE	2.7	3.5	3.7
PROPANE	0.9	1.2	1.4
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	32.9	21.0	15.9
OXYGEN	0.0	0.5	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	2.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.20	2.00	1.80
HEATING VALUE*	711	849	925
SPECIFIC GRAVITY	0.718	0.685	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2077 SAMPLE 8173	INDEX 2078 SAMPLE 8174	INDEX 2079 SAMPLE 8175
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	HANHARDT NO. 1	SCHNEIDER NO. 1	HANHARDT NO. 1
LOCATION	SEC. 24, T17S, R17W	SEC. 13, T17S, R17W	SEC. 24, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/13/61	08/11/61	08/13/61
FORMATION	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3320	3365	2998
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	71.8	63.8
ETHANE	3.2	3.4	2.8
PROPANE	1.3	1.6	1.0
N-BUTANE	0.5	0.6	0.3
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	17.7	19.6	29.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.90	1.90	2.20
HEATING VALUE*	900	890	756
SPECIFIC GRAVITY	0.676	0.690	0.706

	INDEX 2080 SAMPLE 8176	INDEX 2081 SAMPLE 8237	INDEX 2082 SAMPLE 8239
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHNEIDER NO. 1	REICHEL NO. 1	SCHNEIDER NO. 1
LOCATION	SEC. 13, T17S, R17W	SEC. 22, T17S, R17W	SEC. 13, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/10/61	09/28/61	10/02/61
FORMATION	PENN-LANSING-KANSAS CITY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3330	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	691
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2901
COMPONENT, MOLE PCT			
METHANE	69.9	62.1	73.0
ETHANE	3.5	2.4	3.3
PROPANE	1.2	0.9	1.2
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	19.9	31.4	19.4
OXYGEN	1.5	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	2.20	2.10	2.00
HEATING VALUE*	859	726	867
SPECIFIC GRAVITY	0.692	0.713	0.674

	INDEX 2083 SAMPLE 8240	INDEX 2084 SAMPLE 8248	INDEX 2085 SAMPLE 8344
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	HANHARDT NO. 1	BIEBER NO. 1	HONDERICK A NO. 1
LOCATION	SEC. 24, T17S, R17W	SEC. 15, T17S, R17W	SEC. 10, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	NORTHERN NAT. GAS PROD. CO.
COMPLETED	NOT GIVEN	NOT GIVEN	01/07/62
SAMPLED	10/03/61	10/--/61	12/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	920
OPEN FLOW, MCFD	1860	NOT GIVEN	1020
COMPONENT, MOLE PCT			
METHANE	63.9	78.0	75.1
ETHANE	2.6	3.6	3.5
PROPANE	0.9	1.3	1.3
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.5	14.0	16.6
OXYGEN	0.0	TRACE	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	2.19	1.70	1.41
HEATING VALUE*	749	937	902
SPECIFIC GRAVITY	0.707	0.660	0.674

	INDEX 2086 SAMPLE 8380	INDEX 2087 SAMPLE 8385	INDEX 2088 SAMPLE 8430
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHNEIDER K. NO. 1	GRUMBEIN NO. 1	ROTHE A NO. 1
LOCATION	SEC. 13, T17S, R17W	SEC. 9, T17S, R17W	SEC. 30, T17S, R16W
OWNER	PETROLEUM, INC.	NORTHERN NAT. GAS PROD. CO.	NORTHERN NAT. GAS PROD. CO.
COMPLETED	01/23/62	03/01/62	NOT GIVEN
SAMPLED	01/24/62	01/26/62	02/24/62
FORMATION	PENN-TOPEKA	PERM-GRANITE WASH	-QUARTZ WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3018	3594	3532
WELLHEAD PRESSURE,PSIG	760	1125	1130
OPEN FLOW, MCFD	1450	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.4	74.9	76.8
ETHANE	3.1	3.0	3.6
PROPANE	1.3	2.4	1.4
N-BUTANE	0.4	0.5	0.6
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	18.8	16.4	14.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	2.06	1.89	1.66
HEATING VALUE*	869	909	937
SPECIFIC GRAVITY	0.672	0.673	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2089 SAMPLE 8433	INDEX 2090 SAMPLE 8497	INDEX 2091 SAMPLE 8498
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	APPL NO. 1	ERBER NO. 1	ROTHE A NO. 1
LOCATION	SEC. 10, T17S, R17W	SEC. 26, T17S, R17W	SEC. 30, T17S, R16W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	NORTHERN NAT. GAS PROD. CO.
COMPLETED	NOT GIVEN	NOT GIVEN	04/10/62
SAMPLED	02/10/62	03/30/62	04/02/62
FORMATION	PENN-TOPEKA	PERM-GRANITE WASH	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3033	3559	3011
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.6	74.5	60.3
ETHANE	2.8	2.6	1.8
PROPANE	1.0	0.8	0.7
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	33.1	18.8	34.4
OXYGEN	3.7	TRACE	0.1
ARGON	0.3	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.28	1.92	1.97
HEATING VALUE*	491	866	685
SPECIFIC GRAVITY	0.752	0.666	0.718

	INDEX 2092 SAMPLE 8501	INDEX 2093 SAMPLE 8502	INDEX 2094 SAMPLE 8503
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FOOS NO. 1	FOOS NO. 1	STEITZ NO. 1
LOCATION	SEC. 25, T17S, R17W	SEC. 25, T17S, R17W	SEC. 11, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/27/62	03/26/62	04/07/62
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3470	3292	3084
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.3	69.0	75.3
ETHANE	3.4	1.4	3.5
PROPANE	1.4	1.1	1.3
N-BUTANE	0.6	0.6	0.4
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	19.3	24.1	16.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.88	2.03	1.96
HEATING VALUE*	886	836	908
SPECIFIC GRAVITY	0.685	0.703	0.669

	INDEX 2095 SAMPLE 8504	INDEX 2096 SAMPLE 8507	INDEX 2097 SAMPLE 8508
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERBER NO. 1	FOOS NO. 1	FOOS NO. 1
LOCATION	SEC. 26, T17S, R17W	SEC. 25, T17S, R17W	SEC. 25, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/30/62	03/25/62	03/27/62
FORMATION	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3475	3238	3500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	66.6	77.3
ETHANE	2.7	2.6	3.6
PROPANE	0.9	1.1	1.4
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	18.9	26.4	13.7
OXYGEN	0.1	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.91	1.91	2.13
HEATING VALUE*	871	791	942
SPECIFIC GRAVITY	0.672	0.699	0.662

	INDEX 2098 SAMPLE 8524	INDEX 2099 SAMPLE 8525	INDEX 2100 SAMPLE 8526
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERNIE A NO. 1	ERNIE A NO. 1	BEAHM NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 12, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	04/21/62
SAMPLED	04/24/62	04/24/62	04/21/62
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3032	3084	3495
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	75.6	73.7
ETHANE	3.4	3.5	3.4
PROPANE	1.2	1.3	1.3
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	17.2	16.2	18.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.08	1.98	1.73
HEATING VALUE*	896	911	899
SPECIFIC GRAVITY	0.673	0.668	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2101 SAMPLE 8527	INDEX 2102 SAMPLE 8551	INDEX 2103 SAMPLE 8552
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	BEAHM NO. 1	BEIBER NO. 1	BEAHM NO. 1
LOCATION	SEC. 36, T17S, R17W	SEC. 15, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/20/62	05/15/62	05/15/62
FORMATION	PENN-KANSAS CITY	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3451	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.8	72.7	76.2
ETHANE	3.5	3.5	3.6
PROPANE	1.3	1.3	1.3
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.7	19.0	15.3
OXYGEN	0.2	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	1.82	1.96	1.83
HEATING VALUE*	919	894	921
SPECIFIC GRAVITY	0.669	0.686	0.664

	INDEX 2104 SAMPLE 8556	INDEX 2105 SAMPLE 8557	INDEX 2106 SAMPLE 8568
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERNIE A NO. 1	ERNIE A NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 14, T17S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/26/62	04/--/62	05/28/62
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3358	3450	3467
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	73.0	16.9
ETHANE	3.6	3.6	2.3
PROPANE	1.5	1.4	0.5
N-BUTANE	0.6	0.5	0.2
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	17.9	18.5	72.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	1.88	1.90	5.87
HEATING VALUE*	910	889	256
SPECIFIC GRAVITY	0.685	0.678	0.866

	INDEX 2107 SAMPLE 8575	INDEX 2108 SAMPLE 8576	INDEX 2109 SAMPLE 8577
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KANSAS STATE NO. 1	KANSAS STATE NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 6, T16S, R17W	SEC. 6, T16S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/26/62	05/24/62	05/25/62
FORMATION	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3267	3152	3220
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.6	62.6	60.0
ETHANE	3.3	2.7	3.0
PROPANE	2.0	1.4	1.6
N-BUTANE	1.1	0.6	0.6
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	31.8	29.6	31.9
OXYGEN	0.5	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.80	1.96	1.73
HEATING VALUE*	801	784	752
SPECIFIC GRAVITY	0.768	0.728	0.738

	INDEX 2110 SAMPLE 8608	INDEX 2111 SAMPLE 8653	INDEX 2112 SAMPLE 8686
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	MCGILL NO. 2	DECKER NO. 2	BEAHM NO. 1
LOCATION	SEC. 3, T17S, R17W	SEC. 2, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/05/62	08/23/62	09/17/62
FORMATION	PENN-TOPEKA	NOT GIVEN	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3062	3097	3457
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.0	73.2	76.7
ETHANE	3.4	3.3	3.8
PROPANE	1.2	1.2	1.4
N-BUTANE	0.4	0.4	0.6
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.6	18.9	14.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	2.23	2.17	1.74
HEATING VALUE*	867	873	937
SPECIFIC GRAVITY	0.678	0.673	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2113 SAMPLE 8718	INDEX 2114 SAMPLE 8720	INDEX 2115 SAMPLE 8734
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KISER NO. 1	REICHEL NO. 1	FRYE NO. 1
LOCATION	SEC. 2, T17S, R17W	SEC. 22, T17S, R17W	SEC. 4, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/10/62	10/16/62	10/22/62
FORMATION	PENN-TOPEKA	PERM-GR.WASH&PENN-KAN. CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3060	NOT GIVEN	3342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.5	76.4	77.0
ETHANE	3.1	3.6	3.6
PROPANE	1.6	1.4	1.4
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	21.1	15.0	14.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	2.01	1.81	1.79
HEATING VALUE*	845	937	946
SPECIFIC GRAVITY	0.685	0.671	0.669

	INDEX 2116 SAMPLE 8735	INDEX 2117 SAMPLE 8836	INDEX 2118 SAMPLE 8837
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FRYE NO. 1	ODELL NO. 1	DECKER NO. 1
LOCATION	SEC. 4, T17S, R17W	SEC. 34, T16S, R17W	SEC. 2, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/20/62	01/16/63	01/16/63
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3057	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	72.0	73.3
ETHANE	3.4	3.0	3.2
PROPANE	1.2	1.0	1.0
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	19.5	20.3	19.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	2.18	2.31	2.19
HEATING VALUE*	878	855	864
SPECIFIC GRAVITY	0.684	0.677	0.668

	INDEX 2119 SAMPLE 8839	INDEX 2120 SAMPLE 8840	INDEX 2121 SAMPLE 8841
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KAISER A NO. 1	MCGILL NO. 1	HONDERICK
LOCATION	SEC. 1, T17S, R17W	SEC. 3, T17S, R17W	SEC. 6, T17S, R16W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	01/17/63	01/17/63	01/20/63
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.1	69.4	58.0
ETHANE	2.9	4.1	2.8
PROPANE	1.0	1.6	0.9
N-BUTANE	0.4	1.1	0.4
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	0.6	TRACE
ISOPENTANE	0.2	1.0	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	1.0	TRACE
NITROGEN	21.4	18.4	32.9
OXYGEN	TRACE	TRACE	1.7
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	2.29	2.09	2.44
HEATING VALUE*	829	902	686
SPECIFIC GRAVITY	0.678	0.737	0.728

	INDEX 2122 SAMPLE 9255	INDEX 2123 SAMPLE 9256	INDEX 2124 SAMPLE 9257
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SHERWOOD NO. 1	HARTMAN A	BRACK NO. 1
LOCATION	SEC. 25, T16S, R17W	SEC. 17, T16S, R17W	SEC. 5, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	10/26/63	06/28/63	04/22/63
SAMPLED	03/17/64	03/17/64	03/17/64
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2996	3492	3336
WELLHEAD PRESSURE,PSIG	955	1000	870
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	70.3	60.2
ETHANE	1.8	3.3	3.0
PROPANE	0.5	1.4	1.5
N-BUTANE	0.3	0.5	0.8
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	27.7	21.2	31.3
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.67	2.18	1.91
HEATING VALUE*	755	862	759
SPECIFIC GRAVITY	0.692	0.690	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2125 SAMPLE 9258	INDEX 2126 SAMPLE 9259	INDEX 2127 SAMPLE 9261
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHLITTER NO. 1	PFEIFFER A NO. 2	KLEWENO A NO. 1
LOCATION	SEC. 18, T16S, R17W	SEC. 6, T16S, R17W	SEC. 16, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	03/01/63	02/09/63	06/20/63
SAMPLED	03/17/64	03/17/64	03/17/64
FORMATION	PENN-TOPEKA & LANSING-KC	PENN-LANSING-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2990	3274	3064
WELLHEAD PRESSURE, PSIG	1005	990	810
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	67.5	61.5
ETHANE	3.1	2.8	2.7
PROPANE	1.2	1.0	1.0
N-BUTANE	0.5	0.7	0.3
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	18.9	25.3	31.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	2.28	1.48	2.22
HEATING VALUE*	879	815	740
SPECIFIC GRAVITY	0.675	0.704	0.716

	INDEX 2128 SAMPLE 9262	INDEX 2129 SAMPLE 9264	INDEX 2130 SAMPLE 9406
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	LIPPERT NO. 2	BASGALL NO. 1	KAISER NO. 1
LOCATION	SEC. 19, T16S, R17W	SEC. 5, T16S, R17W	SEC. 2, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	06/01/63	03/21/63	11/02/62
SAMPLED	03/17/64	03/17/64	06/15/64
FORMATION	PENN-LANSING-KANSAS CITY	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3260	2988	3060
WELLHEAD PRESSURE, PSIG	1010	960	860
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	928
COMPONENT, MOLE PCT			
METHANE	73.1	64.5	74.1
ETHANE	3.4	2.3	3.4
PROPANE	1.3	0.8	1.5
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.2	28.0	17.7
OXYGEN	TRACE	0.4	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	2.25	2.47	2.07
HEATING VALUE*	889	760	892
SPECIFIC GRAVITY	0.677	0.704	0.670

	INDEX 2131 SAMPLE 9412	INDEX 2132 SAMPLE 9416	INDEX 2133 SAMPLE 10473
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FRYE NO. 1	GIESICK NO. 3	ALLEN A NO. 1
LOCATION	SEC. 4, T17S, R17W	SEC. 19, T17S, R16W	SEC. 33, T16S, R16W
OWNER	FRONTIER OIL CO.	PETROLEUM, INC.	FRONTIER OIL CO.
COMPLETED	11/09/62	04/18/62	01/26/66
SAMPLED	06/15/64	06/25/64	03/17/66
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3057	2986	2984
WELLHEAD PRESSURE, PSIG	900	640	1000
OPEN FLOW, MCFD	3500	255	4090
COMPONENT, MOLE PCT			
METHANE	71.9	66.7	68.0
ETHANE	3.3	2.8	2.6
PROPANE	1.2	1.1	1.4
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.8	25.8	25.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	2.26	2.20	2.08
HEATING VALUE*	860	801	801
SPECIFIC GRAVITY	0.677	0.700	0.690

	INDEX 2134 SAMPLE 11287	INDEX 2135 SAMPLE 12584	INDEX 2136 SAMPLE 12585
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ALLEN NO. A-1	ALLEN NO. C-1	LEGLITER NO. 2
LOCATION	SEC. 33, T16S, R16W	SEC. 11, T17S, R17W	SEC. 18, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	01/24/66	10/30/70	10/10/70
SAMPLED	02/12/68	12/15/70	12/15/70
FORMATION	PENN-TOPEKA	PENN-TOPEKA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2985	3103	3261
WELLHEAD PRESSURE, PSIG	700	600	1000
OPEN FLOW, MCFD	1500	3285	3550
COMPONENT, MOLE PCT			
METHANE	59.4	74.8	68.7
ETHANE	2.4	3.6	3.8
PROPANE	0.9	1.5	1.7
N-BUTANE	0.2	0.5	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	32.1	16.7	21.5
OXYGEN	2.3	0.0	0.0
ARGON	0.2	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.82	1.83	2.39
HEATING VALUE*	699	909	878
SPECIFIC GRAVITY	0.729	0.671	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2137 SAMPLE 4069	INDEX 2138 SAMPLE 4497	INDEX 2139 SAMPLE 4500
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	RYAN
WELL NAME	HAGERMAN NO. 2	F. NAGLE NO. 1	BRACK RANKIN NO. 1
LOCATION	SEC. 34, T19S, R16W	SEC. 34, T19S, R16W	SEC. 27, T19S, R16W
OWNER	GULF OIL CORP.	ALKAY OIL CO.	BEN F. BRACK OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/21/45	06/--/48	06/--/48
FORMATION	CAMO-ARBUCKLE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3720	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	800	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.8	73.7	68.6
ETHANE	15.0	12.0	19.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.3	11.7	10.0
OXYGEN	0.0	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.7	0.8
HELIUM	1.56	1.78	1.03
HEATING VALUE*	1006	962	1043
SPECIFIC GRAVITY	0.667	0.662	0.696

	INDEX 2140 SAMPLE 4808	INDEX 2141 SAMPLE 4884	INDEX 2142 SAMPLE 5052
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	RYAN
WELL NAME	ALKAY W. NAGLE NO. 1	W. H. OIRKS NO. 3	PETERSON NO. 1
LOCATION	SEC. 33, T19S, R16W	SEC. 27, T19S, R16W	SEC. 35, T19S, R16W
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	TEXAS CO.	INLAND OIL CO., INC.
COMPLETED	NOT GIVEN	01/29/50	NOT GIVEN
SAMPLED	01/09/50	04/21/50	04/18/51
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3814	3700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	350
OPEN FLOW, MCFD	NOT GIVEN	500	2250
COMPONENT, MOLE PCT			
METHANE	86.6	51.1	80.2
ETHANE	3.5	3.8	4.2
PROPANE	1.7	2.1	1.9
N-BUTANE	0.6	0.8	0.6
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	4.2	37.1	9.8
OXYGEN	0.1	0.1	0.2
ARGON	0.2	0.2	0.2
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.5	0.9
HELIUM	3.60	3.29	1.32
HEATING VALUE*	933	770	992
SPECIFIC GRAVITY	0.780	0.770	0.666

	INDEX 2143 SAMPLE 5209	INDEX 2144 SAMPLE 5244	INDEX 2145 SAMPLE 5051
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	RYAN W
WELL NAME	THALHEIM NO. 2	W. H. OIRKS	TAMMEN NO. 1
LOCATION	T19S, R16W	SEC. 27, T19S, R16W	SEC. 26, T19S, R16W
OWNER	CONRTNEY-DAVIS OIL CO.	TEXAS CO.	ALKAY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/22/52	06/18/52	04/08/51
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3800	3700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	275
OPEN FLOW, MCFD	843	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	52.1	49.5	76.8
ETHANE	4.0	3.8	1.1
PROPANE	2.2	2.1	2.2
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	35.4	38.1	15.6
OXYGEN	0.1	0.1	0.1
ARGON	0.2	0.2	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.8
HELIUM	3.06	3.35	1.36
HEATING VALUE*	748	737	1007
SPECIFIC GRAVITY	0.778	0.780	0.687

	INDEX 2146 SAMPLE 8361	INDEX 2147 SAMPLE 6172	INDEX 2148 SAMPLE 6173
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN W	SHAEFFER	SHAEFFER
WELL NAME	CHRISTIANSEN NO. 1	HANBARDT NO. 1	MILLER NO. 1
LOCATION	SEC. 33, T19S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	HELLAR DRILLING CO.	SOLAR OIL CO.	SOLAR OIL CO.
COMPLETED	NOT GIVEN	05/10/56	01/10/56
SAMPLED	12/29/61	11/01/56	11/01/56
FORMATION	CAMO-ARBUCKLE	CAMO-REAGAN	CAMO-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3730	3608	3575
WELLHEAD PRESSURE,PSIG	NOT GIVEN	970	893
OPEN FLOW, MCFD	350	200	3
COMPONENT, MOLE PCT			
METHANE	23.3	79.1	78.3
ETHANE	2.9	3.5	3.4
PROPANE	1.4	0.6	0.5
N-BUTANE	0.5	0.1	0.2
ISOBUTANE	0.3	0.8	0.4
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.9	0.5
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	63.3	13.1	14.4
OXYGEN	4.3	TRACE	0.0
ARGON	0.4	0.1	0.1
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.2
HELIUM	3.33	1.38	1.83
HEATING VALUE*	356	948	909
SPECIFIC GRAVITY	0.677	0.659	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2149 SAMPLE 6175	INDEX 2150 SAMPLE 6177	INDEX 2151 SAMPLE 6188
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	SHAEFFER	SHAEFFER	SHAEFFER
WELL NAME	MONSON NO. 2	MONSON NO. 4	HANHARDT NO. 3
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SOLAR OIL CO.	SOLAR OIL CO.	SOLAR OIL CO.
COMPLETED	--/--/55	06/--/56	10/15/56
SAMPLED	11/01/56	11/01/56	11/01/56
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3610	3587	3601
WELLHEAD PRESSURE,PSIG	NOT GIVEN	820	690
OPEN FLOW, MCFD	100	100	500
COMPONENT, MOLE PCT			
METHANE	79.3	78.6	78.1
ETHANE	4.2	2.8	3.6
PROPANE	0.6	0.4	0.7
N-BUTANE	0.2	0.2	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.8	0.5	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	12.9	15.1	14.0
OXYGEN	0.0	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.09	1.78	1.82
HEATING VALUE*	949	892	923
SPECIFIC GRAVITY	0.656	0.645	0.655

	INDEX 2152 SAMPLE 6189	INDEX 2153 SAMPLE 6190	INDEX 2154 SAMPLE 6209
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	SHAEFFER	SHAEFFER	SHAEFFER
WELL NAME	MONSON NO. 1	MONSON NO. 3	L. MILLER NO. 1
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SOLAR OIL CO.	SOLAR OIL CO.	SKELLY OIL CO.
COMPLETED	11/04/55	05/--/56	04/01/56
SAMPLED	11/01/56	11/01/56	NOT GIVEN
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3600	3572	3562
WELLHEAD PRESSURE,PSIG	650	650	710
OPEN FLOW, MCFD	100	100	35
COMPONENT, MOLE PCT			
METHANE	77.2	76.6	77.4
ETHANE	4.8	5.1	5.5
PROPANE	1.2	1.3	1.4
N-BUTANE	0.7	0.9	1.0
ISOBUTANE	0.7	1.0	0.9
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.5	0.5	0.6
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	12.5	12.0	11.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.5
HELIUM	1.45	1.26	0.89
HEATING VALUE*	990	1021	1026
SPECIFIC GRAVITY	0.682	0.696	0.691

	INDEX 2155 SAMPLE 6210	INDEX 2156 SAMPLE 6211	INDEX 2157 SAMPLE 6212
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	SHAEFFER	SHAEFFER	SHAEFFER
WELL NAME	L. MILLER NO. 3	L. MILLER NO. 4	DYER NO. 2
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	06/06/56	06/14/56	02/28/56
SAMPLED	12/31/56	12/31/56	12/31/56
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3578	3582	3544
WELLHEAD PRESSURE,PSIG	800	860	945
OPEN FLOW, MCFD	200	900	1500
COMPONENT, MOLE PCT			
METHANE	76.2	75.9	75.6
ETHANE	4.4	4.8	4.8
PROPANE	1.1	1.3	1.3
N-BUTANE	1.2	1.2	1.1
ISOBUTANE	0.8	0.8	0.5
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.9	0.8	0.8
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	12.6	12.1	12.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	1.47	1.42	1.50
HEATING VALUE*	1013	1036	1019
SPECIFIC GRAVITY	0.699	0.708	0.702

	INDEX 2158 SAMPLE 6213	INDEX 2159 SAMPLE 7792	INDEX 2160 SAMPLE 8952
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	SHAEFFER	SHAEFFER	SHAEFFER
WELL NAME	DYER NO. 3	BETZ NO. 1	HUENGAROT NO. 1
LOCATION	SEC. 21, T18S, R16W	SEC. 8, T18S, R16W	SEC. 18, T18S, R16W
OWNER	SKELLY OIL CO.	SOLAR OIL CO.	MORRISON PRODUCING CO.
COMPLETED	04/24/56	NOT GIVEN	NOT GIVEN
SAMPLED	12/31/56	12/07/60	05/10/63
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3558	3520	NOT GIVEN
WELLHEAD PRESSURE,PSIG	770	1000	NOT GIVEN
OPEN FLOW, MCFD	400	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	78.3	73.6
ETHANE	4.2	4.1	5.2
PROPANE	1.2	1.5	3.2
N-BUTANE	1.2	0.5	2.1
ISOBUTANE	0.3	0.5	0.7
N-PENTANE	0.3	0.2	0.7
ISOPENTANE	2.2	0.1	0.9
CYCLOPENTANE	0.2	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	11.8	12.7	11.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	1.40	1.70	1.40
HEATING VALUE*	1055	962	1128
SPECIFIC GRAVITY	0.714	0.664	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2161 SAMPLE 8953	INDEX 2162 SAMPLE 8954	INDEX 2163 SAMPLE 8955
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	SHAEFFER	SHAEFFER	SHAEFFER
WELL NAME	HUENGARDT X NO. 2	DIRKS NO. 1	PECHANEC NO. 1
LOCATION	SEC. 18, T18S, R16W	SEC. 7, T18S, R16W	SEC. 18, T18S, R16W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/10/63	05/10/63	05/10/63
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3529	3505	NOT GIVEN
WELLHEAD PRESSURE,PSIG	474	825	NOT GIVEN
OPEN FLOW, MCFD	4500	3500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	78.5	76.7
ETHANE	3.4	3.6	3.6
PROPANE	1.3	1.4	1.4
N-BUTANE	0.6	0.6	0.8
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.6
NITROGEN	14.1	13.0	13.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	1.80	1.90	1.73
HEATING VALUE*	936	954	971
SPECIFIC GRAVITY	0.661	0.663	0.681

	INDEX 2164 SAMPLE 8956	INDEX 2165 SAMPLE 906	INDEX 2166 SAMPLE 10835
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSSELL	RUSSELL
FIELD	SHAEFFER	FAIRPORT	JANNE
WELL NAME	SCHNEIDER NO. 1	OSWALD NO. 1	KAUFMAN NO. 1
LOCATION	SEC. 17, T18S, R16W	SEC. 8, T12 , R15W	SEC. 13, T15S, R12W
OWNER	MORRISON PRODUCING CO.	STEARNS & STREETER	R. P. NIXON
COMPLETED	NOT GIVEN	NOT GIVEN	11/01/66
SAMPLED	05/10/63	NOT GIVEN	01/12/67
FORMATION	CAMB-REAGAN	NOT GIVEN	PENN-TORONTO
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3508	2461	2915
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	525
OPEN FLOW, MCFD	4500	7000	3000
COMPONENT, MOLE PCT			
METHANE	78.3	33.7	66.3
ETHANE	3.6	11.7	4.0
PROPANE	1.3	---	1.6
N-BUTANE	0.6	---	0.6
ISOBUTANE	0.3	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.3	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	13.3	52.6	25.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.80	1.80	1.05
HEATING VALUE*	953	551	833
SPECIFIC GRAVITY	0.665	0.822	0.715

	INDEX 2167 SAMPLE 7524	INDEX 2168 SAMPLE 8038	INDEX 2169 SAMPLE 10110
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSSELL	RUSSELL	SCOTT
FIELD	MAHONEY	TRAPP	AMY PROSPECT
WELL NAME	MAHONEY NO. 1	SELLENS NO. 3	ORVAL ETTEL NO. 1
LOCATION	SEC. 5, T14S, R12W	SEC. 15, T15, R13	SEC. 23, T18S, R31W
OWNER	MESSMAN-RINEHART OIL CO.	ISERNWELLS	OIL & GAS PROP. MANAGEMENT,
COMPLETED	NOT GIVEN	05/20/61	03/18/65
SAMPLED	04/26/60	06/19/61	09/10/65
FORMATION	PENN-TARKIO	PENN-TARKIO	-KINDER
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	2430	2501	2751
WELLHEAD PRESSURE,PSIG	NOT GIVEN	490	448
OPEN FLOW, MCFD	734000	2100	2951
COMPONENT, MOLE PCT			
METHANE	56.7	60.0	42.4
ETHANE	2.3	1.9	2.7
PROPANE	1.3	0.9	1.9
N-BUTANE	0.6	0.1	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	37.1	35.3	50.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	1.20	1.20	1.27
HEATING VALUE*	498	680	5790
SPECIFIC GRAVITY	0.751	0.722	0.813

	INDEX 2170 SAMPLE 10416	INDEX 2171 SAMPLE 14855	INDEX 2172 SAMPLE 14856
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON N	NOT GIVEN	NOT GIVEN
WELL NAME	SMITH NO. 1	GRUBEN NO. 1	HUSHAW NO. 1
LOCATION	SEC. 35, T19, R33	SEC. 1, T20S, R34W	SEC. 12, T19S, R33W
OWNER	SATURN OIL & GAS CO., INC.	M. L. BROWN	M. L. BROWN
COMPLETED	01/15/65	09/01/76	01/21/76
SAMPLED	02/23/66	11/02/76	11/02/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2430	2670	2721
WELLHEAD PRESSURE,PSIG	425	350	525
OPEN FLOW, MCFD	1790	700	700
COMPONENT, MOLE PCT			
METHANE	50.9	48.7	24.2
ETHANE	3.7	3.9	1.4
PROPANE	1.9	2.6	1.4
N-BUTANE	0.8	0.9	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	1.3	0.3	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	3.2	0.1	0.1
NITROGEN	36.3	41.9	70.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.94	1.43
HEATING VALUE*	907	698	352
SPECIFIC GRAVITY	0.868	0.801	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2173 SAMPLE 3858	INDEX 2174 SAMPLE 2371	INDEX 2175 SAMPLE 2528
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEDGWICK	SEDGWICK	SEDGWICK
FIELD	DERBY	GLADYS SW	ROBBINS
WELL NAME	PARRISH NO. 1	PENDELUM NO. 1	NO. 1
LOCATION	SEC. 29, T28S, R2E	SEC. 31, T28S, R1W	SEC. 27, T27S, R1E
OWNER	BEECH AIRCRAFT CORP.	MAGNOLIA PETROLEUM CORP.	WILL SCHWEITER
COMPLETED	05/--/44	DRILL STEM TEST	08/03/32
SAMPLED	06/14/44	08/07/31	08/03/32
FORMATION	PENN-STALNAKER	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2043	2548	1490
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	400
OPEN FLOW, MCFD	1200	2000	750
COMPONENT, MOLE PCT			
METHANE	70.0	22.1	35.5
ETHANE	9.6	38.9	9.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.0	34.8	53.7
OXYGEN	0.6	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.74	0.82	1.64
HEATING VALUE*	881	921	521
SPECIFIC GRAVITY	0.682	0.876	0.815

	INDEX 2176 SAMPLE 2538	INDEX 2177 SAMPLE 2686	INDEX 2178 SAMPLE 2674
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEDGWICK	SEDGWICK	SEDGWICK
FIELD	ROBBINS	ROBBINS	SCHULTE
WELL NAME	SCHWEITER NO. 1	SEELEY NO. 1	GILLESPIE NO. 1
LOCATION	SEC. 27, T27S, R1E	SEC. 17, T28S, R1E	SEC. 6, T28S, R1W
OWNER	WILL SCHWEITER	ALADDIN PETROLEUM CORP.	D. R. LAUCK ET AL.
COMPLETED	08/13/32	NOT GIVEN	NOT GIVEN
SAMPLED	08/13/32	11/29/34	06/08/34
FORMATION	NOT GIVEN	MISS-	MISS-CHERT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1490	3280	3333
WELLHEAD PRESSURE,PSIG	700	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2570	968	684
COMPONENT, MOLE PCT			
METHANE	33.0	12.6	39.3
ETHANE	10.6	20.6	19.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	54.4	65.1	39.6
OXYGEN	0.4	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	1.59	1.64	1.16
HEATING VALUE*	524	497	748
SPECIFIC GRAVITY	0.827	0.919	0.812

	INDEX 2179 SAMPLE 7158	INDEX 2180 SAMPLE 15905	INDEX 2181 SAMPLE 13691
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ADAMSON	ADAMSON	ADOBE
WELL NAME	ADAMSON NO. 2	POWELL "D" NO. 1	RUSSELL NO. 1
LOCATION	SEC. 11, T34S, R34W	SEC. 26, T34S, R34W	SEC. 14, T35S, R31W
OWNER	CABOT CARBON CO.	ANADARKO PRODUCTION CO.	HICKERSON OIL CO.
COMPLETED	09/22/58	12/21/79	04/30/73
SAMPLED	07/31/59	02/21/80	08/24/73
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6390	6098	6013
WELLHEAD PRESSURE,PSIG	1725	NOT GIVEN	1545
OPEN FLOW, MCFD	25000	4260	3400
COMPONENT, MOLE PCT			
METHANE	82.1	80.3	84.8
ETHANE	5.1	4.6	4.8
PROPANE	2.4	2.6	2.9
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	8.3	9.9	4.5
OXYGEN	TRACE	TRACE	0.6
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.14	0.17	0.14
HEATING VALUE*	1052	1053	1095
SPECIFIC GRAVITY	0.670	0.685	0.664

	INDEX 2182 SAMPLE 12786	INDEX 2183 SAMPLE 12787	INDEX 2184 SAMPLE 9249
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ARCHER	ARCHER	ARKALON
WELL NAME	DUNLAP NO. 1	FINCHAM NO. 1	DAVIES C NO. 1
LOCATION	SEC. 16, T34S, R34W	SEC. 31, T34S, R34W	SEC. 31, T33S, R31W
OWNER	LEBEN OIL CORP.	LEBEN OIL CORP.	ANADARKO PRODUCTION CO.
COMPLETED	03/18/71	02/02/71	10/24/63
SAMPLED	04/--/71	04/--/71	03/05/64
FORMATION	PENN-MARMATON	PENN-MORROW + MISS-CHESTER	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5144	5978	5636
WELLHEAD PRESSURE,PSIG	1350	450	1569
OPEN FLOW, MCFD	1552	2122	32500
COMPONENT, MOLE PCT			
METHANE	66.0	82.4	88.9
ETHANE	5.2	5.2	5.1
PROPANE	3.4	3.3	2.2
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.7	0.7	0.1
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.3	0.6	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.2
NITROGEN	22.8	5.8	1.7
OXYGEN	0.2	0.1	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.30	0.16	0.11
HEATING VALUE*	917	1128	1118
SPECIFIC GRAVITY	0.739	0.689	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2185 SAMPLE 9392		INDEX 2186 SAMPLE 12325		INDEX 2187 SAMPLE 12258	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	ARKALON		BLUE BELL NW		CARTHIAGE NW	
WELL NAME	ROBERT DAVIES NO. 2		BEERS NO. 1		JOHNSON NO. 1	
LOCATION	SEC. 6, T34S, R31W		SEC. 24, T34S, R32W		SEC. 9, T34S, R32W	
OWNER	GULF OIL CORP.		LEBEN DRILLING, INC.		PETRODYNAMICS, INC.	
COMPLETED	04/12/64		05/19/70		12/31/69	
SAMPLED	06/12/64		07/14/70		05/13/70	
FORMATION	PENN-MORROW		PENN-LANSING		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5672		4549		5825	
WELLHEAD PRESSURE,PSIG	1555		1200		1152	
OPEN FLOW, MCFD	22900		3360		4237	
COMPONENT, MOLE PCT						
METHANE	88.0		72.2		88.8	
ETHANE	5.2		5.7		4.7	
PROPANE	2.6		4.2		2.6	
N-BUTANE	0.7		1.0		0.6	
ISOBUTANE	0.5		0.5		0.5	
N-PENTANE	0.1		0.3		0.2	
ISOPENTANE	0.3		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	2.3		15.2		2.2	
OXYGEN	0.1		0.2		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		TRACE		0.1	
HELIUM	0.11		0.30		0.12	
HEATING VALUE*	1112		1029		1115	
SPECIFIC GRAVITY	0.645		0.727		0.644	

	INDEX 2188 SAMPLE 9508		INDEX 2189 SAMPLE 11503		INDEX 2190 SAMPLE 8455	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	CONDIT		CONDIT		EVALYN	
WELL NAME	WORTHINGTON A NO. 1		ALEXANDER B NO. 1		SANTA FE A NO. 1	
LOCATION	SEC. 12, T34S, R33W		SEC. 4, T34S, R32W		SEC. 9, T33S, R33W	
OWNER	ANADARKO PRODUCTION CO.		ANADARKO PRODUCTION CO.		ANADARKO PRODUCTION CO.	
COMPLETED	05/14/64		06/15/67		08/27/61	
SAMPLED	07/28/64		05/16/68		03/13/62	
FORMATION	MISS-CHESTER		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6255		5863		5548	
WELLHEAD PRESSURE,PSIG	1625		1521		1530	
OPEN FLOW, MCFD	11410		13556		16382	
COMPONENT, MOLE PCT						
METHANE	79.0		85.0		83.2	
ETHANE	3.3		5.8		5.3	
PROPANE	1.5		3.1		3.3	
N-BUTANE	0.5		1.0		1.0	
ISOBUTANE	0.3		0.3		0.4	
N-PENTANE	0.1		0.1		0.2	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	14.2		3.7		5.6	
OXYGEN	TRACE		0.3		TRACE	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.33		0.12		0.17	
HEATING VALUE*	948		1120		1101	
SPECIFIC GRAVITY	0.668		0.666		0.673	

	INDEX 2191 SAMPLE 9531		INDEX 2192 SAMPLE 6397		INDEX 2193 SAMPLE 14715	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	EVALYN		HOLT		HOLT	
WELL NAME	BRYANT A NO. 1		HITCH F NO. 2		HITCH F-3	
LOCATION	SEC. 8, T33S, R33W		SEC. 27, T32S, R34W		SEC. 27, T32S, R34W	
OWNER	CABOT CORP.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	05/12/64		06/06/57		04/01/76	
SAMPLED	08/04/64		08/29/57		06/02/76	
FORMATION	PENN-MORROW		PENN-TORONTO		PERM-COUNCIL GROVE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5680		4182		2986	
WELLHEAD PRESSURE,PSIG	1486		1024		262	
OPEN FLOW, MCFD	5800		18000		1648	
COMPONENT, MOLE PCT						
METHANE	82.2		74.3		73.0	
ETHANE	5.4		5.3		5.9	
PROPANE	3.5		2.6		3.3	
N-BUTANE	1.0		0.8		0.9	
ISOBUTANE	0.6		0.6		0.4	
N-PENTANE	0.4		0.3		0.2	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.1	
NITROGEN	6.0		15.2		15.4	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		TRACE	
HELIUM	0.17		0.33		0.46	
HEATING VALUE*	1115		998		1001	
SPECIFIC GRAVITY	0.685		0.707		0.710	

	INDEX 2194 SAMPLE 4950		INDEX 2195 SAMPLE 4965		INDEX 2196 SAMPLE 5604	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	HUGOTON		HUGOTON		HUGOTON	
WELL NAME	BAUGHMAN H NO. 1		GASKILL NO. 1		HOLT B NO. 1	
LOCATION	SEC. 30, T32S, R32W		SEC. 36, T32S, R33W		SEC. 28, T32S, R34W	
OWNER	AMERICAN GAS PRODUCTION CO.		CITIES SERVICE OIL CO.		TERMINAL FACILITIES, INC.	
COMPLETED	07/04/50		08/26/50		02/27/54	
SAMPLED	09/27/50		11/30/50		03/30/54	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PENN-TORONTO	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2932		2430		4184	
WELLHEAD PRESSURE,PSIG	430		4283		1060	
OPEN FLOW, MCFD	6540		600		27800	
COMPONENT, MOLE PCT						
METHANE	73.8		73.5		74.1	
ETHANE	4.0		6.1		5.1	
PROPANE	1.8		3.3		2.8	
N-BUTANE	0.4		0.9		0.9	
ISOBUTANE	0.3		0.2		0.4	
N-PENTANE	0.1		0.3		0.3	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	17.7		14.6		15.4	
OXYGEN	0.1		0.1		0.0	
ARGON	0.1		0.1		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	1.0		0.2		0.1	
HELIUM	0.60		0.45		0.34	
HEATING VALUE*	902		1007		994	
SPECIFIC GRAVITY	0.692		0.711		0.707	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2197 SAMPLE 5617	INDEX 2198 SAMPLE 5620	INDEX 2199 SAMPLE 5637
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	MYRA ATWELL NO. 1	MYRA ATWELL NO. 1	MYRA ATWELL NO. 1
LOCATION	SEC. 9, T33S, R31W	SEC. 9, T33S, R31W	SEC. 9, T33S, R31W
OWNER	COLUMBIAN FUEL CORP.	COLUMBIAN FUEL CORP.	COLUMBIAN FUEL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/11/54	05/22/54	06/05/54
FORMATION	PERM-CHASE GROUP	PENN-TORONTO	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2775	4300	5069
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.7	69.0	82.6
ETHANE	4.1	5.6	5.4
PROPANE	1.8	4.4	3.3
N-BUTANE	0.5	1.3	0.9
ISOBUTANE	0.1	0.5	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.7	17.0	6.5
OXYGEN	TRACE	0.9	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.61	0.30	0.22
HEATING VALUE*	931	1006	1095
SPECIFIC GRAVITY	0.671	0.743	0.675

	INDEX 2200 SAMPLE 12870	INDEX 2201 SAMPLE 12903	INDEX 2202 SAMPLE 12904
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	LAHEY NO. 1	GRIFFITH NO. 1	HITCH NO. 1
LOCATION	SEC. 21, T31S, R34W	SEC. 19, T32S, R33W	SEC. 25, T32S, R34W
OWNER	NORTHERN NAT. GAS PROD. CO.	CABOT CORP.	CABOT CORP.
COMPLETED	05/11/50	NOT GIVEN	NOT GIVEN
SAMPLED	06/22/71	07/20/71	07/20/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2473	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	250	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2042	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.1	74.2	74.7
ETHANE	5.5	5.8	5.5
PROPANE	3.0	3.4	3.1
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.4	14.1	14.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.48	0.44	0.45
HEATING VALUE*	980	1018	1007
SPECIFIC GRAVITY	0.697	0.707	0.704

	INDEX 2203 SAMPLE 12597	INDEX 2204 SAMPLE 12598	INDEX 2205 SAMPLE 9857
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	IRIS	IRIS	KISMET
WELL NAME	GENE BLACK NO. 1	GENE BLACK NO. 1	E. L. RICHARDSON
LOCATION	SEC. 11, T34S, R31W	SEC. 11, T34S, R31W	SEC. 26, T32S, R31W
OWNER	VENUS OIL CO.	VENUS OIL CO.	AMBASSADOR OIL CORP.
COMPLETED	06/11/70	06/11/70	03/14/65
SAMPLED	12/22/70	12/22/70	04/23/65
FORMATION	PENN-TORONTO	PERM-COUNCIL GROVE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4314	3100	5565
WELLHEAD PRESSURE,PSIG	1150	600	1560
OPEN FLOW, MCFD	510	1608	16800
COMPONENT, MOLE PCT			
METHANE	71.8	68.5	84.6
ETHANE	5.7	4.3	5.2
PROPANE	4.3	2.5	2.6
N-BUTANE	1.3	0.7	0.7
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	15.2	22.1	5.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.32	0.63	0.23
HEATING VALUE*	1040	912	1082
SPECIFIC GRAVITY	0.734	0.726	0.658

	INDEX 2206 SAMPLE 10906	INDEX 2207 SAMPLE 11050	INDEX 2208 SAMPLE 11625
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KISMET	KISMET	KISMET
WELL NAME	SIMONSON NO. 2	FREDERICK NO. 1	HIGGINS NO. 1
LOCATION	SEC. 26, T33S, R31W	SEC. 26, T33S, R31W	SEC. 35, 33S, 31W
OWNER	A. L. ABERCROMBIE, INC.	HUMBLE OIL & REFINING CO.	A. L. ABERCROMBIE, INC.
COMPLETED	11/01/60	05/--/67	12/22/61
SAMPLED	03/22/67	08/04/67	08/14/68
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3200	5524	4300
WELLHEAD PRESSURE,PSIG	498	911	NOT GIVEN
OPEN FLOW, MCFD	574	855	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.5	86.2	65.4
ETHANE	4.7	5.5	9.4
PROPANE	2.7	2.5	10.1
N-BUTANE	1.0	0.6	3.8
ISOBUTANE	0.3	0.3	1.5
N-PENTANE	0.1	0.1	0.9
ISOPENTANE	0.4	0.3	0.7
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.6
NITROGEN	19.2	3.9	7.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.57	0.18	0.10
HEATING VALUE*	948	1098	1379
SPECIFIC GRAVITY	0.719	0.651	0.861

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2209 SAMPLE 9784	INDEX 2210 SAMPLE 15902	INDEX 2211 SAMPLE 14492
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KISMET NW	KNEELAND SW	LEMERT
WELL NAME	RINEHART NO. 1	YORK NO. 1	EDNA SCOTT NO. 1
LOCATION	SEC. 15, T33S, R31W	SEC. 27, T24S, R31W	SEC. 15, T32S, R33W
OWNER	J. M. HUBER CORP.	KANSAS ENERGY INVESTMENT	AMOCO PRODUCTION CO.
COMPLETED	06/05/62	NOT GIVEN	08/18/75
SAMPLED	03/01/65	02/15/80	10/03/75
FORMATION	PENN-MARMATON	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5060	NOT GIVEN	5516
WELLHEAD PRESSURE,PSIG	1314	1575	719
OPEN FLOW, MCFD	2138	3664	4500
COMPONENT, MOLE PCT			
METHANE	81.7	85.3	86.5
ETHANE	5.6	4.8	5.0
PROPANE	3.8	2.5	2.8
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	6.0	3.1	4.1
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.7	0.1
HELIUM	0.20	0.13	0.13
HEATING VALUE*	1124	1067	1089
SPECIFIC GRAVITY	0.690	0.666	0.648

	INDEX 2212 SAMPLE 13195	INDEX 2213 SAMPLE 10330	INDEX 2214 SAMPLE 4921
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	LIBERAL LIGHT	LIBERAL S	LIBERAL SE
WELL NAME	COOPER NO. 1	FEATHER G. U. NO. 1	WARDEN NO. 1
LOCATION	SEC. 21, T34S, R32W	SEC. 15, T35S, R33W	SEC. 13, T35S, R33W
OWNER	THUNDERBIRD DRILLING CO.	PAN AMERICAN PETROLEUM CORP.	WHITE EAGLE OIL CO.
COMPLETED	03/30/75	01/24/47	07/26/50
SAMPLED	04/10/72	12/18/65	09/19/50
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW & MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5894	6156	6060
WELLHEAD PRESSURE,PSIG	206	633	1375
OPEN FLOW, MCFD	877	3557	6493
COMPONENT, MOLE PCT			
METHANE	84.6	88.1	86.1
ETHANE	6.2	5.0	4.0
PROPANE	4.2	2.3	2.2
N-BUTANE	1.3	0.9	1.0
ISOBUTANE	1.1	0.4	0.3
N-PENTANE	0.0	0.2	0.7
ISOPENTANE	0.7	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.8
NITROGEN	1.6	2.0	3.9
OXYGEN	0.0	TRACE	0.7
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.10	0.16	0.11
HEATING VALUE*	1192	1125	1119
SPECIFIC GRAVITY	0.688	0.650	0.670

	INDEX 2215 SAMPLE 14556	INDEX 2216 SAMPLE 5054	INDEX 2217 SAMPLE 5073
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	LIBERAL SE	LIGHT	LIGHT
WELL NAME	HOWLAND NO. 1	LOFLAND-HAWKS NO. 1	FEASE NO. 1
LOCATION	SEC. 10, T35S, R33W	SEC. 18, T35S, R31W	SEC. 14, T35S, R32W
OWNER	BEREN CORP.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	12/11/75	06/10/51	05/24/51
SAMPLED	12/26/75	07/12/51	06/18/51
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6155	5995	5942
WELLHEAD PRESSURE,PSIG	422	1553	1580
OPEN FLOW, MCFD	3644	3549	55235
COMPONENT, MOLE PCT			
METHANE	87.5	81.6	86.4
ETHANE	4.9	7.1	6.1
PROPANE	2.8	4.8	3.2
N-BUTANE	0.7	1.3	0.7
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	2.5	3.6	2.3
OXYGEN	0.0	0.1	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.15	0.12	0.12
HEATING VALUE*	1102	1164	1130
SPECIFIC GRAVITY	0.645	0.697	0.660

	INDEX 2218 SAMPLE 5132	INDEX 2219 SAMPLE 5994	INDEX 2220 SAMPLE 5995
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	LIGHT	MASSONI	MASSONI
WELL NAME	LIGHT NO. A-1	MASSONI NO. 1	MASSONI NO. 1
LOCATION	SEC. 10, T35S, R32W	SEC. 5, T33N, R31W	SEC. 5, T33N, R31W
OWNER	J. M. HUBER CORP.	CABOT CARBON CO.	CABOT CARBON CO.
COMPLETED	07/25/51	12/05/55	12/05/55
SAMPLED	NOT GIVEN	01/14/56	01/14/56
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6089	5590	4270
WELLHEAD PRESSURE,PSIG	1270	1588	1200
OPEN FLOW, MCFD	1367	2250	1500
COMPONENT, MOLE PCT			
METHANE	91.7	88.9	88.3
ETHANE	4.1	5.2	5.1
PROPANE	1.8	2.3	2.2
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.1	1.8	2.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.09	0.13	0.14
HEATING VALUE*	1093	1111	1097
SPECIFIC GRAVITY	0.617	0.638	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2221 SAMPLE 7781	INDEX 2222 SAMPLE 10344	INDEX 2223 SAMPLE 10345
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	MASSONI	MASSONI	MASSONI
WELL NAME	F. H. MASSONI B NO. 1	MASSONI NO. 1	MASSONI NO. 1
LOCATION	SEC. 20, T33S, R31W	SEC. 5, T33S, R31W	SEC. 5, T33S, R31W
OWNER	CABOT CORP.	CABOT CORP.	CABOT CORPORATION
COMPLETED	09/29/60	12/05/55	12/05/55
SAMPLED	11/23/60	12/29/65	12/29/65
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5770	5556	4340
WELLHEAD PRESSURE,PSIG	1591	910	750
OPEN FLOW, MCFD	1750	847	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.6	87.0	74.4
ETHANE	5.0	5.8	5.3
PROPANE	2.4	2.7	3.5
N-BUTANE	0.6	0.7	0.9
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.3	2.3	4.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.12	0.30
HEATING VALUE*	1101	1127	1022
SPECIFIC GRAVITY	0.638	0.654	0.615

	INDEX 2224 SAMPLE 12326	INDEX 2225 SAMPLE 12327	INDEX 2226 SAMPLE 16141
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	MASSONI	MASSONI	NOT GIVEN
WELL NAME	MANKA NO. 1	MANKA NO. 1	HACKER UNIT NO. 2-1
LOCATION	SEC. 25, T32S, R31W	SEC. 25, T32S, R31W	SEC. 1, T34S, R34W
OWNER	LEBEN DRILLING, INC.	LEBEN DRILLING, INC.	CABOT CORP.
COMPLETED	06/09/70	06/09/70	08/01/80
SAMPLED	07/14/70	07/14/70	12/08/80
FORMATION	PENN-LANSING	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4402	4160	6028
WELLHEAD PRESSURE,PSIG	1107	1150	1620
OPEN FLOW, MCFD	2400	18850	5000
COMPONENT, MOLE PCT			
METHANE	75.9	67.1	83.4
ETHANE	5.2	4.7	5.1
PROPANE	3.5	2.9	3.4
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.3	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.5	21.6	5.1
OXYGEN	0.3	1.5	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.26	0.30	0.18
HEATING VALUE*	1036	906	1129
SPECIFIC GRAVITY	0.704	0.734	0.683

	INDEX 2227 SAMPLE 7247	INDEX 2228 SAMPLE 6848	INDEX 2229 SAMPLE 14472
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	PLAIN W	SALLEY	SALLEY
WELL NAME	COLLINS NO. 1	SALLEY C NO. 2	STEVESSEN NO. A-2
LOCATION	SEC. 16, T32S, R31W	SEC. 16, T34S, R33W	SEC. 20, T34S, R33W
OWNER	COLORADO OIL & GAS ET AL.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	11/09/56	08/01/58	06/12/75
SAMPLED	10/15/59	11/03/58	09/--/75
FORMATION	PENN-MORROW	PENN-TORONTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5608	4338	6044
WELLHEAD PRESSURE,PSIG	1570	1144	1590
OPEN FLOW, MCFD	NOT GIVEN	2	49152
COMPONENT, MOLE PCT			
METHANE	68.7	54.2	86.3
ETHANE	5.2	3.9	4.9
PROPANE	3.7	4.9	3.0
N-BUTANE	1.1	5.8	0.8
ISOBUTANE	0.7	3.4	0.5
N-PENTANE	0.2	4.0	0.1
ISOPENTANE	0.4	3.4	0.1
CYCLOPENTANE	0.1	1.1	0.1
HEXANES PLUS	0.2	4.5	0.2
NITROGEN	16.8	12.8	3.1
OXYGEN	2.3	1.1	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.10	0.20	0.16
HEATING VALUE*	994	1661	1119
SPECIFIC GRAVITY	0.750	1.101	0.661

	INDEX 2230 SAMPLE 5868	INDEX 2231 SAMPLE 12581	INDEX 2232 SAMPLE 12788
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	SHUCK	SHUCK	SHUCK N
WELL NAME	SHUCK NO. 2-20	FULLER A NO. 1	HITCH NO. 1
LOCATION	SEC. 20, T33S, R34W	SEC. 30, T33S, R34W	SEC. 6, T33S, R34W
OWNER	PANHANDLE EASTERN PIPE LINE	ANADARKO PRODUCTION CO.	LEREN OIL CORP.
COMPLETED	03/27/55	09/19/69	03/12/71
SAMPLED	07/05/55	11/03/70	04/--/71
FORMATION	PENN-MORROW	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5987	6028	5876
WELLHEAD PRESSURE,PSIG	1575	1218	NOT GIVEN
OPEN FLOW, MCFD	4823	1242	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.0	85.5	82.8
ETHANE	5.2	5.2	4.8
PROPANE	3.0	3.2	2.5
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.5	0.6	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.1	0.16
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.2	3.9	7.1
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.14	0.15	0.20
HEATING VALUE*	1114	1117	1065
SPECIFIC GRAVITY	0.666	0.663	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2233 SAMPLE 7690		INDEX 2234 SAMPLE 6932		INDEX 2235 SAMPLE 6933	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	THIRTY TWO		THREE STAR		THREE STAR	
WELL NAME	DOLVEN NO. 1		C. M. LIGHT, JR. NO. 1		C. M. LIGHT, JR. NO. 1	
LOCATION	SEC. 1, T32S, R32W		SEC. 17, T35S, R32W		SEC. 17, T35S, R32W	
OWNER	PETROLEUM INC.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	07/02/60		07/17/58		07/17/58	
SAMPLED	09/19/60		01/28/59		01/28/59	
FORMATION	PENN-MORROW		PENN-LANSING-KANSAS CITY		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5568		4545		6066	
WELLHEAD PRESSURE,PSIG	1180		1213		1240	
OPEN FLOW, MCFD	NOT GIVEN		11500		2200	
COMPONENT, MOLE PCT						
METHANE	79.0	----------	89.0	----------	89.9	----------
ETHANE	5.6		4.7		4.6	
PROPANE	2.5	----------	2.1	----------	2.2	----------
N-BUTANE	0.7		0.6		0.7	
ISOBUTANE	0.6	----------	0.4	----------	0.4	----------
N-PENTANE	0.2		0.2		TRACE	
ISOPENTANE	0.3	----------	0.2	----------	0.4	----------
CYCLOPENTANE	0.2		TRACE		TRACE	
HEXANES PLUS	0.4	----------	0.2	----------	0.1	----------
NITROGEN	9.8		2.1		1.4	
OXYGEN	0.1	----------	TRACE	----------	0.0	----------
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0	----------	0.1	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5	----------	0.1	----------	0.1	----------
HELIUM	0.20		0.20		0.10	
HEATING VALUE*	1059	----------	1102	----------	1110	----------
SPECIFIC GRAVITY	0.696		0.634		0.632	

	INDEX 2236 SAMPLE 6934		INDEX 2237 SAMPLE 7582		INDEX 2238 SAMPLE 10400	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	THREE STAR		THREE STAR		WIDE AWAKE	
WELL NAME	C. M. LIGHT, JR. NO. 1		THOMPSON UNIT NO. 1		DOWDY NO. 1-6	
LOCATION	SEC. 17, T35S, R32W		SEC. 16, T35S, R32W		SEC. 6, T35S, R34W	
OWNER	SHELL OIL CO.		PETROLEUM, INC.		AMARILLO NAT. GAS CO.	
COMPLETED	07/17/58		02/21/60		12/17/65	
SAMPLED	01/28/59		06/11/60		02/09/66	
FORMATION	MISS-CHESTER		PENN-LANSING-KANSAS CITY		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6192		4532		6231	
WELLHEAD PRESSURE,PSIG	1522		1095		1656	
OPEN FLOW, MCFD	4500		2850		12750	
COMPONENT, MOLE PCT						
METHANE	90.2	----------	80.0	----------	90.8	----------
ETHANE	4.5		7.4		0.0	
PROPANE	2.1	----------	3.2	----------	0.0	----------
N-BUTANE	0.7		1.1		0.0	
ISOBUTANE	0.4	----------	0.3	----------	0.0	----------
N-PENTANE	0.1		0.4		0.0	
ISOPENTANE	0.4	----------	0.3	----------	0.0	----------
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.3	----------	0.3	----------	0.0	----------
NITROGEN	0.4		6.3		8.9	
OXYGEN	0.1	----------	TRACE	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2	----------	0.2	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3	----------	0.3	----------	TRACE	----------
HELIUM	0.10		0.30		0.20	
HEATING VALUE*	1127	----------	1123	----------	920	----------
SPECIFIC GRAVITY	0.636		0.695		0.590	

	INDEX 2239 SAMPLE 11519		INDEX 2240 SAMPLE 13883		INDEX 2241 SAMPLE 5585	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	WIDE AWAKE		WIDE AWAKE		WILDCAT	
WELL NAME	DOWDY NO. 1-7		BOLES NO. 1-17		ALEXANDER NO. 1	
LOCATION	SEC. 7, T35S, R34W		SEC. 17, T35S, R34W		SEC. 14, T33S, R32W	
OWNER	AMARILLO NATURAL GAS CO.		HORIZON OIL & GAS CO.		VICKERS EXPLORATIONS LTD.	
COMPLETED	12/15/67		NOT GIVEN		12/23/53	
SAMPLED	05/24/68		01/03/74		12/20/53	
FORMATION	PENN-KEYES		PENN-LANSING-KANSAS CITY		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6272		4548		5868	
WELLHEAD PRESSURE,PSIG	1556		695		1800	
OPEN FLOW, MCFD	4279		1000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	83.2	----------	77.3	----------	89.0	----------
ETHANE	4.9		6.2		4.9	
PROPANE	2.8	----------	3.0	----------	2.2	----------
N-BUTANE	1.0		0.8		0.7	
ISOBUTANE	0.3	----------	0.5	----------	0.2	----------
N-PENTANE	0.3		0.2		0.2	
ISOPENTANE	0.5	----------	0.3	----------	0.2	----------
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2	----------	0.2	----------	0.2	----------
NITROGEN	6.2		11.1		1.9	
OXYGEN	0.0	----------	0.0	----------	TRACE	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2	----------	TRACE	----------	0.1	----------
HELIUM	0.23		0.28		0.11	
HEATING VALUE*	1095	----------	1047	----------	1108	----------
SPECIFIC GRAVITY	0.675		0.693		0.636	

	INDEX 2242 SAMPLE 12198		INDEX 2243 SAMPLE 14490		INDEX 2244 SAMPLE 14681	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	SEWARD		SEWARD		SEWARD	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	FREEMAN NO. 1		EDNA SCOTT NO. 1		BLACK NO. 1	
LOCATION	SEC. 18, T33S, R33W		SEC. 15, T32S, R33W		SEC. 15, T34S, R31W	
OWNER	FERGUSON OIL CO.		AMOCO PRODUCTION CO.		INCA OIL CO.	
COMPLETED	11/14/70		08/18/75		05/27/76	
SAMPLED	02/17/70		10/14/75		05/26/76	
FORMATION	PENN-MORROW		PENN-KANSAS CITY		PENN-MORROW & MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5692		4810		5679	
WELLHEAD PRESSURE,PSIG	1036		705		1506	
OPEN FLOW, MCFD	11500		196		5500	
COMPONENT, MOLE PCT						
METHANE	83.2	----------	51.5	----------	87.4	----------
ETHANE	5.2		13.1		5.2	
PROPANE	3.5	----------	16.6	----------	3.0	----------
N-BUTANE	0.9		5.1		0.8	
ISOBUTANE	0.6	----------	2.6	----------	0.4	----------
N-PENTANE	0.3		0.9		0.2	
ISOPENTANE	TRACE	----------	0.9	----------	0.3	----------
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.1	----------	0.3	----------	0.2	----------
NITROGEN	5.6		8.6		2.1	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	TRACE	----------	0.2	----------
HELIUM	0.19		0.09		0.13	
HEATING VALUE*	1110	----------	1547	----------	1132	----------
SPECIFIC GRAVITY	0.676		0.983		0.655	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2245 SAMPLE 3215	INDEX 2246 SAMPLE 3937	INDEX 2247 SAMPLE 8395
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SHERMAN	STAFFORD	STAFFORD
FIELD	GOODLAND	BEDFORD	BOW
WELL NAME	TOMPKINS NO. 2	ADA BEAN NO. 1	BAUMAN NO. 1
LOCATION	SEC. 18, T8S, R39W	SEC. 21, T23S, R12W	SEC. 32, T23S, R15W
OWNER	INGLING & PARKER	SHELL OIL CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	10/03/41	12/18/44	NOT GIVEN
SAMPLED	03/23/42	01/17/45	02/27/62
FORMATION	CRET-PIERRE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	450	385	385
DEPTH, FEET	993	3505	2999
WELLHEAD PRESSURE,PSIG	55	1090	1175
OPEN FLOW, MCFD	6	3121	4080
COMPONENT, MOLE PCT			
METHANE	96.9	69.0	61.3
ETHANE	0.0	9.8	4.4
PROPANE	---	---	2.2
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	2.1	19.9	26.5
OXYGEN	0.3	0.2	0.2
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.07	0.90	2.95
HEATING VALUE*	982	875	832
SPECIFIC GRAVITY	0.570	0.684	0.734

	INDEX 2248 SAMPLE 8396	INDEX 2249 SAMPLE 8400	INDEX 2250 SAMPLE 10818
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	BOW	BOW	FARMINGTON
WELL NAME	BARSTOW NO. 1	BAUMAN	DORAN NO. 1
LOCATION	SEC. 32, T23S, R15W	SEC. 32, T23S, R15W	SEC. 33, T24S, R15W
OWNER	HELLAR DRILLING CO.	DUNNE-GARDNER PETROLEUM CO.	KEWANEE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/19/66
SAMPLED	NOT GIVEN	02/21/62	12/14/66
FORMATION	PENN-LANSING	PENN-TARKIO	PENN-TARKIO
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3540	NOT GIVEN	2923
WELLHEAD PRESSURE,PSIG	1008	1175	950
OPEN FLOW, MCFD	1200	4080	3600
COMPONENT, MOLE PCT			
METHANE	67.8	81.4	85.8
ETHANE	2.6	3.1	2.5
PROPANE	1.5	1.4	0.7
N-BUTANE	0.7	0.6	0.4
ISOBUTANE	0.4	0.3	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	25.1	12.0	10.1
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	1.24	0.49	0.34
HEATING VALUE*	831	973	946
SPECIFIC GRAVITY	0.711	0.659	0.622

	INDEX 2251 SAMPLE 5331	INDEX 2252 SAMPLE 8037	INDEX 2253 SAMPLE 5451
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	FARMINGTON W	GERMAN VALLEY	HILL
WELL NAME	WESTGATE NO. 1	SITTNER NO. 1	HILL NO. 1
LOCATION	SEC. 6, T24S, R15W	SEC. 4, T22S, R12W	SEC. 11, T23S, R12W
OWNER	CITIES SERVICE OIL CO.	WESTERN PETROLEUM CO.	ALPINE OIL CO.
COMPLETED	06/20/52	06/22/61	10/09/52
SAMPLED	09/15/52	06/18/61	04/29/53
FORMATION	PENN-BASAL	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4169	3416	3448
WELLHEAD PRESSURE,PSIG	1293	NOT GIVEN	1100
OPEN FLOW, MCFD	4190	NOT GIVEN	4
COMPONENT, MOLE PCT			
METHANE	89.7	66.5	60.9
ETHANE	3.7	4.2	5.1
PROPANE	1.3	2.5	3.5
N-BUTANE	0.4	0.9	1.6
ISOBUTANE	0.1	0.7	0.8
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	3.6	23.4	25.4
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.40	1.00	0.78
HEATING VALUE*	1052	890	943
SPECIFIC GRAVITY	0.619	0.727	0.784

	INDEX 2254 SAMPLE 15601	INDEX 2255 SAMPLE 15518	INDEX 2256 SAMPLE 5085
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	HITZ	KIPP	KNOCHE
WELL NAME	KOHRS UNIT NO. 1	KIPP "A" NO. 2	KNOCHE NO. 1
LOCATION	SEC. 4, T24S, R12W	SEC. 27, T25S, R14W	SEC. 8, T24S, R12W
OWNER	WARREN-AMERICAN OIL CO.	EARL M. KNIGHTON	NORTHERN ORDNANCE, INC.
COMPLETED	11/05/78	06/09/77	01/14/51
SAMPLED	04/22/79	11/16/78	07/20/51
FORMATION	ORDO-VIOLA	PERM-CHASE GROUP	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3815	1970	3809
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	1154
OPEN FLOW, MCFD	NOT GIVEN	2057	10835
COMPONENT, MOLE PCT			
METHANE	59.7	71.9	64.9
ETHANE	4.1	1.7	3.9
PROPANE	3.3	0.6	3.1
N-BUTANE	1.0	0.2	0.9
ISOBUTANE	0.4	TRACE	0.6
N-PENTANE	0.2	TRACE	0.3
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	29.6	24.4	24.6
OXYGEN	0.0	0.0	0.2
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	1.22	0.97	1.31
HEATING VALUE*	829	781	877
SPECIFIC GRAVITY	0.754	0.669	0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2257 SAMPLE 15631	INDEX 2258 SAMPLE 15632	INDEX 2259 SAMPLE 5366
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	KNOCHE	KNOCHE	MACKSVILLE
WELL NAME	VIRGIL KNOCHE NO. 1	VERLE KNOCHE NO. 1	SEIBERT NO. 1
LOCATION	SEC. 5, T24S, R12W	SEC. 5, T24S, R12W	SEC. 31, T24S, R15W
OWNER	DONALD D. ASH	DONALD D. ASH	JOHN LINDAS OIL, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	10/10/52
SAMPLED	06/05/79	06/05/79	12/29/52
FORMATION	NOT GIVEN	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4177
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	1193
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1300
COMPONENT, MOLE PCT			
METHANE	65.4	65.6	89.6
ETHANE	4.5	4.5	3.6
PROPANE	3.8	3.8	1.3
N-BUTANE	1.3	1.2	0.4
ISOBUTANE	0.6	0.6	0.2
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	22.3	22.3	3.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.26	1.24	0.41
HEATING VALUE*	932	931	1044
SPECIFIC GRAVITY	0.744	0.742	0.616

	INDEX 2260 SAMPLE 7597	INDEX 2261 SAMPLE 7602	INDEX 2262 SAMPLE 7618
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	BROWN NO. 1	BROWN NO. 1	BROWN NO. 1
LOCATION	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W
OWNER	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/11/60	07/13/60	07/25/60
FORMATION	ORDO-VIOLA	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	82.7	83.0
ETHANE	3.8	4.2	4.1
PROPANE	1.5	1.6	1.7
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.2	8.6	8.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.80	1.10	1.10
HEATING VALUE*	1031	999	1013
SPECIFIC GRAVITY	0.627	0.643	0.648

	INDEX 2263 SAMPLE 7675	INDEX 2264 SAMPLE 7676	INDEX 2265 SAMPLE 7827
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	NAGEL	PETRO NO. 1	HARDTEN NO. 1
LOCATION	SEC. 3, T24S, R15W	SEC. 9, T24S, R15W	SEC. 11, T24S, R15W
OWNER	TOMLINSON KATHOL, INC.	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.
COMPLETED	NOT GIVEN	08/31/60	01/29/61
SAMPLED	09/07/60	08/31/60	01/22/61
FORMATION	ORDO-VIOLA	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4023	4096	4089
WELLHEAD PRESSURE, PSIG	1245	1280	1100
OPEN FLOW, MCFD	NOT GIVEN	10	2530
COMPONENT, MOLE PCT			
METHANE	88.6	77.9	74.7
ETHANE	3.6	4.3	3.4
PROPANE	1.2	1.9	1.1
N-BUTANE	0.4	0.6	0.3
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.7	11.5	17.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.7	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.4
HELIUM	0.70	1.40	1.80
HEATING VALUE*	1036	976	880
SPECIFIC GRAVITY	0.621	0.675	0.668

	INDEX 2266 SAMPLE 7920	INDEX 2267 SAMPLE 7937	INDEX 2268 SAMPLE 7957
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	SUITER NO. 1-B	NAGEL NO. 3	HARNESS NO. 3
LOCATION	SEC. 10, T24S, R15W	SEC. 10, T24S, R15W	SEC. 11, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.
COMPLETED	04/05/61	04/17/61	05/11/61
SAMPLED	04/04/61	04/16/61	05/10/61
FORMATION	CAMO-ARBUCKLE	ORDO-VIOLA	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4053	4030	4111
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6230	1020	8
COMPONENT, MOLE PCT			
METHANE	80.7	88.2	83.0
ETHANE	4.4	3.9	4.3
PROPANE	1.7	1.2	1.7
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	10.1	4.8	7.5
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.5
HELIUM	1.40	0.70	1.10
HEATING VALUE*	989	1032	1026
SPECIFIC GRAVITY	0.657	0.620	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2269 SAMPLE 8106	INDEX 2270 SAMPLE 8394	INDEX 2271 SAMPLE 8397
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	NAGEL NO. 3	O"CONNOR NO. 1	BROWN
LOCATION	SEC. 10, T24S, R15W	SEC. 8, T24S, R15W	SEC. 11, T24S, R15W
OWNER	WALT WILKINSON	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.
COMPLETED	05/--/61	NOT GIVEN	NOT GIVEN
SAMPLED	07/25/61	02/--/62	02/--/62
FORMATION	ORDO-VIOLA	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4080	4035	4016
WELLHEAD PRESSURE,PSIG	1225	1320	1188
OPEN FLOW, MCFD	3000	13300	20750
COMPONENT, MOLE PCT			
METHANE	87.8	70.6	82.8
ETHANE	3.9	4.7	3.8
PROPANE	1.3	2.2	1.7
N-BUTANE	0.4	0.8	0.6
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.0	17.7	8.4
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.5
HELIUM	0.70	2.28	1.09
HEATING VALUE*	1029	927	1005
SPECIFIC GRAVITY	0.624	0.701	0.652

	INDEX 2272 SAMPLE 8398	INDEX 2273 SAMPLE 8399	INDEX 2274 SAMPLE 8403
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	NAGEL NO. 3	PETRO NO. 2	LUCAS NO. 1
LOCATION	SEC. 10, T24S, R15W	SEC. 9, T24S, R15W	SEC. 4, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	REX & MORRIS DRILLING CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/--/62	02/--/62	02/27/62
FORMATION	ORDO-VIOLA	CAMO-ARBUCKLE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3974	4053	3951
WELLHEAD PRESSURE,PSIG	1225	1197	1315
OPEN FLOW, MCFD	3550	2175	9000
COMPONENT, MOLE PCT			
METHANE	87.9	79.9	85.8
ETHANE	3.6	4.2	3.7
PROPANE	1.4	1.9	1.4
N-BUTANE	0.5	0.7	0.5
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.9	10.4	6.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.64	1.37	0.98
HEATING VALUE*	1037	999	1017
SPECIFIC GRAVITY	0.628	0.667	0.633

	INDEX 2275 SAMPLE 8439	INDEX 2276 SAMPLE 8530	INDEX 2277 SAMPLE 8571
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	HARNESS NO. 3	LUCAS NO. 1	HARKNESS
LOCATION	SEC. 11, T24S, R15W	SEC. 4, T24S, R15W	SEC. 11, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/12/62	04/18/62	06/04/62
FORMATION	NOT GIVEN	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	87.0	84.1
ETHANE	3.8	3.7	3.9
PROPANE	1.5	1.4	1.6
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	5.6	7.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	1.09	0.85	1.07
HEATING VALUE*	1009	1026	1013
SPECIFIC GRAVITY	0.642	0.627	0.642

	INDEX 2278 SAMPLE 8605	INDEX 2279 SAMPLE 9332	INDEX 2280 SAMPLE 13102
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	HARKNESS NO. 4	NAGEL	NAGEL NO. 1
LOCATION	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W	SEC. 3, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	HELLAR DRILLING CO.	TOMLINSON OIL CO., INC.
COMPLETED	NOT GIVEN	10/--/63	08/23/71
SAMPLED	07/--/62	04/21/64	NOT GIVEN
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	PENN-HOWARD
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4054	3014
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7120	10800
COMPONENT, MOLE PCT			
METHANE	85.0	81.3	77.5
ETHANE	3.7	4.0	2.8
PROPANE	1.5	1.6	1.4
N-BUTANE	0.5	0.7	0.3
ISOBUTANE	0.3	TRACE	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	7.4	10.5	16.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.77	0.70	0.53
HEATING VALUE*	1015	987	908
SPECIFIC GRAVITY	0.639	0.658	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2281 SAMPLE 13568	INDEX 2282 SAMPLE 8088	INDEX 2283 SAMPLE 8090
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE N	MACKSVILLE N
WELL NAME	HARKNESS NO. 5	LUCUS NO. 1	CORNWELL NO. 1
LOCATION	SEC. 11, T24S, R15W	SEC. 4, T24S, R15W	SEC. 3, T24S, R15W
OWNER	TOMLINSON OIL CO.	DUNNE-GARDNER DRILLING CO.	WALLINGFORD, INC.
COMPLETED	09/25/72	NOT GIVEN	06/--/61
SAMPLED	03/15/72	07/12/61	07/12/61
FORMATION	PERM-NEVA	NOT GIVEN	ORDO-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3019	NOT GIVEN	4024
WELLHEAD PRESSURE,PSIG	425	NOT GIVEN	1169
OPEN FLOW, MCFD	6500	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	78.8	86.2	87.2
ETHANE	3.0	3.9	3.9
PROPANE	1.1	1.4	1.4
N-BUTANE	0.2	0.4	0.4
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.8	6.2	5.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.49	1.00	0.70
HEATING VALUE*	903	1017	1027
SPECIFIC GRAVITY	0.654	0.627	0.627

	INDEX 2284 SAMPLE 8275	INDEX 2285 SAMPLE 8438	INDEX 2286 SAMPLE 8317
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MORNING STAR	NEWELL	NOT GIVEN
WELL NAME	BOWKER NO. 1	RUNDELL NO. 2	WILSON NO. 1
LOCATION	SEC. 2, T25S, R14W	SEC. 12, T25S, R12W	SEC. 24, T25S, R15W
OWNER	TOMLINSON KATHOL, INC.	C. H. NEWELL	D. R. LAUCK OIL CO.
COMPLETED	09/--/60	NOT GIVEN	NOT GIVEN
SAMPLED	11/30/61	02/08/62	12/21/61
FORMATION	MISS-	PENN-KANSAS CITY	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4816	3537	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1248	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	79.0	51.0	76.9
ETHANE	4.1	7.6	4.2
PROPANE	1.8	6.4	1.8
N-BUTANE	0.5	3.3	0.6
ISOBUTANE	0.3	1.5	0.3
N-PENTANE	0.1	1.0	0.1
ISOPENTANE	0.2	0.8	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	12.8	25.1	14.0
OXYGEN	TRACE	1.7	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.96	0.70	1.46
HEATING VALUE*	965	1091	950
SPECIFIC GRAVITY	0.664	0.893	0.669

	INDEX 2287 SAMPLE 8036	INDEX 2288 SAMPLE 13211	INDEX 2289 SAMPLE 13212
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	O'CONNER	O'CONNER	O'CONNER
WELL NAME	PETRO NO. 2	O"CONNOR NO. 1	O"CONNOR NO. 1
LOCATION	SEC. 9, T24S, R15W	SEC. 4, T24S, R15W	SEC. 4, T24S, R15W
OWNER	REX & MORRIS DRILLING CO.	HALLIBURTON OIL PRODUCING CO	HALLIBURTON OIL PRODUCING CO
COMPLETED	06/18/61	09/27/71	09/27/71
SAMPLED	06/18/61	05/16/72	05/16/72
FORMATION	CAMO-ARBUCKLE	PENN-HOWARD	PERM-RED EAGLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4105	3040	2593
WELLHEAD PRESSURE,PSIG	1360	985	NOT GIVEN
OPEN FLOW, MCFD	4250	5200	3450
COMPONENT, MOLE PCT			
METHANE	78.6	77.6	78.2
ETHANE	4.2	3.0	2.8
PROPANE	1.9	1.6	1.4
N-BUTANE	0.6	0.6	0.4
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	11.4	15.5	15.6
OXYGEN	0.3	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	1.40	0.55	0.56
HEATING VALUE*	981	942	925
SPECIFIC GRAVITY	0.671	0.676	0.666

	INDEX 2290 SAMPLE 8057	INDEX 2291 SAMPLE 8058	INDEX 2292 SAMPLE 8267
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	OCONNOR	OCONNOR	RUGAN
WELL NAME	OCONNER NO. 1	OCONNER NO. 1	RUGAN NO. 1
LOCATION	SEC. 4, T24S, R15W	SEC. 4, T24S, R15W	SEC. 2, T21S, R11W
OWNER	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.	F. G. HOLL
COMPLETED	06/29/61	06/29/61	NOT GIVEN
SAMPLED	06/29/61	06/29/61	10/31/61
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4050	4075	3009
WELLHEAD PRESSURE,PSIG	1320	1320	NOT GIVEN
OPEN FLOW, MCFD	13300	12350	3300
COMPONENT, MOLE PCT			
METHANE	70.5	69.8	65.8
ETHANE	5.0	5.1	5.0
PROPANE	2.2	2.4	1.2
N-BUTANE	0.8	0.9	0.4
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	17.9	17.5	27.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	2.38	2.16	1.03
HEATING VALUE*	935	956	792
SPECIFIC GRAVITY	0.702	0.716	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2293 SAMPLE 6573	INDEX 2294 SAMPLE 8249	INDEX 2295 SAMPLE 8499
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	SEEVERS NW	SEEVERS NW	SNIDER S
WELL NAME	SEEVERS NO. 2	HARTER NO. 1	FAIR NO. 1
LOCATION	SEC. 6, T25S, R13W	SEC. 31, T24S, R13W	SEC. 15, T21S, R11W
OWNER	NATURAL GAS & OIL CO.	REX & MORRIS DRILLING CO.	WESTERN PETROLEUM CO.
COMPLETED	05/12/58	11/19/61	NOT GIVEN
SAMPLED	04/19/58	10/15/61	03/27/62
FORMATION	MISS-	MISS-CHERT	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4000	4044	3222
WELLHEAD PRESSURE,PSIG	1395	1530	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2310	887
COMPONENT, MOLE PCT			
METHANE	91.3	77.5	60.6
ETHANE	4.0	4.1	6.9
PROPANE	1.4	1.7	3.5
N-BUTANE	0.4	0.6	1.2
ISOBUTANE	0.2	0.4	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.9	13.8	25.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	0.10	1.34	1.02
HEATING VALUE*	1066	950	920
SPECIFIC GRAVITY	0.615	0.665	0.769

	INDEX 2296 SAMPLE 8500	INDEX 2297 SAMPLE 8505	INDEX 2298 SAMPLE 8506
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	SNIDER S	SNIDER S	SNIDER S
WELL NAME	SMITH ESTATE NO. 5	FAIR NO. 1	FAIR NO. 1
LOCATION	SEC. 16, T21S, R11W	SEC. 15, T21S, R11W	SEC. 15, T21S, R11W
OWNER	DUKE DRILLING CO.	WESTERN PETROLEUM CO.	WESTERN PETROLEUM CO.
COMPLETED	03/24/62	NOT GIVEN	NOT GIVEN
SAMPLED	03/29/62	03/26/62	03/26/62
FORMATION	ORDO-SIMPSON	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3370	3098	3194
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	1500	2190
COMPONENT, MOLE PCT			
METHANE	41.1	62.9	62.1
ETHANE	10.0	5.2	6.7
PROPANE	5.8	2.5	3.8
N-BUTANE	1.5	0.8	1.2
ISOBUTANE	0.9	0.4	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	37.1	26.4	23.6
OXYGEN	1.6	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.63	1.04	1.07
HEATING VALUE*	867	862	944
SPECIFIC GRAVITY	0.879	0.741	0.763

	INDEX 2299 SAMPLE 8767	INDEX 2300 SAMPLE 8359	INDEX 2301 SAMPLE 10556
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STANTON
FIELD	ST. JOHN NW	ST. JOHNS SW	BEAUCHAMP
WELL NAME	AITKENS NO. 3	TREGALLAS NO. 1	BEAUCHAMP NO. 1-19
LOCATION	SEC. 16, T23S, R13W	SEC. 25, T24S, R13W	SEC. 19, T30, R40W
OWNER	HENRY INGER OIL CO.	DUNNE-GARDNER PETROLEUM CO.	GRAHAM-MICHAELIS DRLG.,INC.
COMPLETED	NOT GIVEN	NOT GIVEN	12/22/65
SAMPLED	11/09/62	01/02/62	04/26/66
FORMATION	PENN-KANSAS CITY	PENN-WABAUNSEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	NOT GIVEN	2940	5222
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1123
OPEN FLOW, MCFD	NOT GIVEN	310000	7390
COMPONENT, MOLE PCT			
METHANE	68.9	70.1	70.7
ETHANE	3.1	1.6	4.5
PROPANE	1.8	1.0	3.2
N-BUTANE	0.6	0.5	1.1
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	23.4	25.0	17.7
OXYGEN	TRACE	0.4	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	1.11	0.50	0.92
HEATING VALUE*	852	808	977
SPECIFIC GRAVITY	0.705	0.698	0.726

	INDEX 2302 SAMPLE 7360	INDEX 2303 SAMPLE 3964	INDEX 2304 SAMPLE 4023
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	BEAUCHAMP E	HUGOTON	HUGOTON
WELL NAME	ARMSTRONG NO. 1	COLLMAC NO. 1	CAMPBELL NO. 1
LOCATION	SEC. 24, T30S, R41W	SEC. 32, T30S, R39W	SEC. 31, T28S, R39W
OWNER	WESTERN NATURAL GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	05/04/59	09/08/44	03/25/45
SAMPLED	01/26/60	01/20/45	05/15/45
FORMATION	PENN-MORROW	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5018	2396	2351
WELLHEAD PRESSURE,PSIG	1230	325	420
OPEN FLOW, MCFD	11500	8000	4887
COMPONENT, MOLE PCT			
METHANE	64.0	57.8	65.3
ETHANE	4.9	23.2	18.2
PROPANE	4.1	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	23.5	18.6	15.7
OXYGEN	1.6	0.0	0.4
ARGON	0.1	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.30	0.43	0.42
HEATING VALUE*	897	1001	988
SPECIFIC GRAVITY	0.751	0.744	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2305 SAMPLE 4180	INDEX 2306 SAMPLE 4470	INDEX 2307 SAMPLE 4827
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	FEGAN NO. 1	HARRY TRUSSELL	SPECK NO. 1
LOCATION	SEC. 3, T27S, R39W	SEC. 28, T26S, R39W	SEC. 32, T28S, R40W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	KANSAS NATURAL GAS, INC.
COMPLETED	05/01/45	NOT GIVEN	10/10/49
SAMPLED	12/07/46	04/21/48	12/28/49
FORMATION	PERM-	PERM-	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2380	NOT GIVEN	2290
WELLHEAD PRESSURE,PSIG	420	NOT GIVEN	464
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5400
COMPONENT, MOLE PCT			
METHANE	65.8	63.5	45.9
ETHANE	18.8	19.4	3.8
PROPANE	---	---	2.5
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.0
NITROGEN	14.8	15.9	44.3
OXYGEN	0.1	0.4	0.6
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.41	0.40	0.27
HEATING VALUE*	1003	991	657
SPECIFIC GRAVITY	0.708	0.720	0.810

	INDEX 2308 SAMPLE 7982	INDEX 2309 SAMPLE 13578	INDEX 2310 SAMPLE 13800
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	NICHOLAS C	ALLER B NO. 2	FARM MORTGAGE NO. 2
LOCATION	SEC. 15, T30S, R39W	SEC. 22, T30S, R39W	SEC. 16, T30S, R39W
OWNER	PAN AMERICAN PETROLEUM CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/01/61	NOT GIVEN	NOT GIVEN
SAMPLED	05/18/61	04/18/73	11/06/73
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5234	2638	2608
WELLHEAD PRESSURE,PSIG	1225	262	240
OPEN FLOW, MCFD	9230	2700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	71.1	70.0
ETHANE	5.3	6.6	6.5
PROPANE	3.5	3.8	3.9
N-BUTANE	1.2	1.0	1.0
ISOBUTANE	0.9	0.6	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	12.9	16.0	17.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	1.40	0.42	0.41
HEATING VALUE*	1038	1009	1000
SPECIFIC GRAVITY	0.717	0.723	0.731

	INDEX 2311 SAMPLE 5677	INDEX 2312 SAMPLE 10301	INDEX 2313 SAMPLE 10302
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STEVENS	STEVENS
FIELD	SPARKS	CUTTER	CUTTER
WELL NAME	SPARKS NO. 1	CUTTER NO. 1	H. F. BROWN NO. 2
LOCATION	SEC. 34, T30S, R42W	SEC. 1, T31S, R35W	SEC. 1, T31S, R35W
OWNER	J. M. HUBER CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	07/16/54	04/08/61	08/26/62
SAMPLED	08/11/54	11/02/65	12/02/65
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5277	5313	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1125	425	380
OPEN FLOW, MCFD	20000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	65.3	76.8
ETHANE	3.7	6.9	6.1
PROPANE	2.0	4.8	3.4
N-BUTANE	0.7	1.7	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.2	0.7	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	7.5	18.4	11.4
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.2	0.1
HELIUM	0.86	0.35	0.27
HEATING VALUE*	1031	1056	1047
SPECIFIC GRAVITY	0.669	0.781	0.698

	INDEX 2314 SAMPLE 13089	INDEX 2315 SAMPLE 15249	INDEX 2316 SAMPLE 15354
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	GENTZLER	GENTZLER	GENTZLER
WELL NAME	GENTZLER A NO. 1	RATLIFF "B" NO. 1	MILLER "N" NO. 1
LOCATION	SEC. 7, T33S, R37W	SEC. 18, T33S, R37W	SEC. 11, T33S, R38W
OWNER	SAMUEL OIL & GAS CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	07/07/71	03/30/77	03/12/78
SAMPLED	10/21/71	04/04/78	08/30/78
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5990	5991	6006
WELLHEAD PRESSURE,PSIG	1466	1396	1495
OPEN FLOW, MCFD	1775	5540	1041
COMPONENT, MOLE PCT			
METHANE	86.3	86.2	85.1
ETHANE	4.2	4.5	4.2
PROPANE	2.3	2.9	2.3
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.0	4.2	5.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.30	0.25	0.23
HEATING VALUE*	1069	1102	1070
SPECIFIC GRAVITY	0.646	0.660	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2317 SAMPLE 10185	INDEX 2318 SAMPLE 1866	INDEX 2319 SAMPLE 6184
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	GOOCH	HUGOTON	HUGOTON
WELL NAME	STREETER GAS UNIT NO. 1-15	HAMM NO. 1	HANKE NO. 1
LOCATION	SEC. 15, T35S, R35W	SEC. 10, T33S, R38W	SEC. 6, T35S, R36W
OWNER	MESA PETROLEUM CO.	W. M. MCKNAB	REPUBLIC NATURAL GAS CO.
COMPLETED	07/07/65	02/--/29	04/29/56
SAMPLED	08/01/65	09/18/29	11/19/56
FORMATION	PENN-MORROW	PERM-CHASE GROUP	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6290	2600	6263
WELLHEAD PRESSURE,PSIG	1627	450	1631
OPEN FLOW, MCFD	15500	12000	9800
COMPONENT, MOLE PCT			
METHANE	89.0	64.5	86.4
ETHANE	4.3	21.3	4.1
PROPANE	2.2	---	1.0
N-BUTANE	0.8	---	0.8
ISOBUTANE	0.2	---	0.0
N-PENTANE	0.2	---	1.3
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	0.1	---	0.2
HEXANES PLUS	0.3	---	0.2
NITROGEN	2.2	13.6	5.1
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.16	0.39	0.20
HEATING VALUE*	1110	1035	1076
SPECIFIC GRAVITY	0.642	0.717	0.652

	INDEX 2320 SAMPLE 7493	INDEX 2321 SAMPLE 7941	INDEX 2322 SAMPLE 12912
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	CURTIS NO. 2A	EARL D. DAVIS NO. 2	NEU NO. 1-9
LOCATION	SEC. 24, T31, R39W	SEC. 12, T31S, R35W	SEC. 9, T33S, R37W
OWNER	KINNEY-COASTAL-KUHN	MOBIL OIL CO.	PANHANDLE EASTERN PIPE LINE
COMPLETED	01/07/60	10/24/60	05/21/69
SAMPLED	04/01/60	04/22/61	07/21/71
FORMATION	PERM-COUNCIL GROVE	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2689	2564	2581
WELLHEAD PRESSURE,PSIG	405	344	258
OPEN FLOW, MCFD	NOT GIVEN	7330	3916
COMPONENT, MOLE PCT			
METHANE	70.5	74.3	77.2
ETHANE	7.0	5.4	6.0
PROPANE	3.8	2.7	3.5
N-BUTANE	1.1	0.7	0.9
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.0	15.3	11.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.40	0.50	0.36
HEATING VALUE*	1011	974	1042
SPECIFIC GRAVITY	0.724	0.694	0.692

	INDEX 2323 SAMPLE 12913	INDEX 2324 SAMPLE 12914	INDEX 2325 SAMPLE 12916
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	HOWELL-RINEHART NO. 1-22	HOWELL-RINEHART NO. 3-23	STONE NO. 1-34
LOCATION	SEC. 22, T32S, R39W	SEC. 23, T32S, R39W	SEC. 34, T32S, R39W
OWNER	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE	PANHANDLE EASTERN PIPE LINE
COMPLETED	04/05/31	11/09/64	03/04/31
SAMPLED	07/21/71	07/21/71	07/21/71
FORMATION	PERM-CHASE	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2415	2362	2518
WELLHEAD PRESSURE,PSIG	218	223	212
OPEN FLOW, MCFD	4556	2806	3185
COMPONENT, MOLE PCT			
METHANE	73.2	74.5	74.4
ETHANE	6.0	6.1	6.1
PROPANE	3.6	3.6	3.6
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	14.9	13.8	13.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.40	0.39
HEATING VALUE*	1007	1005	1022
SPECIFIC GRAVITY	0.709	0.697	0.704

	INDEX 2326 SAMPLE 12928	INDEX 2327 SAMPLE 6732	INDEX 2328 SAMPLE 7311
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	PANOMA	PANOMA
WELL NAME	HAYWARD NO. 1	GREY NO. 2	LARRABEE
LOCATION	SEC. 1, T35S, R39W	SEC. 11, T31S, R38W	SEC. 23, T31S, R39W
OWNER	PANHANDLE EASTERN PIPE LINE	HUGOTON PRODUCTION CO.	HUGOTON PRODUCTION CO.
COMPLETED	01/24/47	01/17/57	09/10/59
SAMPLED	07/21/71	07/16/58	12/14/59
FORMATION	PERM-CHASE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2628	2752	2691
WELLHEAD PRESSURE,PSIG	237	405	392
OPEN FLOW, MCFD	4524	15860	16533
COMPONENT, MOLE PCT			
METHANE	76.6	61.0	66.1
ETHANE	6.0	8.6	6.9
PROPANE	3.6	4.6	3.9
N-BUTANE	0.9	1.3	1.0
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.5	22.0	20.0
OXYGEN	0.0	0.3	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.37	0.50	0.40
HEATING VALUE*	1042	991	964
SPECIFIC GRAVITY	0.695	0.780	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2329 SAMPLE 7429	INDEX 2330 SAMPLE 7845	INDEX 2331 SAMPLE 7846
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	PERRILL	YOUNGREN NO. 1-35	SIMMONS B 1-25
LOCATION	SEC. 7, T31S, R37W	SEC. 35, T31S, R39W	SEC. 25, T31S, R39W
OWNER	PANHANDLE EASTERN PIPE LINE	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	01/02/59	10/30/60	09/23/60
SAMPLED	03/09/60	02/09/61	02/09/61
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2720	2768	2772
WELLHEAD PRESSURE,PSIG	NOT GIVEN	327	313
OPEN FLOW, MCFD	NOT GIVEN	1550	1500
COMPONENT, MOLE PCT			
METHANE	56.5	68.7	68.3
ETHANE	9.0	7.0	7.4
PROPANE	5.2	3.9	4.1
N-BUTANE	1.9	1.1	1.2
ISOBUTANE	1.0	0.5	0.6
N-PENTANE	0.9	0.2	0.3
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.0	0.1	0.2
NITROGEN	22.6	17.6	17.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.60	0.50	0.50
HEATING VALUE*	1084	999	1019
SPECIFIC GRAVITY	0.845	0.734	0.742

	INDEX 2332 SAMPLE 12915	INDEX 2333 SAMPLE 13341	INDEX 2334 SAMPLE 13669
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	HOWELL-RINEHART NO. 2-23	MARGARET PRICHARD NO. 2-A	MABELLE SPEAKMAN UNIT NO. 1
LOCATION	SEC. 23, T32S, R39W	SEC. 22, T31S, R39W	SEC. 2, T32S, R38W
OWNER	PANHANDLE EASTERN PIPE LINE	AMOCO PRODUCTION CO.	MOBIL OIL CORP.
COMPLETED	03/09/59	06/22/72	02/20/73
SAMPLED	07/21/71	07/31/72	07/04/73
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2684	2714	2848
WELLHEAD PRESSURE,PSIG	237	316	239
OPEN FLOW, MCFD	120	8250	3880
COMPONENT, MOLE PCT			
METHANE	68.9	66.9	65.2
ETHANE	6.5	6.9	7.2
PROPANE	4.2	4.5	4.0
N-BUTANE	1.0	1.1	1.1
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	17.9	18.6	20.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.41	0.49	0.53
HEATING VALUE*	1001	1014	973
SPECIFIC GRAVITY	0.736	0.752	0.752

	INDEX 2335 SAMPLE 9682	INDEX 2336 SAMPLE 9683	INDEX 2337 SAMPLE 7355
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	VOORHEES	VOORHEES	WALKEMEYER
WELL NAME	PEACHEY NO. 1 UNIT NO. 2	PEACHEY NO. 1 UNIT NO. 2	HEGER B NO. 2
LOCATION	SEC. 24, T34S, R37W	SEC. 24, T34S, R37W	SEC. 26, T33S, R36W
OWNER	MOBIL OIL CO.	MOBIL OIL CO.	NORTHERN NATURAL GAS PROD.
COMPLETED	09/30/64	09/30/64	10/16/59
SAMPLED	01/08/65	01/08/65	01/21/60
FORMATION	MISS-ST. LOUIS	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6711	6317	6098
WELLHEAD PRESSURE,PSIG	1665	1562	1500
OPEN FLOW, MCFD	15500	5300	6848
COMPONENT, MOLE PCT			
METHANE	71.0	72.9	87.9
ETHANE	7.5	7.6	0.1
PROPANE	4.4	4.0	0.2
N-BUTANE	1.5	1.0	0.0
ISOBUTANE	0.8	0.7	0.0
N-PENTANE	0.9	0.2	0.0
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	12.6	12.5	11.2
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.72	0.72	0.50
HEATING VALUE*	1094	1054	898
SPECIFIC GRAVITY	0.746	0.717	0.601

	INDEX 2338 SAMPLE 7746	INDEX 2339 SAMPLE 15338	INDEX 2340 SAMPLE 15837
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	WALKEMEYER	WALKEMEYER N	WILDCAT
WELL NAME	WALKEMEYER NO. 1-35	LEMERT UNIT NO. 2	HOLT NO. 1
LOCATION	SEC. 35, T33S, R36W	SEC. 4, T33S, R36W	SEC. 20, T32S, R37W
OWNER	SHELL OIL CO. ET AL.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	08/25/59	12/28/77	04/09/79
SAMPLED	10/26/60	08/08/78	11/15/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6145	6044	5639
WELLHEAD PRESSURE,PSIG	1625	1076	1253
OPEN FLOW, MCFD	3500	3300	18229
COMPONENT, MOLE PCT			
METHANE	88.9	88.1	82.2
ETHANE	4.8	4.6	4.7
PROPANE	2.1	2.5	2.8
N-BUTANE	0.6	0.6	0.9
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.1	2.4	7.6
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.10	0.15	0.28
HEATING VALUE*	1097	1116	1069
SPECIFIC GRAVITY	0.637	0.649	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2341 SAMPLE 4610	INDEX 2342 SAMPLE 12699	INDEX 2343 SAMPLE 9772
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	ANSON	CONWAY	CORASTONE
WELL NAME	BATES NO. 1	KERSCHEN NO. 6	NUSZ NO. 1
LOCATION	SEC. 26, T30S, R2W	SEC. 18, T31S, R3W	SEC. 23, T31S, R3W
OWNER	ANDERSON-PRICHARD OIL CORP.	RAYMOND OIL CO. INC.	BEARDMORE DRILLING CO.
COMPLETED	08/19/48	07/30/70	12/19/64
SAMPLED	11/04/48	03/03/71	02/27/65
FORMATION	MISS-LIME	PENN-	PENN-WHITE CLOUD
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3745	2000	2061
WELLHEAD PRESSURE,PSIG	1200	1025	905
OPEN FLOW, MCFD	NOT GIVEN	1650	13
COMPONENT, MOLE PCT			
METHANE	16.1	75.1	83.8
ETHANE	36.4	4.2	4.7
PROPANE	---	2.5	2.4
N-BUTANE	---	0.7	0.8
ISOBUTANE	---	0.7	0.4
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	46.1	15.5	6.8
OXYGEN	0.1	0.0	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	1.07	0.55	0.026
HEATING VALUE*	815	979	1062
SPECIFIC GRAVITY	0.923	0.697	0.659

	INDEX 2344 SAMPLE 4955	INDEX 2345 SAMPLE 1552	INDEX 2346 SAMPLE 1553
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	FALL CREEK	LATTA	LATTA
WELL NAME	HOBBISIEFKIN NO. 1	LATTA NO. 2	LOVE NO. 1
LOCATION	SEC. 3, T35S, R3W	SEC. 9, T30S, R2W	SEC. 9, T30S, R2W
OWNER	TEXAS CO.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	08/31/50	11/--/27	11/--/27
SAMPLED	11/10/50	12/15/27	12/15/27
FORMATION	ORDO-SIMPSON	-LIME	-LIME
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4746	2010	2011
WELLHEAD PRESSURE,PSIG	390	700	800
OPEN FLOW, MCFD	NOT GIVEN	8000	5250
COMPONENT, MOLE PCT			
METHANE	48.0	36.9	71.4
ETHANE	19.6	15.3	18.2
PROPANE	16.6	---	---
N-BUTANE	4.1	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.8	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	8.4	46.2	9.3
OXYGEN	0.3	0.3	0.6
ARGON	TRACE	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.08	1.05	0.34
HEATING VALUE*	1508	648	1049
SPECIFIC GRAVITY	0.966	0.820	0.687

	INDEX 2347 SAMPLE 1677	INDEX 2348 SAMPLE 15627	INDEX 2349 SAMPLE 15725
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	LATTA	LATTA PROSPECT	LATTA SW
WELL NAME	LOVE NO. 2	HIRTH NO. 1	REIN BECK NO. 1
LOCATION	SEC. 9, T30S, R2W	SEC. 21, T30S, R2W	SEC. 20, T30S, R2W
OWNER	CHAMPLIN REFINING CO.	TEXAS OIL & GAS CORP.	SANDERS OIL CO.
COMPLETED	11/--/28	11/11/78	NOT GIVEN
SAMPLED	09/18/28	05/29/79	08/08/79
FORMATION	-STRAY	PENN-STALNAKER	PENN-STALNAKER
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2432	2830	2871
WELLHEAD PRESSURE,PSIG	110	938	960
OPEN FLOW, MCFD	3100	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	41.2	85.3	85.1
ETHANE	18.0	4.8	4.8
PROPANE	---	2.6	2.6
N-BUTANE	---	0.8	0.9
ISOBUTANE	---	0.4	0.5
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	39.2	5.2	5.0
OXYGEN	0.7	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.77	0.20	0.20
HEATING VALUE*	740	1085	1098
SPECIFIC GRAVITY	0.807	0.655	0.663

	INDEX 2350 SAMPLE 12599	INDEX 2351 SAMPLE 12600	INDEX 2352 SAMPLE 12601
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	LOVE-THREE	LOVE-THREE	LOVE-THREE
WELL NAME	RUTH NO. 1	RUTH NO. 1	RUTH NO. 1
LOCATION	SEC. 13, T32S, R4W	SEC. 13, T32S, R4W	SEC. 13, T32S, R4W
OWNER	OASIS PETROLEUM, INC.	OASIS PETROLEUM, INC.	OASIS PETROLEUM, INC.
COMPLETED	09/15/70	09/15/70	10/14/70
SAMPLED	12/17/70	12/17/70	12/17/70
FORMATION	PENN-STALNAKER	PENN-WHITE CLOUD	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2978	2042	3939
WELLHEAD PRESSURE,PSIG	1125	950	1400
OPEN FLOW, MCFD	7200	1720	2700
COMPONENT, MOLE PCT			
METHANE	86.8	85.9	66.7
ETHANE	4.7	4.6	6.8
PROPANE	2.5	2.5	3.6
N-BUTANE	0.7	0.8	1.0
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.3	0.3	0.5
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.9	4.8	19.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.16	0.19	0.60
HEATING VALUE*	1101	1093	980
SPECIFIC GRAVITY	0.653	0.657	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2353 SAMPLE 14156	INDEX 2354 SAMPLE 1059	INDEX 2355 SAMPLE 1186
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	MURPHY	PADGETT	PADGETT
WELL NAME	STALNAKER NO. 1	NO. 1	PADGETT NO. 1
LOCATION	SEC. 11, T35S, R2E	SEC. 23, T34S, R2E	SEC. 23, T34S, R2E
OWNER	HERNDON DRILLING CO.	GYPSY OIL CO.	MARLAND OIL CO.
COMPLETED	04/11/74	04/--/25	12/--/24
SAMPLED	09/25/74	05/14/25	12/09/25
FORMATION	PENN-LAYTON	-SAND	PENN-BURBANK
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2775	3445	3455
WELLHEAD PRESSURE,PSIG	920	1250	1200
OPEN FLOW, MCFD	3260	40600	30000
COMPONENT, MOLE PCT			
METHANE	70.3	59.9	61.5
ETHANE	5.6	23.6	21.4
PROPANE	3.0	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	18.7	15.5	15.4
OXYGEN	TRACE	0.2	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.30	0.37	0.57
HEATING VALUE*	964	1030	1006
SPECIFIC GRAVITY	0.723	0.734	0.729

	INDEX 2356 SAMPLE 10293	INDEX 2357 SAMPLE 15911	INDEX 2358 SAMPLE 1750
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	PADGETT NW	STUHLSATZ	VERNON
WELL NAME	TURNER NO. 1	JORDAN TRUST NO. 1	S. W. HORTON NO. 1
LOCATION	SEC. 30, T34S, R2E	SEC. 29, T30S, R2W	SEC. 17, T35S, R2E
OWNER	CARTER & MANDEL CO.	STELBAR OIL CORP.	TIDAL OIL CO.
COMPLETED	NOT GIVEN	05/18/79	02/14/29
SAMPLED	11/19/65	02/31/80	04/22/29
FORMATION	PENN-CATTLEMAN	PENN-STALNAKER	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3428	2812	3281
WELLHEAD PRESSURE,PSIG	1300	991	725
OPEN FLOW, MCFD	6000	4451	4252
COMPONENT, MOLE PCT			
METHANE	52.9	83.5	57.0
ETHANE	7.6	4.8	25.0
PROPANE	4.7	2.5	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.8	0.3	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.1	0.3	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	31.8	6.5	16.8
OXYGEN	0.0	0.5	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.82	0.20	0.67
HEATING VALUE*	961	1069	1025
SPECIFIC GRAVITY	0.799	0.666	0.748

	INDEX 2359 SAMPLE 12401	INDEX 2360 SAMPLE 3626	INDEX 2361 SAMPLE 6159
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	WABAUNSEE	WALLACE
FIELD	YARNELL	ALMA	SEXSON
WELL NAME	PHILLIPS NO. 1	DAGENHART NO. 1	SEXSON NO. 1
LOCATION	SEC. 26, T32S, R4W	SEC. 9, T12S, R10E	SEC. 19, T13S, R42W
OWNER	ATLAS MINERALS	ALVA B. OATBOUT	SKELLY OIL CO.
COMPLETED	NOT GIVEN	02/01/43	08/18/56
SAMPLED	09/03/70	03/14/43	10/09/56
FORMATION	MISS-CHAT	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	375	335	360
DEPTH, FEET	3940	279	5008
WELLHEAD PRESSURE,PSIG	1215	90	911
OPEN FLOW, MCFD	800	NOT GIVEN	14034
COMPONENT, MOLE PCT			
METHANE	67.3	8.7	31.0
ETHANE	6.6	2.3	2.9
PROPANE	3.6	---	2.3
N-BUTANE	0.8	---	0.5
ISOBUTANE	0.5	---	0.4
N-PENTANE	0.4	---	0.2
ISOPENTANE	0.0	---	0.3
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	19.9	83.3	59.2
OXYGEN	0.1	1.2	TRACE
ARGON	TRACE	---	0.1
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	1.0	0.5
HELIUM	0.61	3.48	2.26
HEATING VALUE*	960	129	991
SPECIFIC GRAVITY	0.733	0.911	0.862

	INDEX 2362 SAMPLE 3836	INDEX 2363 SAMPLE 199	INDEX 2364 SAMPLE 1809
STATE	KANSAS	KANSAS	KANSAS
COUNTY	WALLACE	WILSON	WILSON
FIELD	WILDCAT	BUXTON	NEODES CREEK
WELL NAME	GLAD & BRACK NO. 1	LANTRY NO. 2	HYDE NO. 2
LOCATION	SEC. 19, T13S, R42W	SEC. 25, T30S, R13E	SEC. 33, T29S, R16E
OWNER	SINCLAIR PRAIRIE OIL CO.	C. E. ROTH	PRAIRIE OIL & GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	05/08/29
SAMPLED	05/--/44	04/02/21	07/07/29
FORMATION	NOT GIVEN	-STRAY	MISS-
GEOLOGIC PROVINCE CODE	360	365	365
DEPTH, FEET	2860	314	671
WELLHEAD PRESSURE,PSIG	250	125	200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	92
COMPONENT, MOLE PCT			
METHANE	0.0	75.1	94.4
ETHANE	0.0	0.0	0.3
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	99.6	22.8	4.5
OXYGEN	0.2	1.9	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.08	0.91	0.05
HEATING VALUE*	0	761	962
SPECIFIC GRAVITY	0.967	0.652	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2365 SAMPLE 3181	INDEX 2366 SAMPLE 2583	INDEX 2367 SAMPLE 7621
STATE	KANSAS	KANSAS	KENTUCKY
COUNTY	WOODSON	WOODSON	BARREN
FIELD	IOLA W	WINTERSCHEID	BLACK RIDGE
WELL NAME	PERCELL NO. 2	SHAFFER NO. 7	GLASS FARM NO. 2
LOCATION	SEC. 3, T25S, R17E	SEC. 31, T23S, R14E	3 MI NW GLASGOW, KY.
OWNER	OKLAHOMA NATURAL GAS CO.	THETA OIL CO.	MID CONTINENT OIL & GAS CORP
COMPLETED	03/23/23	--/--/32	06/06/60
SAMPLED	03/23/42	NOT GIVEN	07/25/60
FORMATION	PENN-BARTLESVILLE	NOT GIVEN	DEVO-LAUREL
GEOLOGIC PROVINCE CODE	365	365	300
DEPTH, FEET	900	NOT GIVEN	380
WELLHEAD PRESSURE,PSIG	290	NOT GIVEN	83
OPEN FLOW, MCFD	9000	NOT GIVEN	400
COMPONENT, MOLE PCT			
METHANE	93.6	82.5	68.3
ETHANE	1.8	6.3	11.9
PROPANE	---	---	7.9
N-BUTANE	---	---	1.8
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	3.3	9.4	7.1
OXYGEN	0.4	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.4	1.0
HELIUM	0.11	0.95	0.20
HEATING VALUE*	980	949	1231
SPECIFIC GRAVITY	0.587	0.626	0.784

	INDEX 2368 SAMPLE 14310	INDEX 2369 SAMPLE 9275	INDEX 2370 SAMPLE 10064
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	BELL	BOYD	BOYD
FIELD	WILDCAT	ASHLAND	ASHLAND
WELL NAME	AMERICAN ASSOCIATION NO. 1	NO. K-106	WADSWORTH NO. K-30
LOCATION	CARTER COORDINATE 5-B-70	W-K106	KEYES CREEK
OWNER	SAN JUAN OIL CO.	INLAND GAS CO., INC.	INLAND GAS CO., INC.
COMPLETED	11/08/74	05/28/63	06/01/27
SAMPLED	04/04/75	04/07/64	08/13/65
FORMATION	MISS-BIG LIME	SILU-CLINTON	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2928	2931	2157
WELLHEAD PRESSURE,PSIG	1050	910	NOT GIVEN
OPEN FLOW, MCFD	11000	926	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.1	94.8	86.2
ETHANE	0.2	1.8	5.9
PROPANE	0.1	0.3	2.4
N-BUTANE	0.0	0.1	0.5
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	1.0	2.6	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.1
HELIUM	0.05	0.14	0.14
HEATING VALUE*	1000	1013	1070
SPECIFIC GRAVITY	0.567	0.582	0.636

	INDEX 2371 SAMPLE 1033	INDEX 2372 SAMPLE 8654	INDEX 2373 SAMPLE 3505
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	BOYD	CHRISTIAN	CLAY
FIELD	SUMMIT	PENNYRILE	BURNING SPRINGS
WELL NAME	NO. 10	NO. 7	RAWLINGS
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	AMERICAN ROLLING WELL CO.	RYAN OIL CO.	PETROLEUM EXPLORATION CORP.
COMPLETED	04/01/25	08/--/62	NOT GIVEN
SAMPLED	04/23/25	08/23/62	06/04/42
FORMATION	MISS-BEREA	MISS-PAINT CREEK	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	315	160
DEPTH, FEET	1330	1409	NOT GIVEN
WELLHEAD PRESSURE,PSIG	400	510	200
OPEN FLOW, MCFD	250	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.0	97.5	69.4
ETHANE	13.9	0.4	27.7
PROPANE	---	0.1	---
N-BUTANE	---	TRACE	---
ISOBUTANE	---	TRACE	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.0	---
NITROGEN	4.7	1.7	2.5
OXYGEN	0.1	0.0	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.14	0.10	0.12
HEATING VALUE*	1070	1002	1199
SPECIFIC GRAVITY	0.646	0.565	0.703

	INDEX 2374 SAMPLE 3511	INDEX 2375 SAMPLE 3508	INDEX 2376 SAMPLE 3509
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	CLAY	CLAY	CLAY
FIELD	BURNING SPRINGS	ONEIDA	ONEIDA
WELL NAME	J. H. CLARK NO. 3	HENRY B. HENSLEY NO. 3	W. J. LEDFORD NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/04/42	06/04/42	06/04/42
FORMATION	MISS-BIG LIME	DEVO-CORNIFEROUS	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	200	200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.4	71.4	71.7
ETHANE	20.6	26.7	25.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.4	1.0	1.7
OXYGEN	0.4	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.09	0.08	0.14
HEATING VALUE*	1153	1202	1189
SPECIFIC GRAVITY	0.665	0.696	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2377 SAMPLE 3517	INDEX 2378 SAMPLE 4279	INDEX 2379 SAMPLE 8658
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	CLAY	DAVIESS	ESTILL
FIELD	ONEIDA	STANLEY	FLYNN
WELL NAME	W. W. RAWLINGS NO. 1	PRESLEY SAUER NO. 1	NO. 1
LOCATION	NOT GIVEN	SEC. 1, TP, R27	NOT GIVEN
OWNER	PETROLEUM EXPLORATION CORP.	SOHIO PETROLEUM CO.	LOUISA FLYNN
COMPLETED	NOT GIVEN	09/01/45	06/01/54
SAMPLED	06/03/42	01/09/47	08/27/62
FORMATION	MISS-BIG LIME	MISS-	DEVO-CORNIFFROUS
GEOLOGIC PROVINCE CODE	160	315	160
DEPTH, FEET	NOT GIVEN	1120	360
WELLHEAD PRESSURE,PSIG	NOT GIVEN	534	86
OPEN FLOW, MCFD	NOT GIVEN	591	1200
COMPONENT, MOLE PCT			
METHANE	71.8	98.8	81.8
ETHANE	25.9	0.0	0.8
PROPANE	---	---	1.9
N-BUTANE	---	---	1.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	1.7	0.0	0.0
OXYGEN	0.4	0.3	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	TRACE
CARBON DIOXIDE	0.1	0.9	12.7
HELIUM	0.13	0.04	0.04
HEATING VALUE*	1191	1001	993
SPECIFIC GRAVITY	0.692	0.565	0.746

	INDEX 2380 SAMPLE 9882	INDEX 2381 SAMPLE 3492	INDEX 2382 SAMPLE 3503
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	FLOYD	FLOYD	FLOYD
FIELD	MUD CREEK	NOT GIVEN	NOT GIVEN
WELL NAME	WM. HAMILTON NO. 6835	W. B. STUMBO	ALICE ENDICOTT
LOCATION	CARTER COORDINATES 7-K-83	12 1/2 MI. S OF PRESTONBURG	6 MI. SE OF PRESTONBURG
OWNER	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	01/18/65	06/15/29	11/12/31
SAMPLED	04/30/65	06/02/42	06/03/42
FORMATION	PENN-SALT SAND & MISS-MAXTON	DEVO-SHALE	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1838	1940	1915
WELLHEAD PRESSURE,PSIG	440	385	420
OPEN FLOW, MCFD	641	302	990
COMPONENT, MOLE PCT			
METHANE	83.9	67.7	74.5
ETHANE	7.6	31.6	24.6
PROPANE	3.4	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	3.1	0.1	0.3
OXYGEN	TRACE	0.4	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.23	0.06	0.06
HEATING VALUE*	1133	1252	1196
SPECIFIC GRAVITY	0.665	0.714	0.681

	INDEX 2383 SAMPLE 11641	INDEX 2384 SAMPLE 11642	INDEX 2385 SAMPLE 11643
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	GARRARD	GARRARD	GARRARD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	LEONARD KIRBY NO. 1	LEONARD KIRBY NO. 1	LEONARD KIRBY NO. 1
LOCATION	CARTER COORDINATES 8-0-59	CARTER COORDINATES 8-0-59	CARTER COORDINATES 8-0-59
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	10/29/68	10/29/68	10/29/68
SAMPLED	09/--/68	09/--/68	09/--/68
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	300	300
DEPTH, FEET	4546	4546	4546
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	14.1	14.1	13.6
ETHANE	2.0	2.0	2.2
PROPANE	0.5	0.6	0.7
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	80.3	80.0	80.9
OXYGEN	0.1	0.1	0.1
ARGON	0.4	0.4	0.5
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.69	1.92	1.24
HEATING VALUE*	228	228	224
SPECIFIC GRAVITY	0.916	0.911	0.920

	INDEX 2386 SAMPLE 11644	INDEX 2387 SAMPLE 13286	INDEX 2388 SAMPLE 3522
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	GARRARD	GARRARD	HART
FIELD	NOT GIVEN	WILDCAT	MAGNOLIA
WELL NAME	LEONARD KIRBY NO. 1	ANDREW BURDETT UNIT NO. 1	ALONZO DAVIS NO. 2
LOCATION	CARTER COORDINATES 8-0-59	3 MI. W OF LANCASTER	NOT GIVEN
OWNER	TEXACO INC.	PETER WIDNER	CUMBERLAND PETROLEUM CO.
COMPLETED	10/29/68	06/27/72	--/--/37
SAMPLED	09/--/68	06/27/72	05/21/42
FORMATION	NOT GIVEN	CAMB-ROME	DEVO-CORNIFFROUS
GEOLOGIC PROVINCE CODE	300	300	300
DEPTH, FEET	4574	4450	530
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1300	100
OPEN FLOW, MCFD	NOT GIVEN	500	2500
COMPONENT, MOLE PCT			
METHANE	14.5	19.3	81.3
ETHANE	2.2	4.5	4.1
PROPANE	0.6	0.7	---
N-BUTANE	0.3	0.5	---
ISOBUTANE	0.0	0.3	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	79.3	70.7	13.7
OXYGEN	0.1	0.0	0.3
ARGON	0.4	0.5	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	1.8	0.2
HELIUM	1.81	1.32	0.35
HEATING VALUE*	247	338	897
SPECIFIC GRAVITY	0.911	0.912	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2389 SAMPLE 4113	INDEX 2390 SAMPLE 13294	INDEX 2391 SAMPLE 10032
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	HENDERSON	HOPKINS	HOPKINS
FIELD	DIXIE	DIAMOND E	NEW HOPE
WELL NAME	C. T. ARNETT NO. 1	HARNED NO. 1	JOSEPH A. KANE NO. 1
LOCATION	4 MI. S OF CORYDON	CARTER COORDINATE 12-J-25	CARTER COORDINATES 5-J-21
OWNER	KENTUCKY NATURAL GAS CORP.	AMES OIL & GAS	L & H DRILLING CO.
COMPLETED	12/31/45	08/12/71	06/18/65
SAMPLED	09/24/46	07/03/72	08/02/65
FORMATION	PENN-	MISS-BETHEL	MISS-HARDINSBURG
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1042	2100	1529
WELLHEAD PRESSURE,PSIG	452	1000	710
OPEN FLOW, MCFD	1500	5000	7800
COMPONENT, MOLE PCT			
METHANE	95.3	97.5	94.8
ETHANE	---	0.4	0.6
PROPANE	---	TRACE	0.4
N-BUTANE	---	TRACE	0.1
ISOBUTANE	---	TRACE	0.0
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	TRACE	0.0
NITROGEN	4.0	1.2	3.8
OXYGEN	0.3	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.7	TRACE
HELIUM	0.16	0.06	0.25
HEATING VALUE*	965	995	9850
SPECIFIC GRAVITY	0.574	0.567	0.577

	INDEX 2392 SAMPLE 11637	INDEX 2393 SAMPLE 13470	INDEX 2394 SAMPLE 3489
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	HOPKINS	HOPKINS	JACKSON
FIELD	SISK SCHOOL	ST. CHARLES S	BRADSHAW AREA
WELL NAME	WEST KENTUCKY COAL NO. 2	GANNON NO. 1	IKE ADDISON NO. 1
LOCATION	CARTER COORDINATE 12-I-24	CARTER COORDINATE 20-I-24	NOT GIVEN
OWNER	TEXAS GAS EXPLORATION CORP.	HAR-KEN OIL CO.	THOMAS WHITTMER ESTATE
COMPLETED	12/05/67	05/17/71	--/--/37
SAMPLED	NOT GIVEN	11/08/72	05/30/42
FORMATION	MISS-BETHEL	MISS-TAR SPRINGS	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	315	315	160
DEPTH, FEET	2271	1493	975
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	142
OPEN FLOW, MCFD	4200	3000	350
COMPONENT, MOLE PCT			
METHANE	96.6	84.9	81.2
ETHANE	2.0	1.8	12.9
PROPANE	0.5	2.0	---
N-BUTANE	0.0	0.7	---
ISOBUTANE	0.0	0.4	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	0.6	9.5	5.2
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.04	0.24	0.15
HEATING VALUE*	1027	995	1054
SPECIFIC GRAVITY	0.575	0.644	0.642

	INDEX 2395 SAMPLE 3488	INDEX 2396 SAMPLE 4530	INDEX 2397 SAMPLE 10062
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	JACKSON	JACKSON	JOHNSON
FIELD	GRAY HAWK AREA	PUNCHEON	JOHNSON COUNTY
WELL NAME	ROBERT WELCH NO. 1	NO. 858	MATTIE DAVIS NO. 272
LOCATION	NOT GIVEN	NOT GIVEN	ROCKHOUSE CREEK
OWNER	THOMAS WHITTMER ESTATE	KENTUCKY-W. VIRGINIA GAS CO.	INLAND GAS CO., INC.
COMPLETED	--/--/37	09/04/45	09/13/45
SAMPLED	05/30/42	04/30/48	08/12/65
FORMATION	DEVO-CORNIFEROUS	DEVO-BLACK SHALE	SILU-BIG SIX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1025	2985	2386
WELLHEAD PRESSURE,PSIG	142	345	NOT GIVEN
OPEN FLOW, MCFD	1000	146	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	70.0	89.3
ETHANE	16.4	28.5	2.5
PROPANE	---	---	0.8
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.9	1.2	5.8
OXYGEN	0.4	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.12	0.03	0.26
HEATING VALUE*	1115	1220	9900
SPECIFIC GRAVITY	0.646	0.703	0.613

	INDEX 2398 SAMPLE 10063	INDEX 2399 SAMPLE 3506	INDEX 2400 SAMPLE 9933
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	JOHNSON	JOHNSON	KNOTT
FIELD	JOHNSON COUNTY	PAINTSVILLE	CANEY
WELL NAME	ELSIE SPRADLIN	TOPSY RATLIFF	ALEX FRANCIS NO. 6858
LOCATION	ROCKHOUSE CREEK	NOT GIVEN	CARTER COORDINATES 13-K-78
OWNER	CRATE RICE, TRUSTEE	OLIVER JENKINS	KENTUCKY W. VIRGINIA GAS CO.
COMPLETED	09/15/43	03/--/42	02/12/65
SAMPLED	08/12/65	06/03/42	06/15/65
FORMATION	MISS-BIG INJUN	SILU-BIG SIX	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	726	2368	1704
WELLHEAD PRESSURE,PSIG	NOT GIVEN	640	560
OPEN FLOW, MCFD	NOT GIVEN	581	424
COMPONENT, MOLE PCT			
METHANE	79.2	88.4	85.0
ETHANE	8.5	5.2	5.1
PROPANE	4.1	---	2.6
N-BUTANE	1.1	---	0.8
ISOBUTANE	0.5	---	0.3
N-PENTANE	0.3	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.1	3.9	5.2
OXYGEN	0.1	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.4	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	2.0	0.1
HELIUM	0.12	0.18	0.40
HEATING VALUE*	1147	989	1075
SPECIFIC GRAVITY	0.698	0.617	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2401 SAMPLE 3490	INDEX 2402 SAMPLE 3491	INDEX 2403 SAMPLE 4529
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOTT	KNOTT	KNOTT
FIELD	NOT GIVEN	NOT GIVEN	PUNCHEON
WELL NAME	J. G. SUTTON	J. G. SUTTON	NO. 888
LOCATION	9 MI. NE OF HINDMAN	9 MI. NE OF HINDMAN	NOT GIVEN
OWNER	P. E. DUFFENDACH	P. E. DUFFENDACH	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	02/24/42	12/21/41	03/19/48
SAMPLED	06/02/42	06/02/42	NOT GIVEN
FORMATION	DEVO-SHALE	MISS-BIG LIME	DEVO-BLACK SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1900	1349	2567
WELLHEAD PRESSURE,PSIG	NOT GIVEN	235	410
OPEN FLOW, MCFD	94	1905	63
COMPONENT, MOLE PCT			
METHANE	72.6	62.6	78.3
ETHANE	26.7	36.2	21.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.5	0.1
OXYGEN	0.4	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.06	0.06	0.03
HEATING VALUE*	1214	1283	1177
SPECIFIC GRAVITY	0.690	0.739	0.662

	INDEX 2404 SAMPLE 11658	INDEX 2405 SAMPLE 13632	INDEX 2406 SAMPLE 3513
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOX	KNOX	KNOX
FIELD	CAMPBELL CHURCH N	GRAY	HIMYAR
WELL NAME	R. E. VIALL NO. 2	MEDOLIN NO. 1	ELIZ. GREY NO. 1
LOCATION	CARTER COORDINATE 19-F-67	CARTER COORDINATE 11-F-66	NOT GIVEN
OWNER	PETROLEUM EXPLORATION, INC.	WISER OIL CO.	PETROLEUM EXPLORATION CORP.
COMPLETED	01/16/68	04/04/72	NOT GIVEN
SAMPLED	10/01/68	06/02/73	06/05/42
FORMATION	MISS-BIG LIME & WAVERLY	PENN-BIG LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1599	1365	NOT GIVEN
WELLHEAD PRESSURE,PSIG	300	245	300
OPEN FLOW, MCFD	4290	32000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	80.0	75.4
ETHANE	10.8	11.8	23.4
PROPANE	3.9	4.5	---
N-BUTANE	0.8	0.8	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	8.5	1.7	0.5
OXYGEN	1.5	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.5	0.5	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.08	0.08	0.11
HEATING VALUE*	1087	1186	1183
SPECIFIC GRAVITY	0.710	0.682	0.676

	INDEX 2407 SAMPLE 3514	INDEX 2408 SAMPLE 3512	INDEX 2409 SAMPLE 10427
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOX	KNOX	LAUREL
FIELD	INDIAN CREEK AREA	KNOX COUNTY	RACCOON MOUNTAIN
WELL NAME	NORTH GELLICO NO. 1	PURSIFUL COAL CO. NO. 1	LUCAS NO. 1
LOCATION	NOT GIVEN	HOG PEN HOLLOW	NOT GIVEN
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	O. O. ROBERTS, ET AL.
COMPLETED	NOT GIVEN	NOT GIVEN	11/29/55
SAMPLED	06/05/42	06/05/42	02/28/66
FORMATION	MISS-BIG LIME	DEVO-CORNIFEROUS	CAMO-KNOX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3462
WELLHEAD PRESSURE,PSIG	NOT GIVEN	320	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	488
COMPONENT, MOLE PCT			
METHANE	70.0	76.0	81.4
ETHANE	28.9	22.6	5.5
PROPANE	---	---	3.0
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	0.3	0.7	7.8
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.18	0.14	0.20
HEATING VALUE*	1227	1175	1076
SPECIFIC GRAVITY	0.702	0.673	0.678

	INDEX 2410 SAMPLE 7679	INDEX 2411 SAMPLE 10065	INDEX 2412 SAMPLE 10067
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	BIG SANDY	BLEVINS	BLEVINS
WELL NAME	MARTIN L. MOORE NO. 1124	CORDLE, MARTIN ET AL.	CAROLINE CORDELL
LOCATION	NOT GIVEN	BRUSHY FORK	BRUSHY CREEK
OWNER	KENTUCKY-WEST VA. GAS CO.	CREST OIL CO.	CREST OIL CO.
COMPLETED	07/01/50	01/01/60	06/06/61
SAMPLED	09/08/60	08/12/65	08/12/65
FORMATION	DEVO-CORNIFEROUS L	MISS-BEREA	SILU-BIG SIX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2498	1100	2635
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	273	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	81.1	80.6
ETHANE	7.3	6.8	7.8
PROPANE	1.1	3.1	3.5
N-BUTANE	0.3	0.8	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.2	7.1	6.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.1	0.1
HELIUM	0.20	0.10	0.20
HEATING VALUE*	999	1077	1098
SPECIFIC GRAVITY	0.630	0.673	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2413 SAMPLE 10046	INDEX 2414 SAMPLE 10048	INDEX 2415 SAMPLE 10162
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	LITTLE BLAINE	LITTLE BLAINE	LITTLE BLAINE
WELL NAME	NO. 1107	OLIVER SAUL NO. 1116	STELLA MOORE NO. 1213
LOCATION	NOT GIVEN	LITTLE BLAINE CREEK	LITTLE BLAINE CREEK
OWNER	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY W. VIRGINIA GAS CO.
COMPLETED	12/12/58	02/02/60	01/22/63
SAMPLED	08/03/65	08/03/65	09/23/65
FORMATION	MISS-BEREA	DEVO-	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1148	1831	2621
WELLHEAD PRESSURE,PSIG	400	420	700
OPEN FLOW, MCFD	292	163	1054
COMPONENT, MOLE PCT			
METHANE	81.0	82.0	85.3
ETHANE	6.6	6.3	2.9
PROPANE	3.5	2.8	1.0
N-BUTANE	0.9	0.7	0.4
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.8	6.9	9.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.17	0.16	0.23
HEATING VALUE*	1089	1062	9810
SPECIFIC GRAVITY	0.676	0.661	0.639

	INDEX 2416 SAMPLE 2547	INDEX 2417 SAMPLE 10733	INDEX 2418 SAMPLE 14031
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LESLIE	LESLIE
FIELD	NOT GIVEN	HAZARD	LESLIE COUNTY
WELL NAME	HINKLE	FORDSON COAL CO.	C.A. DIXON NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	CARTER COORDINATE 2-H-73
OWNER	J. W. HINKLE	UNITED FUEL GAS CO.	WISER OIL CO.
COMPLETED	10/04/30	01/25/55	06/10/72
SAMPLED	09/01/32	09/29/66	06/26/74
FORMATION	NOT GIVEN	MISS-GREENBRIER	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2165	2046	2208
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	425
OPEN FLOW, MCFD	75	1245	5603
COMPONENT, MOLE PCT			
METHANE	80.0	79.9	81.1
ETHANE	14.4	10.6	10.4
PROPANE	---	3.9	3.9
N-BUTANE	---	1.0	0.8
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.8	3.1	2.5
OXYGEN	0.3	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.5	0.4
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.0	TRACE
HELIUM	0.14	0.22	0.15
HEATING VALUE*	1068	1169	1165
SPECIFIC GRAVITY	0.651	0.690	0.677

	INDEX 2419 SAMPLE 11717	INDEX 2420 SAMPLE 11532	INDEX 2421 SAMPLE 12150
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LETCHER	LETCHER	LETCHER
FIELD	BULL CREEK	MAYTOWN	MAYTOWN
WELL NAME	JOHN B. CORNETT NO. 7015	GEORGE W. FIELDS NO. 6990	JOHN B. CORNETT NO. 1
LOCATION	CARTER COORDINATE 8-H-78	CARTER COORDINATES 21-I-78	CARTER COORDINATE 8-H-78
OWNER	KENTUCKY-W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	05/09/68	01/26/68	07/31/69
SAMPLED	12/26/68	06/10/68	12/15/69
FORMATION	MISS-BIG LIME	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2993	3171	3002
WELLHEAD PRESSURE,PSIG	450	640	510
OPEN FLOW, MCFD	6433	3038	1850
COMPONENT, MOLE PCT			
METHANE	78.6	79.9	83.4
ETHANE	12.9	11.4	11.0
PROPANE	4.6	4.3	2.8
N-BUTANE	1.1	1.1	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.4	1.8	2.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.4	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.06	0.10	0.07
HEATING VALUE*	1217	1196	1115
SPECIFIC GRAVITY	0.700	0.691	0.643

	INDEX 2422 SAMPLE 10066	INDEX 2423 SAMPLE 4533	INDEX 2424 SAMPLE 4536
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MAGOFFIN	MAGOFFIN	MAGOFFIN
FIELD	BEE TREE	LICKING RIVER	LICKING RIVER
WELL NAME	MORGAN ROWE	NO. 5756	NO. 5799
LOCATION	BEE TREE BRANCH	NOT GIVEN	NOT GIVEN
OWNER	W. COMPTON	KENTUCKY-W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	01/01/48	10/29/47	NOT GIVEN
SAMPLED	08/12/65	04/29/48	05/07/48
FORMATION	SILU-BIG SIx	SILU-	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2510	2309	2110
WELLHEAD PRESSURE,PSIG	98	610	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2768	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	80.5	73.3
ETHANE	8.3	10.6	20.4
PROPANE	3.7	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	5.7	7.9	5.6
OXYGEN	0.0	0.2	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.21	0.31	0.18
HEATING VALUE*	1125	1005	1108
SPECIFIC GRAVITY	0.689	0.644	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2425 SAMPLE 7065	INDEX 2426 SAMPLE 10068	INDEX 2427 SAMPLE 3608
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MAGOFFIN	MAGOFFIN	MAGOFFIN
FIELD	LICKING RIVER	ROYALTON	TICK LICK
WELL NAME	NO. 4457	J. W. HOWARD NO. 305	JOHNNIE BLANTON NO. 1-A
LOCATION	LAT. 370EG. 32FT. 10IN.	LICKING RIVER AT ROYALTON	NOT GIVEN
OWNER	KENTUCKY-WEST VA. GAS CO.	INLAND GAS CO., INC.	A. V. HOENIG
COMPLETED	08/19/58	05/31/47	09/14/42
SAMPLED	03/02/59	NOT GIVEN	10/16/42
FORMATION	PENN-SALT SAND	SILU-BIG SIX	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1400	2259	268
WELLHEAD PRESSURE,PSIG	348	85	50
OPEN FLOW, MCFD	684	NOT GIVEN	130
COMPONENT, MOLE PCT			
METHANE	81.1	87.4	70.3
ETHANE	11.4	3.4	0.0
PROPANE	4.5	1.5	---
N-BUTANE	1.0	0.8	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.1	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.7	5.4	28.5
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.4	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.05	0.25	0.47
HEATING VALUE*	1206	1061	712
SPECIFIC GRAVITY	0.685	0.643	0.675

	INDEX 2428 SAMPLE 3487	INDEX 2429 SAMPLE 3500	INDEX 2430 SAMPLE 3502
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MARTIN	MARTIN	MARTIN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	S. A. D. WARD	L. T. MILLS	T. J. WARD
LOCATION	1 MI. SW OF INEZ	4 MI. W OF INEZ	1/2 MI. SW OF INEZ
OWNER	WARFIELD NATURAL GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.	WARFIELD NATURAL GAS CO.
COMPLETED	09/--/37	06/16/30	01/16/32
SAMPLED	06/--/42	06/02/42	06/02/42
FORMATION	MISS-MAXTON	-SALT SAND	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1140	408	1901
WELLHEAD PRESSURE,PSIG	112	180	215
OPEN FLOW, MCFD	3000	719	169
COMPONENT, MOLE PCT			
METHANE	74.2	83.4	76.4
ETHANE	23.2	13.3	8.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	2.0	1.3
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.8	13.5
HELIUM	0.10	0.33	0.09
HEATING VALUE*	1167	1033	923
SPECIFIC GRAVITY	0.681	0.638	0.734

	INDEX 2431 SAMPLE 9764	INDEX 2432 SAMPLE 8688	INDEX 2433 SAMPLE 321
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MARTIN	MCLEAN	MEADE
FIELD	TOMAHAWK	NOT GIVEN	BARTHS
WELL NAME	NO. 6808	ROSIE BATES NO. 1	NO. 56
LOCATION	CARTER COORDINATES 15-0-84	NOT GIVEN	J. PERRY FARM
OWNER	KENTUCKY W. VIRGINIA GAS CO.	HAR-KEN OIL CO.	LOUISVILLE GAS & ELEC. CO.
COMPLETED	09/10/64	NOT GIVEN	--/--/90
SAMPLED	02/23/65	10/04/62	06/05/20
FORMATION	MISS-BIG LIME	MISS-PAINT CREEK	DEVO-
GEOLOGIC PROVINCE CODE	160	315	300
DEPTH, FEET	1523	1674	368
WELLHEAD PRESSURE,PSIG	515	575	28
OPEN FLOW, MCFD	671	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	79.0	2.7	91.1
ETHANE	11.0	0.1	0.0
PROPANE	5.0	0.1	---
N-BUTANE	1.1	0.1	---
ISOBUTANE	0.5	TRACE	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	2.5	84.3	6.9
OXYGEN	0.1	TRACE	1.0
ARGON	0.0	1.0	---
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	11.5	1.1
HELIUM	0.08	TRACE	TRACE
HEATING VALUE*	1275	45	923
SPECIFIC GRAVITY	0.703	1.025	0.600

	INDEX 2434 SAMPLE 3498	INDEX 2435 SAMPLE 3525	INDEX 2436 SAMPLE 3515
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MENIFEE	MENIFEE	OWSLEY
FIELD	RED RIVER AREA	RED RIVER AREA	OWSLEY COUNTY
WELL NAME	STONMORE NO. 2	DANA NO. 3	MARION BRADENBURG NO. 3
LOCATION	NOT GIVEN	NOT GIVEN	WILD DOG CREEK AREA
OWNER	T. J. GILBERT	T. J. GILBERT	PETROLEUM EXPLORATION CORP.
COMPLETED	08/--/40	05/--/41	NOT GIVEN
SAMPLED	05/29/42	05/29/42	06/06/42
FORMATION	MISS-CHATTANOOGA	DEVO-CORNIFEROUS	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	940	585	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	140	25
OPEN FLOW, MCFD	25	743	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	86.8	69.6
ETHANE	7.2	7.8	26.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.6	0.8	3.1
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.06	0.13	0.13
HEATING VALUE*	1039	1019	1184
SPECIFIC GRAVITY	0.607	0.616	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2437 SAMPLE 3518	INDEX 2438 SAMPLE 9688	INDEX 2439 SAMPLE 9887
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	OWSLEY	PERRY	PERRY
FIELD	OWSLEY COUNTY	CANEY	CANEY
WELL NAME	ALEX BOND NO. 1	NO. 6818	W. C. BRASHEAR NO. 6840
LOCATION	NOT GIVEN	CARTER COORDINATES 16-I-77	CARTER COORDINATES23-101-78E
OWNER	PETROLEUM EXPLORATION CORP.	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY W. VIRGINIA GAS CO.
COMPLETED	NOT GIVEN	07/29/64	01/14/65
SAMPLED	06/06/42	01/04/65	05/03/65
FORMATION	DEVO-CORNIFEROUS	DEVO-	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2983	2531
WELLHEAD PRESSURE,PSIG	25	513	610
OPEN FLOW, MCFD	NOT GIVEN	231	984
COMPONENT, MOLE PCT			
METHANE	70.2	78.7	80.2
ETHANE	25.6	13.2	12.0
PROPANE	---	4.3	3.8
N-BUTANE	---	0.9	0.7
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	3.4	1.8	2.0
OXYGEN	0.5	TRACE	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.03	0.07
HEATING VALUE*	1170	1204	1169
SPECIFIC GRAVITY	0.698	0.696	0.679

	INDEX 2440 SAMPLE 10007	INDEX 2441 SAMPLE 16139	INDEX 2442 SAMPLE 11795
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PERRY	PERRY	PERRY
FIELD	CANEY	COCKEREL	HAZARD
WELL NAME	WM. G. BRASHEAR NO. 6856	N. CLAYBOURNE NO. 7309	JOE EVERSOLE NO. 1382
LOCATION	CARTER COORDINATES 23-1-78	CARTER COORDINATE 7-K-76	CARTER COORDINATE 23-H-77
OWNER	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	03/11/65	05/14/80	10/30/6A
SAMPLED	07/16/65	11/26/80	03/13/69
FORMATION	MISS-MAXTON	MISS-BIG LIME	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2176	1756	2471
WELLHEAD PRESSURE,PSIG	710	525	405
OPEN FLOW, MCFD	782	4169	2844
COMPONENT, MOLE PCT			
METHANE	82.9	81.1	80.1
ETHANE	6.6	8.9	7.8
PROPANE	3.0	3.2	3.2
N-BUTANE	0.8	0.7	0.7
ISOBUTANE	0.3	0.2	0.6
N-PENTANE	0.2	0.1	0.6
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.5
HEXANES PLUS	0.2	0.1	1.3
NITROGEN	5.4	5.1	4.3
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.26	0.35	0.32
HEATING VALUE*	1092	1108	1202
SPECIFIC GRAVITY	0.665	0.669	0.720

	INDEX 2443 SAMPLE 8702	INDEX 2444 SAMPLE 9738	INDEX 2445 SAMPLE 10041
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	BIG SANDY	BIG SANDY	BIG SANDY
WELL NAME	NO. 9001	V. FLETCHER, ET AL. NO. 9317	8560
LOCATION	NOT GIVEN	CARTER COORDINATES 5-L-88	CARTER COORDINATES 18-L-89
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	06/20/62	08/05/64	07/21/58
SAMPLED	10/08/62	02/10/65	08/03/65
FORMATION	MISS-RAVENCLIFF	MISS-BEREA	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2231	3837	2354
WELLHEAD PRESSURE,PSIG	640	585	800
OPEN FLOW, MCFD	959	822	7925
COMPONENT, MOLE PCT			
METHANE	89.2	89.1	91.4
ETHANE	4.6	7.7	3.8
PROPANE	1.9	1.7	1.3
N-BUTANE	0.6	0.3	0.4
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.1	0.6	1.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.23	TRACE	0.19
HEATING VALUE*	1095	1115	1071
SPECIFIC GRAVITY	0.629	0.625	0.616

	INDEX 2446 SAMPLE 10042	INDEX 2447 SAMPLE 4532	INDEX 2448 SAMPLE 4534
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	BIG SANDY	JOHNS CREEK	JOHNS CREEK
WELL NAME	9330	NO. 891	NO. 5775
LOCATION	CARTER COORDINATES 10-L-87	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.
COMPLETED	09/08/64	03/24/48	02/06/48
SAMPLED	08/03/65	05/03/48	04/30/48
FORMATION	MISS-BEREA	DEVO-BLACK SHALE	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4251	2261	1701
WELLHEAD PRESSURE,PSIG	705	460	525
OPEN FLOW, MCFD	1299	2523	1212
COMPONENT, MOLE PCT			
METHANE	94.4	76.2	80.3
ETHANE	4.4	22.5	18.5
PROPANE	0.5	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.4	0.7	0.4
OXYGEN	0.0	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.4	0.4
HELIUM	0.05	0.04	0.06
HEATING VALUE*	1055	1175	1145
SPECIFIC GRAVITY	0.585	0.674	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2449 SAMPLE 3495	INDEX 2450 SAMPLE 3496	INDEX 2451 SAMPLE 6264
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	JIM HAMILTON	O. C. POLLY	NO. 6204
LOCATION	5 MI. SE OF PIKEVILLE	7 MI. SE OF PIKEVILLE	BEEFHIDE CREEK
OWNER	UNITED CARBON CO.	UNITED CARBON CO.	KENTUCKY-WEST VA. GAS CO.
COMPLETED	07/06/40	12/01/39	07/23/54
SAMPLED	06/03/42	06/03/42	02/08/57
FORMATION	DEVO-SHALE	MISS-WEIR	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2885	2270	2651
WELLHEAD PRESSURE,PSIG	675	730	650
OPEN FLOW, MCFD	1750	2	7557
COMPONENT, MOLE PCT			
METHANE	87.0	85.0	77.9
ETHANE	12.4	14.4	14.4
PROPANE	---	---	4.5
N-BUTANE	---	---	1.2
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	TRACE	TRACE	0.4
OXYGEN	0.4	0.4	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1104	1119	1244
SPECIFIC GRAVITY	0.619	0.628	0.709

	INDEX 2452 SAMPLE 6265	INDEX 2453 SAMPLE 4531	INDEX 2454 SAMPLE 3516
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	POWELL
FIELD	NOT GIVEN	RACCOON	ROSSLYN
WELL NAME	NO. 6212	NO. 879	RUBIN CROW NO. 1
LOCATION	ELKINS FORK OF BIG CREEK	NOT GIVEN	NEAR COMPRESSOR STATION
OWNER	KENTUCKY-WEST VA. GAS CO.	KENTUCKY-W. VIRGINIA GAS CO.	PETROLEUM EXPLORATION CORP.
COMPLETED	07/15/54	02/06/48	NOT GIVEN
SAMPLED	02/28/57	05/03/48	06/06/42
FORMATION	DEVO-SHALE	DEVO-BLACK SHALE	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3291	2825	NOT GIVEN
WELLHEAD PRESSURE,PSIG	500	295	NOT GIVEN
OPEN FLOW, MCFD	1917	82	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.2	76.5	71.0
ETHANE	15.2	21.4	25.7
PROPANE	5.4	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.5	1.6	2.5
OXYGEN	0.2	0.2	0.4
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.04	0.05	0.07
HEATING VALUE*	1254	1158	1180
SPECIFIC GRAVITY	0.716	0.669	0.697

	INDEX 2455 SAMPLE 12883	INDEX 2456 SAMPLE 6491	INDEX 2457 SAMPLE 14015
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	BOSCO S	CHURCH POINT	CROWLEY S
WELL NAME	E. A. HANKS NO. 1	H. THIBODEAUX NO. 1	DAVID BREAUX EST. NO. 1
LOCATION	SEC. 34, T8S, R3E	SEC. 83, T8S, R2E	SEC. 17, T10S, R1E
OWNER	CHEVRON OIL CO.	TIDEWATER OIL CO.	DAMSON OIL CORP.
COMPLETED	09/18/70	04/--/57	05/30/74
SAMPLED	06/17/71	01/29/58	05/30/74
FORMATION	OLIG-NODOSARIA A	OLIG-FRIO	OLIG-HAYES
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13307	14400	11952
WELLHEAD PRESSURE,PSIG	8845	12135	2350
OPEN FLOW, MCFD	6100	16000	2000
COMPONENT, MOLE PCT			
METHANE	83.5	92.1	89.6
ETHANE	4.3	5.8	3.0
PROPANE	1.5	1.0	0.8
N-BUTANE	1.5	0.3	0.2
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	1.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	5.4	0.9	4.2
OXYGEN	1.1	0.2	1.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.1	0.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1069	1062	1008
SPECIFIC GRAVITY	0.681	0.615	0.619

	INDEX 2458 SAMPLE 13629	INDEX 2459 SAMPLE 4482	INDEX 2460 SAMPLE 4681
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	DUSON	EGAN	IOTA
WELL NAME	FRANCES PREJEAN NO. 1	KOLLITZ UNIT NO.1, WELL NO.1	HAYES LECKELT MOODY NO. 1
LOCATION	SEC. 20, T9S, R3E	SEC. 7, T10S, R1W	SEC. 13, T8S, R2W
OWNER	SUN OIL CO.	SUN OIL CO.	SOHIO PETROLEUM CO.
COMPLETED	01/17/73	01/11/48	09/08/48
SAMPLED	06/15/73	04/10/48	03/17/49
FORMATION	OLIG-FRIO-NON UNION STRUMA	OLIG-FRIO	EOCE-MOODYS BRANCH
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13900	10856	9092
WELLHEAD PRESSURE,PSIG	7077	5100	3100
OPEN FLOW, MCFD	1700	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	81.6	84.7	89.7
ETHANE	8.0	12.5	5.8
PROPANE	5.3	---	2.3
N-BUTANE	1.0	---	0.5
ISOBUTANE	1.7	---	0.8
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.4	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.0
NITROGEN	0.5	2.1	0.9
OXYGEN	0.0	0.3	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.1	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1230	1082	1110
SPECIFIC GRAVITY	0.715	0.630	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2461 SAMPLE 4895	INDEX 2462 SAMPLE 13926	INDEX 2463 SAMPLE 14493
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	MAXIE	MIDLAND	RAYNE
WELL NAME	S. W. ROBINSON NO. 1	WALTON GUIDRY NO. 1	E. B. PETITJEAN NO. 1
LOCATION	SEC. 31, T8S, R1E	SEC. 53, T10S, R2W	SEC. 13, T9S, R2E
OWNER	HASSIE HUNT TRUST	GOLDKING-SERIO-TIPCO-DILLOW	CONTINENTAL OIL CO.
COMPLETED	01/20/50	08/29/73	07/18/75
SAMPLED	05/13/50	02/18/74	10/17/75
FORMATION	-MARTEX	OLIG-DISCORBIS	OLIG-NODOSARIA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10562	9704	16079
WELLHEAD PRESSURE,PSIG	4775	1425	10600
OPEN FLOW, MCFD	1000	2000	9500
COMPONENT, MOLE PCT			
METHANE	91.9	58.7	85.7
ETHANE	4.7	12.7	7.7
PROPANE	1.7	12.2	2.3
N-BUTANE	0.4	4.3	0.4
ISOBUTANE	0.3	5.3	0.6
N-PENTANE	0.2	1.4	0.1
ISOPENTANE	0.0	2.4	0.1
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.2	1.9	0.1
NITROGEN	0.0	0.1	0.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.4	2.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1106	1740	1113
SPECIFIC GRAVITY	0.618	1.018	0.664

	INDEX 2464 SAMPLE 4038	INDEX 2465 SAMPLE 4039	INDEX 2466 SAMPLE 4040
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	TEPETATE N	TEPETATE N	TEPETATE N
WELL NAME	KLUMPP NO. 1	KLUMPP NO. 5	KLUMPP NO. 2
LOCATION	SEC. 13, T7S, R2W	SEC. 13, T7W, R2W	SEC. 13, T7S, R2W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	10/09/38	08/30/39	12/14/38
SAMPLED	06/11/45	06/11/45	06/11/45
FORMATION	MIOC-KLUMPP	MIOC-KLUMPP	MIOC-KLUMPP
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7960	9040	8478
WELLHEAD PRESSURE,PSIG	2900	4700	3000
OPEN FLOW, MCFD	NOT GIVEN	3787	1333
COMPONENT, MOLE PCT			
METHANE	91.3	83.0	83.7
ETHANE	8.5	16.9	16.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	0.0
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1077	1144	1140
SPECIFIC GRAVITY	0.598	0.639	0.635

	INDEX 2467 SAMPLE 10854	INDEX 2468 SAMPLE 15554	INDEX 2469 SAMPLE 13987
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ALLEN	ALLEN	ASSUMPTION
FIELD	KINDER S	LYLES	BAY MATCHEZ
WELL NAME	CHARLES KUNTZ NO. 1	ALLEN NO. 1	BROWNELL-KIDD NO. C-1
LOCATION	SEC. 14, T7S, R5W	SEC. 7, T6S, R4W	SEC. 23, T12S, R12E
OWNER	W. W. F. OIL CORP.	GETTY OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/01/66	03/31/78	10/09/73
SAMPLED	01/26/67	01/15/79	04/17/74
FORMATION	OLIG-FRIO	EOCE-WILCOX	MIOC-SIPHONINA DAVISI
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8216	12576	13930
WELLHEAD PRESSURE,PSIG	2300	7400	4949
OPEN FLOW, MCFD	900	2000	80000
COMPONENT, MOLE PCT			
METHANE	91.7	80.9	84.0
ETHANE	3.9	9.3	2.7
PROPANE	1.9	5.0	0.7
N-BUTANE	0.6	1.0	0.2
ISOBUTANE	0.5	0.8	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.7	9.0
OXYGEN	0.0	0.1	2.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.6	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1107	1199	948
SPECIFIC GRAVITY	0.623	0.707	0.646

	INDEX 2470 SAMPLE 14507	INDEX 2471 SAMPLE 14718	INDEX 2472 SAMPLE 12353
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ASSUMPTION	ASSUMPTION	ASSUMPTION
FIELD	BAYOU SHERMAN	BAYOU ST. VINCENT	GRAND BAYOU
WELL NAME	SCHOOL BOARD NO. 1-A	LABARRE-TRICHE NO. 4	O.C. LOG BLANCHARD NO. 1
LOCATION	SEC. 16, T15S, R14E	SEC. 8, T13S, R13E	SEC. 49, T12S, R13E
OWNER	EXCHANGE OIL & GAS CORP.	SUN OIL CO.	TEXACO INC.
COMPLETED	11/10/73	11/15/75	12/04/69
SAMPLED	10/14/75	07/08/76	08/12/70
FORMATION	OLIG-DISCORBIS	MIOC-CRISTELLARIA	MIOC-B-1 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15790	15051	13594
WELLHEAD PRESSURE,PSIG	5300	8941	1750
OPEN FLOW, MCFD	NOT GIVEN	5246	954
COMPONENT, MOLE PCT			
METHANE	90.5	94.2	94.4
ETHANE	4.0	3.1	3.0
PROPANE	1.9	0.9	0.9
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	0.4	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.6	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1078	1059	1056
SPECIFIC GRAVITY	0.630	0.598	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2473 SAMPLE 15595	INDEX 2474 SAMPLE 12240	INDEX 2475 SAMPLE 14629
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ASSUMPTION	ASSUMPTION	BEAUREGARD
FIELD	GRAVEYARD ISLAND	LAKE VERRET	FIELDS S
WELL NAME	MICHEIL NO. 1	STATE LEASE 4919 NO. 1	ARMS NO. 7
LOCATION	SEC. 12, T14S, R12E	T14S, R11E	SEC. 31, T6S, R12W
OWNER	TEXAS CRUDE, INC.	GENERAL CRUDE OIL CO. ET AL.	SOHIO PETROLEUM CO.
COMPLETED	11/20/78	06/08/69	02/26/75
SAMPLED	04/02/79	04/14/70	03/02/76
FORMATION	NOT GIVEN	MIOC-PLANULINA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7678	14676	11124
WELLHEAD PRESSURE,PSIG	1250	9800	4000
OPEN FLOW, MCFD	7	9600	10000
COMPONENT, MOLE PCT			
METHANE	88.6	94.4	78.1
ETHANE	4.3	2.5	11.8
PROPANE	2.1	1.0	5.5
N-BUTANE	1.0	0.2	0.8
ISOBUTANE	1.5	0.2	0.8
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.4	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	2.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1145	1054	1217
SPECIFIC GRAVITY	0.673	0.598	0.721

	INDEX 2476 SAMPLE 4045	INDEX 2477 SAMPLE 4050	INDEX 2478 SAMPLE 4747
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BEAUREGARD	BEAUREGARD	BIENVILLE
FIELD	NEALE	NEALE	BEAR CREEK
WELL NAME	KETTE NO. 1	IRA SPIERS I-5	ADVANCE NO. 1
LOCATION	SEC. 30, T3S, R10W	SEC. 26, T3S, R11W	SEC. 8, T16N, R5W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	C. H. MURPHY & CO.
COMPLETED	10/23/44	03/11/45	07/27/48
SAMPLED	05/25/45	05/25/45	05/17/49
FORMATION	EOCE-WILCOX	EOCE-WILCOX	CRET-PETTIT & SLIGO
GEOLOGIC PROVINCE CODE	220	220	230
DEPTH, FEET	10474	11172	7061
WELLHEAD PRESSURE,PSIG	1650	2600	2325
OPEN FLOW, MCFD	200	130	7300
COMPONENT, MOLE PCT			
METHANE	73.3	52.9	96.2
ETHANE	24.8	45.1	0.9
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	0.0	1.3
OXYGEN	0.0	0.0	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.9	2.0	0.8
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1187	1344	1013
SPECIFIC GRAVITY	0.696	0.797	0.579

	INDEX 2479 SAMPLE 11086	INDEX 2480 SAMPLE 5487	INDEX 2481 SAMPLE 13042
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	BEAR CREEK	BRYCELAND W	BRYCELAND W
WELL NAME	T. J. CUMMINGS NO. 2	W. H. TEASLEY NO. 1	SMITH NO. 1
LOCATION	SEC. 1, T16N, R6W	SEC. 20, T17N, R6W	SEC. 26, T17N, R7W
OWNER	SOUTHERN NATURAL GAS CO.	PAN-AM SOUTHERN CORP.	FRANKS X PETROFUNDS, INC.
COMPLETED	05/25/66	06/05/52	07/10/71
SAMPLED	08/31/67	05/21/53	09/30/71
FORMATION	JURA-COTTON VALLEY	CRET-TRAVIS PEAK	CRET-HOSSTON B
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10203	7612	8600
WELLHEAD PRESSURE,PSIG	5625	5382	4692
OPEN FLOW, MCFD	4300	16800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	95.9	91.8
ETHANE	1.6	1.7	1.5
PROPANE	0.8	0.2	0.3
N-BUTANE	0.1	TRACE	0.2
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.3	0.4	4.0
OXYGEN	0.0	TRACE	1.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	1.1	1.2
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1019	1022	971
SPECIFIC GRAVITY	0.600	0.578	0.603

	INDEX 2482 SAMPLE 10778	INDEX 2483 SAMPLE 14191	INDEX 2484 SAMPLE 14192
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	DANVILLE	DANVILLE	DANVILLE
WELL NAME	NOAH BRADLEY NO. 1	BROWN NO. 1	BROWN NO. 1-D
LOCATION	SEC. 30, T16N, R4W	SEC. 26, T14N, R5W	SEC. 26, T14N, R5W
OWNER	ARKANSAS LOUISIANA GAS CO.	SKLAR & PHILLIPS OIL CO.	SKLAR & PHILLIPS OIL CO.
COMPLETED	NOT GIVEN	06/--/74	06/--/74
SAMPLED	NOT GIVEN	10/25/74	10/25/74
FORMATION	CRET-HOSSTON	CRET-HOSSTON C	CRET-HOSSTON A
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8280	8800	8000
WELLHEAD PRESSURE,PSIG	3250	3250	2200
OPEN FLOW, MCFD	13000	60000	10000
COMPONENT, MOLE PCT			
METHANE	95.9	96.6	95.5
ETHANE	0.3	0.3	0.2
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	2.0	1.1	2.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.9	1.6
HELIUM	0.06	0.03	0.03
HEATING VALUE*	977	984	976
SPECIFIC GRAVITY	0.579	0.578	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2485 SAMPLE 13050	INDEX 2486 SAMPLE 3865	INDEX 2487 SAMPLE 16075
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	DRISCOLL	LUCKY	LUCKY
WELL NAME	DAVIS BROTHERS NO. 1	NEBO OIL CO. A-1	TOBIN NO. 1
LOCATION	SEC. 4, T16N, R4W	SEC. 11, T15N, R7W	SEC. 18, T15N, R6W
OWNER	FRANKS & PETROFUNDS INC.	PLACID OIL CO.	PLACID OIL CO.
COMPLETED	02/25/71	01/15/43	08/22/79
SAMPLED	09/30/71	09/13/44	09/22/80
FORMATION	CRET-HOSSTON	CRET-PETTIT	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8131	6834	9987
WELLHEAD PRESSURE,PSIG	2575	NOT GIVEN	4100
OPEN FLOW, MCFD	NOT GIVEN	1950	8000
COMPONENT, MOLE PCT			
METHANE	96.6	97.7	94.9
ETHANE	1.2	1.1	1.3
PROPANE	0.2	---	0.2
N-BUTANE	0.2	---	0.1
ISOBUTANE	0.0	---	0.1
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	TRACE	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.5	0.0	0.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.2	1.1	2.7
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	1017	1009	1002
SPECIFIC GRAVITY	0.582	0.571	0.597

	INDEX 2488 SAMPLE 4325	INDEX 2489 SAMPLE 14904	INDEX 2490 SAMPLE 160
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BOSSIER
FIELD	WILDCAT	WOODARDVILLE	ELM GROVE
WELL NAME	OZLEY NO. 1	T. A. MARTIN NO. 1	W. H. HODGES NO. 1
LOCATION	SEC. 13, T17N, R6W	SEC. 28, T15N, R9W	SEC. 15, T16N, R11W
OWNER	LION OIL CO.	MAY PETROLEUM, INC.	STANDARD OIL CO.
COMPLETED	05/14/47	07/23/76	02/12/20
SAMPLED	06/21/47	02/11/77	03/23/20
FORMATION	CRET-L	CRET-RODESSA	CRET-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7696	5147	2497
WELLHEAD PRESSURE,PSIG	3546	2200	580
OPEN FLOW, MCFD	50000	2651	3000
COMPONENT, MOLE PCT			
METHANE	94.2	94.3	93.5
ETHANE	3.1	1.4	3.5
PROPANE	---	0.2	---
N-BUTANE	---	0.1	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	1.2	0.7	0.3
OXYGEN	0.3	0.1	0.4
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.2	2.9	0.1
HELIUM	0.03	0.01	0.11
HEATING VALUE*	1010	1002	1010
SPECIFIC GRAVITY	0.588	0.602	0.564

	INDEX 2491 SAMPLE 162	INDEX 2492 SAMPLE 172	INDEX 2493 SAMPLE 175
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	ELM GROVE	ELM GROVE	ELM GROVE
WELL NAME	R. E. MCDADE NO. 1	A. F. MCDADE NO. 2	MCCONNELL NO. 1
LOCATION	SEC. 29, T16N, R11W	SEC. 11, T16N, R12W	SEC. 10, T16N, R11W
OWNER	STANDARD OIL CO.	STANDARD OIL CO.	ARKANSAS NATURAL GAS CO.
COMPLETED	NOT GIVEN	10/01/19	01/06/20
SAMPLED	03/02/20	03/27/20	03/27/20
FORMATION	CRET-	CRET-	CRET-TRINITY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2483	1254	2526
WELLHEAD PRESSURE,PSIG	600	380	600
OPEN FLOW, MCFD	1500	15000	7000
COMPONENT, MOLE PCT			
METHANE	93.7	96.4	97.4
ETHANE	3.1	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.7	2.6	1.8
OXYGEN	0.4	0.6	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	TRACE	0.3	0.0
HELIUM	TRACE	TRACE	0.13
HEATING VALUE*	1005	977	987
SPECIFIC GRAVITY	0.583	0.571	0.563

	INDEX 2494 SAMPLE 15279	INDEX 2495 SAMPLE 4757	INDEX 2496 SAMPLE 4819
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	ROCKY MOUNT	SAREPTA S	SAREPTA S
WELL NAME	ANTRIM ESTATE NO. 2-25	ARDIS NO. 1	ARDIS NO. 1
LOCATION	SEC. 25, T22N, R12W	SEC. 27, T22N, R11W	SEC. 27, T22N, R11W
OWNER	ARKLA EXPLORATION CO.	BARNSDALL OIL CO.	BARNSDALL OIL CO. ET AL
COMPLETED	12/08/77	07/05/49	06/05/49
SAMPLED	05/10/78	10/01/49	12/02/49
FORMATION	JURA-COTTON VALLEY	JURA-SCHULER	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9186	9155	8700
WELLHEAD PRESSURE,PSIG	3150	4492	4122
OPEN FLOW, MCFD	1400	596	10000
COMPONENT, MOLE PCT			
METHANE	79.5	77.0	77.0
ETHANE	10.4	11.7	11.5
PROPANE	4.5	5.0	5.1
N-BUTANE	1.3	1.3	1.3
ISOBUTANE	0.6	0.8	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.4	0.4
NITROGEN	0.8	1.6	2.2
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.7	1.6	1.6
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1226	1231	1214
SPECIFIC GRAVITY	0.724	0.739	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2497 SAMPLE 1973	INDEX 2498 SAMPLE 159	INDEX 2499 SAMPLE 14937
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	CADDO	CADDO
FIELD	SLIGO	CEDAR GROVE	ELM GROVE
WELL NAME	MURFF NO. 2	CHAS. DIAL NO. 2	WHITTINGTON NO. 2
LOCATION	SEC. 24, T17N, R12W	SEC. 17, T17N, R13W	SEC. 30, T16N, R12W
OWNER	LOUISIANA GAS & FUEL CO.	TEXAS CO.	ARKLA EXPLORATION CO.
COMPLETED	12/22/29	05/06/18	NOT GIVEN
SAMPLED	03/18/30	03/23/20	02/22/77
FORMATION	CRET-NACATOCH	-GUMBO	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	844	2215	8500
WELLHEAD PRESSURE,PSIG	325	60	3200
OPEN FLOW, MCFD	7200	500	600
COMPONENT, MOLE PCT			
METHANE	96.4	88.5	87.6
ETHANE	0.0	1.1	5.8
PROPANE	---	---	2.0
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	3.0	8.8	0.2
OXYGEN	0.3	1.3	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	2.6
HELIUM	0.03	TRACE	0.01
HEATING VALUE*	977	916	1108
SPECIFIC GRAVITY	0.571	0.606	0.658

	INDEX 2500 SAMPLE 15043	INDEX 2501 SAMPLE 14125	INDEX 2502 SAMPLE 1272
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CADDO	CADDO
FIELD	JOHNSON BRANCH	LONGWOOD	PINE ISLAND
WELL NAME	NORMAN G. ALEXANDER NO. 1	W.E. NOEL FEE NO. 11	NO. 43 DILLON
LOCATION	SEC. 1, T15N, R16W	SEC. 33, T19N, R16W	SEC. 13, T15N, R21W
OWNER	NORTH AMERICAN ROYALTIES INC	TEXACO INC.	DIXIE OIL CO., INC.
COMPLETED	07/01/77	02/11/74	10/--/24
SAMPLED	06/30/77	08/06/74	05/28/26
FORMATION	JURA-COTTON VALLEY	CRET-HOSSTON "B"	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9500	6011	3623
WELLHEAD PRESSURE,PSIG	3000	2300	1550
OPEN FLOW, MCFD	2000	1000	46000
COMPONENT, MOLE PCT			
METHANE	52.5	91.9	82.2
ETHANE	17.0	4.1	15.4
PROPANE	12.4	1.0	---
N-BUTANE	5.6	0.3	---
ISOBUTANE	4.0	0.3	---
N-PENTANE	1.9	0.1	---
ISOPENTANE	1.3	0.1	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	1.6	0.2	---
NITROGEN	0.0	1.4	0.6
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	3.0	0.7	1.5
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1734	1070	1109
SPECIFIC GRAVITY	1.055	0.616	0.649

	INDEX 2503 SAMPLE 1816	INDEX 2504 SAMPLE 2269	INDEX 2505 SAMPLE 4898
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CADDO	CADDO
FIELD	PINE ISLAND	RODESSA	RODESSA
WELL NAME	DILLON NO. 92	FRENCH NO. 1	FITTS NO. 5
LOCATION	SEC. 13, T21N, R15W	SEC. 34, T23N, R16W	SEC. 11, T23N, R16W
OWNER	DIXIE OIL CO., INC.	UNITED PRODUCTION CORP.	ARKLA OIL CO.
COMPLETED	NOT GIVEN	01/13/31	04/--/49
SAMPLED	07/16/29	01/15/31	04/20/50
FORMATION	NOT GIVEN	CRET-GLEN ROSE	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6125	5501	10820
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2350	4100
OPEN FLOW, MCFD	NOT GIVEN	20000	5000
COMPONENT, MOLE PCT			
METHANE	63.5	85.5	86.8
ETHANE	29.7	8.2	2.4
PROPANE	---	---	0.9
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.6
NITROGEN	5.8	4.8	6.0
OXYGEN	0.2	0.3	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	1.2	1.7
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1175	1013	1030
SPECIFIC GRAVITY	0.734	0.628	0.656

	INDEX 2506 SAMPLE 4843	INDEX 2507 SAMPLE 15534	INDEX 2508 SAMPLE 14717
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CALCASIEU	CALCASIEU
FIELD	WILDCAT	BECKWITH CREEK	CHALKLEY N
WELL NAME	ELLERBE NO. 1	LC NAVAL STORE NO. 1	F.R. HOLLAND NO. 1
LOCATION	SEC. 17, T15N, R12W	SEC. 17, T8S, R9W	SEC. 29, T11S, R6W
OWNER	PHILLIPS PETROLEUM CO.	TEXAS PACIFIC OIL CO., INC.	SUN OIL CO.
COMPLETED	05/22/49	NOT GIVEN	02/29/76
SAMPLED	02/07/50	12/07/78	07/01/76
FORMATION	CRET-KILPATRICK LIME ZONE	OLIG-NODOSARIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	9459	8730	11256
WELLHEAD PRESSURE,PSIG	2600	3725	4950
OPEN FLOW, MCFD	NOT GIVEN	20	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	80.4	89.2
ETHANE	4.3	8.5	5.3
PROPANE	1.9	5.1	2.4
N-BUTANE	0.7	1.6	0.6
ISOBUTANE	0.3	1.7	0.8
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.4	0.8	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.6	0.5	0.2
NITROGEN	0.9	0.3	0.4
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.7
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	1125	1295	1135
SPECIFIC GRAVITY	0.640	0.741	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2509 SAMPLE 16102	INDEX 2510 SAMPLE 7083	INDEX 2511 SAMPLE 4651
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	CHLOE	CHOUPIQUE	EDGERLY
WELL NAME	TOBILAR INC. NO. 1	C. O. NOBLE 3 NO. 2	KRAUSE&MANAGAN LUMBER NO. 1
LOCATION	SEC. 36, T9S, R8W	SEC. 11, T11S, R11W	SEC. 17, T9S, R11W
OWNER	MCMORAN EXPLORATION CO.	CALIFORNIA CO.	GULF OIL CO.
COMPLETED	10/07/80	05/29/59	10/12/48
SAMPLED	10/17/80	05/31/59	01/11/49
FORMATION	MIOC-HACKBERRY	OLIG-ORTEGO	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11592	9032	8620
WELLHEAD PRESSURE,PSIG	5100	4000	4063
OPEN FLOW, MCFD	2000	4044	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.1	87.9	89.0
ETHANE	5.3	4.2	9.1
PROPANE	1.4	1.5	---
N-BUTANE	0.3	0.4	---
ISOBUTANE	0.3	0.7	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	0.3	1.1	0.0
OXYGEN	0.1	0.0	0.8
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	3.5	1.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1101	1066	1065
SPECIFIC GRAVITY	0.622	0.658	0.615

	INDEX 2512 SAMPLE 13357	INDEX 2513 SAMPLE 11528	INDEX 2514 SAMPLE 11760
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	HOLMWOOD S	MANCHESTER S	MANCHESTER W
WELL NAME	PAN AM FEE NO. 1	FARMERS LAND & CANAL NO A-4	LAKE CHARLES SUGAR CO. NO. 2
LOCATION	SEC. 34, T10S, R7W	SEC. 27, T10S, R7W	SEC. 14, T10S, R8W
OWNER	MORIL OIL CORP.	COASTAL STATES GAS PROD. CO	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12406/72	09/09/66	11/08/67
SAMPLED	06/17/72	NOT GIVEN	02/10/69
FORMATION	MIOC-HACKBERRY	OLIG-HACKBERRY	-12200 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14060	12886	12200
WELLHEAD PRESSURE,PSIG	2500	7900	9400
OPEN FLOW, MCFD	5000	8600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	87.7	91.2
ETHANE	9.3	6.9	4.9
PROPANE	3.6	2.3	1.3
N-BUTANE	0.8	0.6	0.4
ISOBUTANE	1.2	0.4	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	11.7	0.3	0.2
OXYGEN	2.9	0.1	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.0	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1056	1131	1099
SPECIFIC GRAVITY	0.762	0.650	0.627

	INDEX 2515 SAMPLE 4616	INDEX 2516 SAMPLE 15620	INDEX 2517 SAMPLE 13360
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALDWELL	CALDWELL
FIELD	WILDCAT	BANK SPRINGS SW	BANKS SPRING
WELL NAME	SWEETLAKE LD: & OIL C NO. 1	PARKER NO. 1	OLINKRAFT NO. D-1
LOCATION	SEC. 34, T10S, R6W	SEC. 35, T13N, R3E	SEC. 26, T13N, R3E
OWNER	SOHIO OIL CO.	MARLIN EXPLORATION, INC.	FRANK SPOONER
COMPLETED	05/20/48	08/21/78	10/02/71
SAMPLED	11/09/48	05/15/79	08/--/72
FORMATION	OLIG-CIBICIDES HAZZARDI	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	10882	2306	2510
WELLHEAD PRESSURE,PSIG	4400	860	1020
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	420
COMPONENT, MOLE PCT			
METHANE	61.9	96.8	96.9
ETHANE	34.9	0.1	0.1
PROPANE	---	0.1	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	2.6	2.7	2.7
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	TRACE	0.03	0.03
HEATING VALUE*	1252	985	983
SPECIFIC GRAVITY	0.742	0.568	0.569

	INDEX 2518 SAMPLE 13377	INDEX 2519 SAMPLE 14142	INDEX 2520 SAMPLE 11811
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CALDWELL	CALDWELL
FIELD	CLARKS N	CLARKS S	COLUMBIA
WELL NAME	CENTRAL MINERALS NO. 1	LOUISIANA-CENTRAL NO. 11-23	OLIN NO. 1
LOCATION	SEC. 10, T12N, R3E	SEC. 23, T12N, R3E	SEC. 17, T13N, R4E
OWNER	SCOTT PRODUCTION CO., INC.	JUSTISS-MEARS OIL CO.	JAMES C. STORM CO.
COMPLETED	01/22/72	02/13/74	08/23/68
SAMPLED	09/05/72	09/06/74	04/09/69
FORMATION	EOCE-WILCOX	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	1553	2602	NOT GIVEN
WELLHEAD PRESSURE,PSIG	630	510	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	97.0	96.9
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	0.0	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	4.1	2.4	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.04	0.03	0.04
HEATING VALUE*	970	994	984
SPECIFIC GRAVITY	0.572	0.574	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2521 SAMPLE 14139	INDEX 2522 SAMPLE 15621	INDEX 2523 SAMPLE 3897
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CALDWELL	CALDWELL
FIELD	COOPER	PINEY CREEK	VIXEN
WELL NAME	HOGG NO. 1	RUSSELL NO. 2	LA. CENTRAL LMBR. CO. NO. 1
LOCATION	SEC. 31, T13N, R3E	SEC. 8, T12N, R3E	SEC. 31, T15N, R3W
OWNER	SOUTH LOUISIANA PROD. CO.	MARLIN EXPLORATION, INC.	SHELL OIL CO.
COMPLETED	04/26/78	10/27/78	NOT GIVEN
SAMPLED	08/28/78	05/15/79	09/30/44
FORMATION	EOCE-WILCOX	EOCE-WILCOX	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2494	2623	11615
WELLHEAD PRESSURE,PSIG	940	1120	3230
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5980
COMPONENT, MOLE PCT			
METHANE	97.3	97.2	87.2
ETHANE	0.1	0.1	6.0
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	2.4	2.4	0.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	6.8
HELIUM	0.03	0.03	0.03
HEATING VALUE*	987	983	991
SPECIFIC GRAVITY	0.565	0.564	0.650

	INDEX 2524 SAMPLE 7090	INDEX 2525 SAMPLE 15722	INDEX 2526 SAMPLE 12012
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CAMERON	CAMERON
FIELD	VIXEN	BACKRIDGE	BLACK BAYOU S
WELL NAME	LOUISIANA CEN. OIL & GAS FEE	J. A. DAVIS NO. 1	BROWN-DOOM NO. 4
LOCATION	SEC. 23, T15N, R2E	SEC. 26, T14S, R9W	SEC. 34, T12S, R12W
OWNER	BARNWELL DRILLING CO., INC.	PENO CREILLE OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	05/11/59	07/01/79	06/15/69
SAMPLED	05/29/59	08/15/79	08/27/69
FORMATION	CRET-RODESSA	PLIO-CLARKE	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	6597	13353	11750
WELLHEAD PRESSURE,PSIG	2668	8400	5700
OPEN FLOW, MCFD	14000	21500	10000
COMPONENT, MOLE PCT			
METHANE	85.3	89.3	88.7
ETHANE	1.1	6.3	4.5
PROPANE	0.4	1.8	2.1
N-BUTANE	0.1	0.3	0.5
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.1	0.5
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.3	0.1	0.7
NITROGEN	7.4	0.3	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.8	1.0	0.4
HELIUM	0.10	TRACE	0.01
HEATING VALUE*	932	1105	1151
SPECIFIC GRAVITY	0.658	0.632	0.662

	INDEX 2527 SAMPLE 13806	INDEX 2528 SAMPLE 3669	INDEX 2529 SAMPLE 13040
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	BLUE BUCK POINT	CAMERON	CAMERON BLK. 47W
WELL NAME	NOBLE-CRAIN NO. 2	ADOLPH HEBERT NO. 1	OCS-G-1437 NO. 1
LOCATION	T15S, R16W	SEC. 18, T12S, R8W	BLOCK 47 OFFSHORE
OWNER	TEXAS CRUDE, INC.	CONTINENTAL OIL CO.	CHEVRON OIL CO.
COMPLETED	08/04/73	09/15/43	04/02/67
SAMPLED	11/10/73	09/21/43	09/23/71
FORMATION	MIOC-8400 FT. SAND	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8435	8571	12700
WELLHEAD PRESSURE,PSIG	3100	4119	8200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	88.2	92.0
ETHANE	3.4	10.2	3.4
PROPANE	0.7	---	0.9
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.2	---	0.4
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	1.1	0.9	1.7
OXYGEN	0.1	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	1.2
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1048	1076	1046
SPECIFIC GRAVITY	0.591	0.614	0.612

	INDEX 2530 SAMPLE 12338	INDEX 2531 SAMPLE 13523	INDEX 2532 SAMPLE 12960
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON BLOCK 192 W	CAMERON BLOCK 33 E	CAMERON E
WELL NAME	OCS-0187, H-2 WELL	OCS-G-1972 NO. 2	OCS-G-0958 NO. A-1
LOCATION	NOT GIVEN	OCS-G-1972	OFFSHORE BLOCK 195
OWNER	CONTINENTAL OIL CO.	MOBIL OIL CORP.	SIGNAL OIL & GAS CO.
COMPLETED	02/24/69	01/22/72	11/23/69
SAMPLED	07/22/70	01/18/73	08/21/71
FORMATION	MIOC-MP SAND	MIOC-ROPULUS	-CP-25 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11432	10200	11846
WELLHEAD PRESSURE,PSIG	4950	3750	6000
OPEN FLOW, MCFD	80000	15000	5400
COMPONENT, MOLE PCT			
METHANE	93.1	94.9	85.0
ETHANE	3.5	2.7	4.9
PROPANE	1.1	0.8	4.4
N-BUTANE	0.3	0.1	1.0
ISOBUTANE	0.3	0.3	2.2
N-PENTANE	0.1	TRACE	0.8
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.7
NITROGEN	0.3	0.4	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1042	1053	1246
SPECIFIC GRAVITY	0.614	0.594	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2533 SAMPLE 13007	INDEX 2534 SAMPLE 4913	INDEX 2535 SAMPLE 11035
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON E BLK. 265	CAMERON W	CAMERON W
WELL NAME	OCS-0972 NO. A-2	NO. A-2	STATE LEASE 4291 NO. 1
LOCATION	OFFSHORE BLK. 265	BLK. 33, STATE LSE. NO. 1123	WEST CAMERON BLK. 49
OWNER	TEXACO INC.	PHILLIPS PETROLEUM CO.	CHEVRON OIL CO.
COMPLETED	10/21/70	01/22/50	07/07/67
SAMPLED	08/12/71	06/28/50	07/18/67
FORMATION	NOT GIVEN	PLIO-	MIOC-8700 FOOT SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8476	1665	8694
WELLHEAD PRESSURE,PSIG	3655	425	5953
OPEN FLOW, MCFD	NOT GIVEN	600	12000
COMPONENT, MOLE PCT			
METHANE	97.5	98.3	95.8
ETHANE	1.1	0.2	2.5
PROPANE	0.4	0.1	0.6
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.2	0.0	0.3
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.5	1.0	0.5
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1028	1006	1054
SPECIFIC GRAVITY	0.571	0.567	0.587

	INDEX 2536 SAMPLE 15468	INDEX 2537 SAMPLE 13094	INDEX 2538 SAMPLE 13444
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON W BLOCK 10	CAMERON W, BLOCK 28	CHENIER PERDUE
WELL NAME	STATE LEASE 6930 NO. 1	STATE LEASE 5033 NO. 1	MIAMI CORP. NO. 1
LOCATION	OFFSHORE	BLOCK 28	SEC. 10, T14S, R7W
OWNER	WAINOCO OIL & GAS CO.	OIL & GAS FUTURES, INC.	BALLARD & CORDELL CORP.
COMPLETED	08/14/78	06/30/71	01/14/72
SAMPLED	10/26/78	10/22/71	10/04/72
FORMATION	MIOC-ARREVILLE	-1400 SAND	MIOC-SIPHONINA DAVISI H
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12440	15230	9900
WELLHEAD PRESSURE,PSIG	2750	10240	5700
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	89.3	94.9	92.1
ETHANE	6.2	2.2	4.6
PROPANE	1.8	0.6	1.6
N-BUTANE	0.4	0.1	0.3
ISOBUTANE	0.5	0.1	0.6
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.7	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1120	1028	1097
SPECIFIC GRAVITY	0.640	0.595	0.615

	INDEX 2539 SAMPLE 13361	INDEX 2540 SAMPLE 13725	INDEX 2541 SAMPLE 15278
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CREOLE S	DEEP LAKE	DEEP LAKE N
WELL NAME	S. O. CARTER NO. 1	ROCKEFELLER NO. 12	MIAMI NO. 4
LOCATION	SEC. 29, T14S, R7W	SEC. 24, T16S, R4W	SEC. 15, T15S, R3W
OWNER	MCCORMICK OIL & GAS CORP.	PENNZOIL PRODUCING CO.	QUINTANA PRODUCTION CO.
COMPLETED	NOT GIVEN	02/26/73	10/08/77
SAMPLED	08/--/72	09/16/73	05/09/78
FORMATION	MIOC-PLANULINA	-15400 SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12848	16156	12300
WELLHEAD PRESSURE,PSIG	5000	6000	2400
OPEN FLOW, MCFD	1500	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	92.8	89.1	93.7
ETHANE	3.9	4.3	2.8
PROPANE	1.1	1.5	0.8
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.3	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	3.5	1.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1076	1059	1047
SPECIFIC GRAVITY	0.612	0.643	0.604

	INDEX 2542 SAMPLE 13105	INDEX 2543 SAMPLE 13010	INDEX 2544 SAMPLE 4349
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	GRAND CHENIER S	GUEYDAN W	JOHNSON BAYOU
WELL NAME	WATKINS-MILLER NO. 1	DIXIE RICE CO. NO. 1	G. J. MCMANUS NO. 1
LOCATION	SEC. 5, T15S, R5W	SEC. 1, T12S, R3W	SEC. 20, T13S, R14W
OWNER	SUPERIOR OIL CO.	TEXACO INC.	STANOLIND OIL & GAS CO.
COMPLETED	12/20/70	09/03/70	07/03/47
SAMPLED	11/04/71	09/07/71	08/22/47
FORMATION	MIOC-	-ZWAN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11150	12542	4480
WELLHEAD PRESSURE,PSIG	3968	5000	1750
OPEN FLOW, MCFD	NOT GIVEN	7400	3200
COMPONENT, MOLE PCT			
METHANE	95.7	92.7	97.2
ETHANE	2.4	3.6	2.4
PROPANE	0.7	1.4	---
N-BUTANE	0.0	0.3	---
ISOBUTANE	0.0	0.6	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	0.5	0.5	0.0
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.7	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1031	1080	1028
SPECIFIC GRAVITY	0.582	0.613	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2545 SAMPLE 16150	INDEX 2546 SAMPLE 13180	INDEX 2547 SAMPLE 15589
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	JOHNSON BAYOU	JOHNSONS BAYOU W	KINGS BAYOU
WELL NAME	9000 RA SAU.SCHUH NO. 1	F. J. PAVELL C NO. 1	E. M. STEWART NO. 1
LOCATION	SEC. 5, T15S, R14W	SEC. 15, T15S, R15W	SEC. 1, T15S, R7W
OWNER	GREAT SOUTHERN O&G CO. INC.	AMOCO PRODUCTION CO.	HOUSTON OIL & MINERALS CORP.
COMPLETED	02/13/80	12/01/71	09/30/78
SAMPLED	12/06/80	03/30/72	03/23/79
FORMATION	MIOC-	MIOC-CRISTELLARIA	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9000	9095	11580
WELLHEAD PRESSURE,PSIG	3100	3450	6800
OPEN FLOW, MCFD	400	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	90.6	90.5	89.5
ETHANE	4.5	2.6	3.6
PROPANE	1.6	0.8	0.9
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	0.6	4.3	3.5
OXYGEN	0.0	0.1	0.8
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1145	1017	1022
SPECIFIC GRAVITY	0.646	0.617	0.618

	INDEX 2548 SAMPLE 12957	INDEX 2549 SAMPLE 9628	INDEX 2550 SAMPLE 15924
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	LACASSANE	LAKE ARTHUR SW	LAKE ARTHUR SW
WELL NAME	LACASSANE CO. NO. 4-B	P. DAVID NO. 1	DIXIE RICE NO. 1
LOCATION	SEC. 8, T12S, R5W	SEC. 12, T12S, R4W	SEC. 2, T12S, R3W
OWNER	TEXAS PACIFIC OIL CO.	BRAZOS OIL & GAS CO.	AMERICAN QUASAR PET. CO.
COMPLETED	01/02/70	08/17/63	01/07/80
SAMPLED	08/20/71	10/28/64	03/14/80
FORMATION	OLIG-MARGINULINA HOWEI 2	MIOC-	-ZWAN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13421	10760	12510
WELLHEAD PRESSURE,PSIG	AA00	3775	2400
OPEN FLOW, MCFD	30000	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	88.2	92.8	89.7
ETHANE	5.2	4.1	5.3
PROPANE	2.6	1.2	2.1
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	1.1	0.3	0.9
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	0.4	0.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.3	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1131	1087	1136
SPECIFIC GRAVITY	0.655	0.610	0.645

	INDEX 2551 SAMPLE 11036	INDEX 2552 SAMPLE 10073	INDEX 2553 SAMPLE 14721
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	LAKE MISERE	LITTLE PECAN LAKE	MALLARD BAY
WELL NAME	MIAMI CORP. C NO. 1	STATE LEASE 4183 WELL NO. 1	STATE LEASE 6574 LONG NO. 1
LOCATION	SEC. 28, T13S, R5W	ROCKEFELLER REFUGE	SEC. 22, T13S, R3W
OWNER	MOBIL OIL CORP.	PAN AMERICAN PETROLEUM CORP.	TESORO PETROLEUM CORP.
COMPLETED	12/16/66	03/03/64	07/12/76
SAMPLED	07/20/67	08/20/65	07/23/76
FORMATION	MIOC-PLANULINA A	MIOC-	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10700	15000	8404
WELLHEAD PRESSURE,PSIG	6600	1100	2650
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	550000
COMPONENT, MOLE PCT			
METHANE	96.2	90.9	93.3
ETHANE	2.1	3.8	2.9
PROPANE	0.4	2.0	1.4
N-BUTANE	0.1	0.4	0.4
ISOBUTANE	0.1	0.7	0.5
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	0.3	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.5	0.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1034	1091	1077
SPECIFIC GRAVITY	0.579	0.632	0.611

	INDEX 2554 SAMPLE 13709	INDEX 2555 SAMPLE 15466	INDEX 2556 SAMPLE 15467
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	MUD LAKE E	OCEAN VIEW	OCEAN VIEW
WELL NAME	VINCENT HEIRS NO. 1	STREAM TRUST NO. 2	STREAM TRUST NO. 2
LOCATION	SEC. 16, T14S, R10W	SEC. 42, T15S, R13W	SEC. 42, T15S, R13W
OWNER	MCCORMICK OIL & GAS CORP.	WAINOCO OIL & GAS CO.	WAINOCO OIL & GAS CO.
COMPLETED	12/31/71	06/16/77	06/16/77
SAMPLED	08/--/73	10/26/78	10/26/78
FORMATION	MIOC-PLANULINA	MIOC-ABBEVILLE	MIOC-ABBEVILLE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10220	11091	11091
WELLHEAD PRESSURE,PSIG	3750	1800	1800
OPEN FLOW, MCFD	4000	3037	3037
COMPONENT, MOLE PCT			
METHANE	91.0	89.7	89.7
ETHANE	4.3	5.6	5.7
PROPANE	1.7	1.8	1.7
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.7	0.5	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.5	0.6	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.9
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1116	1109	1108
SPECIFIC GRAVITY	0.634	0.634	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2557 SAMPLE 5403	INDEX 2558 SAMPLE 13718	INDEX 2559 SAMPLE 15209
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CLAIBORNE
FIELD	PECAN LAKE S	SECOND BAYOU	ATHENS
WELL NAME	MIAMI CORP. NO. 6	JOHN W. MECOM NO. 2	JOHN FERRELL ESTATE NO. 1
LOCATION	SEC. 8, T15S, R3W	SEC. 33, T14S, R11W	SEC. 22, T20N, R7W
OWNER	PAN AMERICAN PETROLEUM CORP.	SIGNAL PETROLEUM	ICM EXPLORATION CO.
COMPLETED	12/31/52	02/10/71	NOT GIVEN
SAMPLED	02/25/53	09/11/73	02/13/78
FORMATION	MIOC-	-P-3 SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	230
DEPTH, FEET	10710	12412	NOT GIVEN
WELLHEAD PRESSURE, PSIG	3958	1400	NOT GIVEN
OPEN FLOW, MCFD	34000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.7	88.8	87.9
ETHANE	2.8	6.5	4.6
PROPANE	2.3	1.7	1.8
N-BUTANE	0.3	0.4	0.7
ISOBUTANE	0.0	0.5	0.8
N-PENTANE	0.2	0.1	0.8
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.2	1.2
NITROGEN	0.0	0.4	1.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	0.5
HELIUM	0.02	TRACE	0.03
HEATING VALUE*	1088	1109	1178
SPECIFIC GRAVITY	0.606	0.637	0.679

	INDEX 2560 SAMPLE 13119	INDEX 2561 SAMPLE 14152	INDEX 2562 SAMPLE 14926
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CLAIBORNE	CLAIBORNE	CLAIBORNE
FIELD	DYKESVILLE	OAKS	OAKS
WELL NAME	J. W. PRATHER NO. 1	MORELOCK NO. 1	WARE NO. 1
LOCATION	SEC. 7, T22N, R8W	SEC. 36, T23N, R8W	SEC. 10, T22N, R7W
OWNER	SUN OIL CO.	LONE STAR PRODUCING CO.	LYONS PETROLEUM, INC.
COMPLETED	07/--/71	07/13/73	07/07/76
SAMPLED	12/20/71	09/21/74	02/17/77
FORMATION	JURA-MCCRARY	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8720	10955	10763
WELLHEAD PRESSURE, PSIG	2440	1790	5600
OPEN FLOW, MCFD	12000	1000	1000
COMPONENT, MOLE PCT			
METHANE	63.5	84.8	85.1
ETHANE	10.9	5.1	7.7
PROPANE	5.8	2.0	2.9
N-BUTANE	1.3	0.6	0.9
ISOBUTANE	0.6	0.8	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	12.7	4.2	0.3
OXYGEN	3.0	TRACE	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.8	1.4
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1080	1077	1168
SPECIFIC GRAVITY	0.790	0.668	0.678

	INDEX 2563 SAMPLE 1951	INDEX 2564 SAMPLE 2444	INDEX 2565 SAMPLE 5486
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CLAIBORNE	CLAIBORNE	CLAIBORNE
FIELD	SUGAR CREEK	SUGAR CREEK	WILDCAT
WELL NAME	KILPATRICK NO. 1	TREADWELL HAWK NO. 1	B. M. WOODS NO. 1
LOCATION	SEC. 7, T19N, R5W	SEC. 6, T19N, R5W	SEC. 30, T22N, R8W
OWNER	TRIANGLE DRILLING CO., INC.	SUGAR CREEK SYNDICATE	PAN-AM SOUTHERN CORP. ET AL.
COMPLETED	DRILL STEM TEST	10/14/31	05/04/53
SAMPLED	03/10/30	01/03/32	05/21/53
FORMATION	NOT GIVEN	CRET-GLEN ROSE	JURA-BODCAW
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	4355	4367	8711
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1615	3000
OPEN FLOW, MCFD	NOT GIVEN	29170	1480
COMPONENT, MOLE PCT			
METHANE	85.2	83.1	95.5
ETHANE	12.6	15.3	1.8
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	1.4	0.9	0.5
OXYGEN	0.3	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.3	1.3
HELIUM	0.06	0.06	0.02
HEATING VALUE*	1089	1116	1031
SPECIFIC GRAVITY	0.629	0.638	0.587

	INDEX 2566 SAMPLE 2309	INDEX 2567 SAMPLE 4015	INDEX 2568 SAMPLE 14735
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CONCORDIA	CONCORDIA	DE SOTO
FIELD	FERRIDAY	NOT GIVEN	BENSON
WELL NAME	SAUNDERS NO. 3	BENNETT NO. 1	CLAYTON ENGLISH NO. 1
LOCATION	SEC. 42, T8, R10	SEC. 27, T9N, R10E	SEC. 2, T10N, R14W
OWNER	UNITED GAS PUBLIC SERVICE CO	CALIFORNIA CO.	TERRA RESOURCES, INC.
COMPLETED	03/15/31	NOT GIVEN	04/16/76
SAMPLED	04/07/31	NOT GIVEN	08/13/76
FORMATION	EOCE-JACKSON	NOT GIVEN	CRET-PALUXY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	1420	NOT GIVEN	3124
WELLHEAD PRESSURE, PSIG	615	NOT GIVEN	1320
OPEN FLOW, MCFD	28000	NOT GIVEN	2300
COMPONENT, MOLE PCT			
METHANE	97.1	69.9	94.0
ETHANE	0.0	26.7	2.4
PROPANE	---	---	1.1
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.7	0.8	1.3
OXYGEN	0.1	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.1	2.4	TRACE
HELIUM	0.00	TRACE	0.03
HEATING VALUE*	984	1187	1065
SPECIFIC GRAVITY	0.573	0.714	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2569 SAMPLE 15368	INDEX 2570 SAMPLE 15219	INDEX 2571 SAMPLE 4612
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	DE SOTO
FIELD	BETHANY LONGSTREET	BRUSHY BAYOU	BUTLER
WELL NAME	SURFORD NO. 1	B. E. WILBURN NO. 1	J. J. RAMBIN NO. 1
LOCATION	SEC. 18, T13N, R13N	SEC. 34, T11N, R12W	SEC. 23, T11N, R11W
OWNER	CRYSTAL OIL CO.	SUN PRODUCTION CO.	TEXAS CO.
COMPLETED	04/28/78	08/27/77	04/13/48
SAMPLED	09/11/78	03/08/78	11/08/48
FORMATION	CRET-PALUXY	CRET-PALUXY	CRET-RODESSA
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	3248	2969	4972
WELLHEAD PRESSURE,PSIG	1328	1350	2350
OPEN FLOW, MCFD	2528	557	150
COMPONENT, MOLE PCT			
METHANE	91.0	93.1	85.8
ETHANE	2.5	1.8	8.0
PROPANE	1.0	1.0	---
N-BUTANE	0.3	0.6	---
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.1	0.4	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.4	---
NITROGEN	4.2	1.8	4.3
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	1.6
HELIUM	0.03	0.03	0.08
HEATING VALUE*	1027	1088	1013
SPECIFIC GRAVITY	0.610	0.622	0.628

	INDEX 2572 SAMPLE 14611	INDEX 2573 SAMPLE 15031	INDEX 2574 SAMPLE 196
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	DE SOTO
FIELD	CASPIANA	CASPIANA	DE SOTO
WELL NAME	SUSIE B. OSBY NO. 1	OLINKRAFT NO. 2	HURD NO. 1
LOCATION	SEC. 14, T15N, R13W	SEC. 19, T15N, R13W	SEC. 12, T12N, R12W
OWNER	TENNECO OIL CO.	MAY PETROLEUM, INC.	TEXAS CO.
COMPLETED	NOT GIVEN	09/02/76	11/01/12
SAMPLED	03/12/76	06/23/77	04/10/20
FORMATION	JURA-COTTON VALLEY	CRET-RODESSA	-BLUE GAS SAND
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9142	5170	2610
WELLHEAD PRESSURE,PSIG	1500	1700	35
OPEN FLOW, MCFD	1659	1200	200000
COMPONENT, MOLE PCT			
METHANE	90.4	93.1	95.4
ETHANE	4.9	3.8	0.0
PROPANE	1.3	1.1	---
N-BUTANE	0.3	0.4	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.0	0.4	3.9
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.3	0.5	0.2
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1076	1083	966
SPECIFIC GRAVITY	0.631	0.611	0.575

	INDEX 2575 SAMPLE 15303	INDEX 2576 SAMPLE 14931	INDEX 2577 SAMPLE 15355
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	DE SOTO
FIELD	GRAND CANE	HOLLY	KINGSTON
WELL NAME	A. F. WILLIAMS NO. 1	BURFORD ESTATE NO. 1	STATE LEASE 6760 NO. 1
LOCATION	SEC. 13, T13N, R15W	SEC. 27, T14N, R14W	SEC.8, T14N, R13W
OWNER	MAY PETROLEUM, INC.	PLACID OIL CO.	TENNECO OIL CO.
COMPLETED	NOT GIVEN	09/12/76	01/06/78
SAMPLED	06/10/78	03/02/77	08/30/78
FORMATION	CRET-HOSSTON	CRET-HOSSTON	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7173	NOT GIVEN	9515
WELLHEAD PRESSURE,PSIG	1500	2700	3750
OPEN FLOW, MCFD	1220	2000	1575
COMPONENT, MOLE PCT			
METHANE	94.2	96.4	88.9
ETHANE	2.1	0.9	5.5
PROPANE	0.5	0.1	1.6
N-BUTANE	0.2	0.1	0.4
ISOBUTANE	0.1	TRACE	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	1.2	1.3	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.0	2.2
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1029	999	1092
SPECIFIC GRAVITY	0.596	0.575	0.642

	INDEX 2578 SAMPLE 15801	INDEX 2579 SAMPLE 11077	INDEX 2580 SAMPLE 4185
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	DE SOTO
FIELD	KINGSTON	MANSFIELD	SPIDER
WELL NAME	JOE E. MORAN NO. 1	NABORS N-J NO. 1	NABORS NO. 1
LOCATION	SEC. 15, T14N, R13W	SEC. 8, T12N, R13W	SEC. 28, T12N, R14W
OWNER	ENERGY RESERVES GROUP, INC.	W. J. NABORS	PHILLIPS PETROLEUM CO.
COMPLETED	12/13/77	11/08/66	07/18/46
SAMPLED	09/20/79	08/26/67	11/09/46
FORMATION	JURA-COTTON VALLEY	CRET-PETTIT	CRET-L
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9250	6532	6180
WELLHEAD PRESSURE,PSIG	3370	NOT GIVEN	2010
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	39000
COMPONENT, MOLE PCT			
METHANE	89.6	96.8	86.0
ETHANE	5.3	0.3	11.0
PROPANE	1.5	0.1	---
N-BUTANE	0.4	0.0	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	0.1	1.9	1.7
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.1	0.8	1.0
HELIUM	TRACE	0.03	0.03
HEATING VALUE*	1096	989	1060
SPECIFIC GRAVITY	0.641	0.572	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2581 SAMPLE 14534	INDEX 2582 SAMPLE 14535	INDEX 2583 SAMPLE 15913
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	E. BATON ROUGE
FIELD	WILDCAT	WILDCAT	PORT HUDSON
WELL NAME	JACKSON B. DAVIS NO. 2	JACKSON B. DAVIS NO. 2	GEORGIA PACIFIC NO. 1
LOCATION	SEC. 24, T15N, R14W	SEC. 24, T15N, R14W	SEC. 64, T4S, R2W
OWNER	MAY PETROLEUM, INC.	MAY PETROLEUM, INC.	AMOCO PRODUCING CO.
COMPLETED	11/17/75	11/17/75	12/17/77
SAMPLED	11/17/75	11/17/75	02/28/80
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	230	230	220
DEPTH, FEET	5200	6300	16616
WELLHEAD PRESSURE,PSIG	2100	2450	4925
OPEN FLOW, MCFD	1700	2100	9300
COMPONENT, MOLE PCT			
METHANE	92.1	92.7	83.7
ETHANE	3.7	3.7	4.3
PROPANE	1.3	1.1	1.7
N-BUTANE	0.4	0.3	0.5
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.2	0.4	1.7
OXYGEN	0.0	0.0	0.3
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.2	6.3
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1075	1068	1043
SPECIFIC GRAVITY	0.614	0.612	0.696

	INDEX 2584 SAMPLE 14527	INDEX 2585 SAMPLE 3698	INDEX 2586 SAMPLE 13137
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	EVANGELINE	EVANGELINE	IBERIA
FIELD	DURALDE	REDDELL	BAYOU PIGEON E
WELL NAME	PINELANDS PETROLEUM NO. 1	PARDEE NO. 3	WILLIAMS, INC. NO. 1
LOCATION	SEC. 21, T5S, R2W	SEC. 20, T4S, R2E	SEC. 10, T12S, R11E
OWNER	SKLAR & PHILLIPS, INC.	CONTINENTAL OIL CO.	GULF OIL CO. - U.S.
COMPLETED	10/12/75	11/10/43	03/05/70
SAMPLED	11/04/75	11/20/43	01/19/72
FORMATION	OLIG-FRIO	EOCE-SPARTA	OLIG-DISCORBIS 15
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7704	9960	12487
WELLHEAD PRESSURE,PSIG	2700	4779	4476
OPEN FLOW, MCFD	NOT GIVEN	160000	24500
COMPONENT, MOLE PCT			
METHANE	91.9	73.0	96.0
ETHANE	3.6	24.4	2.2
PROPANE	2.1	---	0.5
N-BUTANE	0.5	---	0.2
ISOBUTANE	0.7	---	0.1
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	0.7	0.7	0.2
OXYGEN	0.0	0.4	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	1.5	0.5
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1121	1177	1053
SPECIFIC GRAVITY	0.631	0.695	0.590

	INDEX 2587 SAMPLE 13138	INDEX 2588 SAMPLE 15184	INDEX 2589 SAMPLE 14442
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	BAYOU PIGEON E	BAYOU POSTILLION	BAYOU POSTILLION E
WELL NAME	WILLIAMS, INC. NO. 1	WILLIAMS U NO 1	E.H. PETERMAN ET AL. NO. C-2
LOCATION	SEC. 10, T12S, R11E	SEC. 28, T12S, R11E	SEC. 36, T12S, R11E
OWNER	GULF OIL CO. - U.S.	PHILLIPS PETROLEUM CO.	CHEVRON OIL CO.
COMPLETED	03/05/70	09/02/76	02/18/74
SAMPLED	01/19/72	01/07/78	08/14/75
FORMATION	OLIG-DISCORBIS 14	MIOC-DISCORBIS 10	-14800 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12420	11882	14588
WELLHEAD PRESSURE,PSIG	4459	3750	5500
OPEN FLOW, MCFD	52000	14500	13300
COMPONENT, MOLE PCT			
METHANE	96.0	94.5	94.0
ETHANE	2.3	3.2	2.6
PROPANE	0.5	0.7	0.8
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	1.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1047	1057	1047
SPECIFIC GRAVITY	0.585	0.595	0.602

	INDEX 2590 SAMPLE 14665	INDEX 2591 SAMPLE 14993	INDEX 2592 SAMPLE 14994
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	IBERIA	JEFFERSON ISLAND	JEFFERSON ISLAND
WELL NAME	DUHE NO. 2	J.L. BAYLESS NO. 1	J.L. BAYLESS NO. 1-D
LOCATION	SEC. 41, T12S, R8E	SEC. 65, T12S, R5E	SEC. 65, T12S, R5E
OWNER	ASHLAND OIL, INC.	C & K PETROLEUM, INC.	C & K PETROLEUM, INC.
COMPLETED	06/18/75	02/14/77	02/04/77
SAMPLED	04/27/76	05/04/77	05/04/77
FORMATION	MIOC-ROCHAN	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11412	13759	13381
WELLHEAD PRESSURE,PSIG	4042	5000	4960
OPEN FLOW, MCFD	1321	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.9	87.8	85.6
ETHANE	3.6	5.1	6.2
PROPANE	1.0	2.7	3.0
N-BUTANE	0.2	0.9	0.7
ISOBUTANE	0.3	0.8	0.9
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.4	0.1	1.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.6	1.9
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1068	1153	1133
SPECIFIC GRAVITY	0.600	0.669	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2593 SAMPLE 15109	INDEX 2594 SAMPLE 12413	INDEX 2595 SAMPLE 4341
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	JEFFERSON ISLAND	MOUND POINT	RABBIT ISLAND
WELL NAME	CLEVELAND DUHON NO. 1	MOUND POINT NO. 38	STATE RABBIT ISLAND NO. 10
LOCATION	SEC. 65, T12S, R5E	STATE LEASE 340, OFFSHORE	ATCHAFALAYA BAY
OWNER	C & K PETROLEUM, INC.	TEXACO INC.	TEXAS CO.
COMPLETED	07/24/77	08/01/69	06/22/47
SAMPLED	09/26/77	08/31/70	08/12/47
FORMATION	MIOC-SO2	-Y SAND, SEG. D.	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13592	12050	10545
WELLHEAD PRESSURE,PSIG	100	3500	4200
OPEN FLOW, MCFD	NOT GIVEN	5300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	92.2	83.1
ETHANE	6.6	3.0	9.5
PROPANE	3.2	1.4	---
N-BUTANE	1.0	0.2	---
ISOBUTANE	0.9	0.5	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.3	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	1.5	1.4	5.6
OXYGEN	0.0	0.0	1.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.5	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	0.7	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1170	1076	1012
SPECIFIC GRAVITY	0.685	0.620	0.636

	INDEX 2596 SAMPLE 12378	INDEX 2597 SAMPLE 12386	INDEX 2598 SAMPLE 4021
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	RABBIT ISLAND	RABBIT ISLAND	WEEKS ISLAND
WELL NAME	STATE LEASE 340 NO. 93	STATE LEASE 340 NO. 93	SMITH STATE UNIT 1 NO. 1
LOCATION	ATCHAFALAYA BAY, OFFSHORE	OFFSHORE	SEC. 13, T14S, R6E
OWNER	TEXACO INC.	TEXACO INC.	SHELL OIL CO.
COMPLETED	02/01/69	02/01/69	NOT GIVEN
SAMPLED	08/12/70	08/12/70	05/10/45
FORMATION	MIOC-NO.20 SAND, SEG. A	MIOC-NO.20 SAND, SEG. A	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11072	11072	13400
WELLHEAD PRESSURE,PSIG	4300	4300	4500
OPEN FLOW, MCFD	8800	8800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.5	94.5	84.7
ETHANE	2.8	2.9	14.4
PROPANE	1.0	0.9	---
N-BUTANE	0.3	0.2	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.5	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1068	1061	1116
SPECIFIC GRAVITY	0.602	0.596	0.633

	INDEX 2599 SAMPLE 4096	INDEX 2600 SAMPLE 5633	INDEX 2601 SAMPLE 15569
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERVILLE
FIELD	WEEKS ISLAND	GONSOULIN STATE UNIT NO. 2	GROSSE TETE
WELL NAME	SMITH-STATE UNIT 1	SEC. 41, T14S, R7E	WILBERTS "C" NO. 1
LOCATION	SEC. 13, T14S, R6E	SHELL OIL CO.	SEC. 22, T8S, R11E
OWNER	SHELL OIL CO.	10/01/53	GOLDKING PRODUCTION CO.
COMPLETED	NOT GIVEN	06/04/54	12/02/75
SAMPLED	04/25/45	MIOC-L	02/19/79
FORMATION	MIOC-	220	PENN-ROWE
GEOLOGIC PROVINCE CODE	220	17186	220
DEPTH, FEET	13551	5800	10448
WELLHEAD PRESSURE,PSIG	5000	4847	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	93.5	86.8
ETHANE	10.9	2.6	6.9
PROPANE	---	0.6	3.5
N-BUTANE	---	0.2	0.7
ISOBUTANE	---	0.2	0.7
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	3.1	1.3	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.2	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1061	1032	1175
SPECIFIC GRAVITY	0.626	0.599	0.665

	INDEX 2602 SAMPLE 3945	INDEX 2603 SAMPLE 3946	INDEX 2604 SAMPLE 16046
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERVILLE	IBERVILLE	IBERVILLE
FIELD	LAUREL RIDGE	LAUREL RIDGE	MARINGOUIN
WELL NAME	ADAM HYMEL NO. 1	C. G. ROBINSON NO. 1	E. G. HYNES ET AL NO. 1
LOCATION	SEC. 91, T10S, R13E	SEC. 91, T10S, R13E	SEC. 98, T7S, R9E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	RIO BRAVO OIL CO.
COMPLETED	07/03/44	11/20/44	08/31/78
SAMPLED	11/21/44	11/21/44	08/11/80
FORMATION	OLIG-HET LIME	OLIG-HET LIME	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10688	10620	9402
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3400
OPEN FLOW, MCFD	4449	2978	1000
COMPONENT, MOLE PCT			
METHANE	90.0	91.0	91.1
ETHANE	8.9	8.3	5.8
PROPANE	---	---	1.9
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	0.0	0.0	1.0
OXYGEN	0.3	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.5	TRACE
HELIUM	1.30	0.01	0.01
HEATING VALUE*	1071	1071	1123
SPECIFIC GRAVITY	0.608	0.601	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2605 SAMPLE 4146	INDEX 2606 SAMPLE 9158	INDEX 2607 SAMPLE 15646
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JACKSON	JACKSON	JACKSON
FIELD	CHATHAM	CHATHAM	CLEAR BRANCH
WELL NAME	TREMONT LUMBER CO. NO. 1	TREMONT A NO. 1	H. S. SMITH NO. 1
LOCATION	SEC. 22, T15N, R1W	SEC. 15, T15N, R1W	SEC. 2, T14N, R2W
OWNER	SHELL OIL CO.	PHILLIPS PETROLEUM CO.	HUNT PETROLEUM CORP.
COMPLETED	05/15/45	11/27/62	07/22/78
SAMPLED	10/31/46	11/04/63	06/12/79
FORMATION	NOT GIVEN	CRET-JAMES	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9620	6840	9828
WELLHEAD PRESSURE,PSIG	3100	2800	3900
OPEN FLOW, MCFD	150	44000	6900
COMPONENT, MOLE PCT			
METHANE	95.9	89.1	92.5
ETHANE	0.0	1.0	0.1
PROPANE	---	0.6	TRACE
N-BUTANE	---	0.2	0.0
ISOBUTANE	---	TRACE	0.0
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	0.4	8.4	1.4
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	3.2	TRACE	5.8
HELIUM	0.05	0.10	0.03
HEATING VALUE*	971	962	939
SPECIFIC GRAVITY	0.589	0.610	0.616

	INDEX 2608 SAMPLE 14447	INDEX 2609 SAMPLE 15883	INDEX 2610 SAMPLE 14555
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JACKSON	JACKSON	JACKSON
FIELD	DANVILLE	DANVILLE	KEPPLER CREEK
WELL NAME	CAN B NO. 1	HOOGE-HUNT NO. 1	L. G. STEWART NO. 1
LOCATION	SEC. 29, T14N, R4W	SEC. 30, T14N, R4W	SEC. 14, T16N, R3W
OWNER	PHILLIPS PETROLEUM CO.	JUSTISS-MEARS OIL CO.	JONES-O'BRIEN, INC.
COMPLETED	01/26/74	09/17/79	12/09/74
SAMPLED	09/02/75	01/16/80	12/--/75
FORMATION	CRET-HOSSTON	CRET-HOSSTON	CRET-JAMES
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8530	8443	6572
WELLHEAD PRESSURE,PSIG	3259	1550	1892
OPEN FLOW, MCFD	3000	1581	2008
COMPONENT, MOLE PCT			
METHANE	94.1	95.1	84.9
ETHANE	0.2	0.2	0.9
PROPANE	TRACE	0.1	0.3
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	3.0	2.4	8.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	2.1	5.0
HELIUM	0.08	0.05	0.09
HEATING VALUE*	957	970	900
SPECIFIC GRAVITY	0.593	0.587	0.650

	INDEX 2611 SAMPLE 13157	INDEX 2612 SAMPLE 13168	INDEX 2613 SAMPLE 12947
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON	JEFFERSON	JEFFERSON DAVIS
FIELD	GOOD HOPE E	GRAND ISLE BLOCK 25	BON AIR
WELL NAME	UNIV. CITY SUBDIVISION NO. 1	STATE LEASE 5015 NO. 1	E. MALLETT NO. 1
LOCATION	SEC. 11, T12S, R9E	GRAND ISLE	SEC. 21, T10S, R6W
OWNER	DAMSON EXPLORATION CORP.	HUNT OIL CO.	AUSTRAL GAS CO.
COMPLETED	08/01/70	11/05/71	04/06/70
SAMPLED	02/--/72	03/12/72	08/11/71
FORMATION	-UNIV. SAND	MIOC-Y SERIES	OLIG-HACKBERRY M
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9544	20440	11958
WELLHEAD PRESSURE,PSIG	3000	9000	5980
OPEN FLOW, MCFD	4500	5100	55000
COMPONENT, MOLE PCT			
METHANE	93.4	92.7	77.8
ETHANE	1.4	2.5	6.3
PROPANE	1.0	1.7	5.7
N-BUTANE	0.3	0.4	1.8
ISOBUTANE	0.5	0.4	2.9
N-PENTANE	0.2	0.1	0.8
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.2	TRACE	0.2
HEXANES PLUS	0.4	0.1	0.6
NITROGEN	1.9	0.6	2.4
OXYGEN	0.3	TRACE	0.3
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.4	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1065	1069	1297
SPECIFIC GRAVITY	0.614	0.618	0.773

	INDEX 2614 SAMPLE 13882	INDEX 2615 SAMPLE 3830	INDEX 2616 SAMPLE 12303
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	BON AIR N	LAKE ARTHUR	LAKE ARTHUR S
WELL NAME	EUGENE LEBLANC NO. 1	J. STURDIVANT NO. 4	J. T. FERGUSON NO. 1
LOCATION	SEC. 1, T10S, R6W	SEC. 35, T10S, R4W	SEC. 13, T11S, R3W
OWNER	AMOCO PRODUCTION CO.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	06/13/73	04/26/44	02/02/70
SAMPLED	01/28/74	05/15/44	06/17/70
FORMATION	OLIG-HACKBERRY	NOT GIVEN	MIOC-ALLIANCE SEG. A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12300	11348	11953
WELLHEAD PRESSURE,PSIG	7600	5400	3180
OPEN FLOW, MCFD	7500	5000	7329
COMPONENT, MOLE PCT			
METHANE	92.2	80.6	91.0
ETHANE	4.7	14.0	4.2
PROPANE	1.4	---	1.9
N-BUTANE	0.2	---	0.4
ISOBUTANE	0.3	---	0.8
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.4
NITROGEN	0.4	4.4	0.6
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.6	0.2
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1076	1067	1120
SPECIFIC GRAVITY	0.611	0.650	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2617 SAMPLE 15166		INDEX 2618 SAMPLE 6049		INDEX 2619 SAMPLE 3810	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	JEFFERSON DAVIS		JEFFERSON DAVIS		JEFFERSON DAVIS	
FIELD	THORNWELL		THORNWELL S		WELSH	
WELL NAME	J.M. PETITJEAN NO. 1		EDDIE BENOIT NO. 1		W. L. TRIMBLE NO. 1	
LOCATION	SEC. 15, T11S, R4W		SEC. 25, T11S, R5W		SEC. 16, T9S, R5W	
OWNER	ANSCHUTZ CORP.		PAN AMERICAN PETROLEUM CORP.		STANOLIND OIL & GAS CO.	
COMPLETED	11/01/76		05/08/55		07/05/43	
SAMPLED	12/08/77		05/07/56		04/16/44	
FORMATION	MIOC-		OLIG-BENOIT		OLIG-M	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	15744		12778		8838	
WELLHEAD PRESSURE,PSIG	5600		7500		3500	
OPEN FLOW, MCFD	3700		NOT GIVEN		19000	
COMPONENT, MOLE PCT						
METHANE	87.3		70.7		85.0	
ETHANE	6.0		14.3		9.4	
PROPANE	2.3		7.2		---	
N-BUTANE	0.5		1.7		---	
ISOBUTANE	0.5		2.5		---	
N-PENTANE	0.2		0.3		---	
ISOPENTANE	0.2		0.7		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	0.3		0.4		---	
NITROGEN	0.1		0.0		4.8	
OXYGEN	0.0		0.1		0.3	
ARGON	TRACE		0.0		---	
HYDROGEN	0.0		TRACE		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	2.7		2.1		0.5	
HELIUM	TRACE		0.03		0.00	
HEATING VALUE*	1118		1368		1030	
SPECIFIC GRAVITY	0.665		0.814		0.627	

	INDEX 2620 SAMPLE 4824		INDEX 2621 SAMPLE 10417		INDEX 2622 SAMPLE 15622	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	JEFFERSON DAVIS		LA SALLE		LAFAYETTE	
FIELD	WELSH N		OLLA		ANSELM COULEE	
WELL NAME	R. A. ESTES NO. 1		URANIA LUMBER CO. NO. E-2		E. RICHARD NO. 1	
LOCATION	SEC. 11, T9S, R5W		SEC. 10, T10N, R2E		SEC. 10, T11S, R4E	
OWNER	CONTINENTAL OIL CO.		PLACID OIL CO.		REB PETROLEUM CO.	
COMPLETED	08/05/49		09/30/65		05/14/79	
SAMPLED	11/30/49		02/24/66		05/10/79	
FORMATION	OLIG-HACKBERRY		EOCE-WILCOX		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		230		220	
DEPTH, FEET	11263		2482		12694	
WELLHEAD PRESSURE,PSIG	4873		1100		6015	
OPEN FLOW, MCFD	1580		650		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	93.3		97.0		89.1	
ETHANE	3.7		0.2		6.2	
PROPANE	1.1		0.0		2.3	
N-BUTANE	0.3		0.0		0.5	
ISOBUTANE	0.2		0.0		0.5	
N-PENTANE	0.1		0.0		0.2	
ISOPENTANE	0.2		0.0		0.1	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.2	
NITROGEN	0.4		2.5		0.3	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.6		0.3		0.5	
HELIUM	TRACE		0.03		TRACE	
HEATING VALUE*	1070		986		1130	
SPECIFIC GRAVITY	0.605		0.569		0.640	

	INDEX 2623 SAMPLE 10039		INDEX 2624 SAMPLE 11634		INDEX 2625 SAMPLE 14253	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	LAFAYETTE		LAFAYETTE		LAFAYETTE	
FIELD	CADE		MAURICE N		PARCPERDUE N	
WELL NAME	BROUSSARD PLANT, INC. NO. 1		J. M. BROUSSARD NO. 1		GUIDRY NO. 1	
LOCATION	SEC. 3, T11S, YOUNGSVILLE E		SEC. 19, T10S, R4E		SEC. 23, T11S, R4E	
OWNER	SUPERIOR OIL CO.		EDWIN L. COX		PHILLIPS PETROLEUM CO.	
COMPLETED	08/19/64		08/05/67		06/12/74	
SAMPLED	08/04/65		NOT GIVEN		01/03/75	
FORMATION	OLIG-MARTEX		OLIG-MARGINULINA TEXANA		OLIG-CAMERINA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	15155		13076		15735	
WELLHEAD PRESSURE,PSIG	7725		9900		8900	
OPEN FLOW, MCFD	NOT GIVEN		6500		52000	
COMPONENT, MOLE PCT						
METHANE	93.7		91.3		87.0	
ETHANE	3.0		4.7		6.5	
PROPANE	1.3		1.3		2.9	
N-BUTANE	0.3		0.5		0.5	
ISOBUTANE	0.2		0.2		1.2	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.1		0.4		0.1	
NITROGEN	0.2		0.4		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		0.8		1.0	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1067		1107		1148	
SPECIFIC GRAVITY	0.607		0.631		0.660	

	INDEX 2626 SAMPLE 8187		INDEX 2627 SAMPLE 13919		INDEX 2628 SAMPLE 13731	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	LAFAYETTE		LAFOURCHE		LAFOURCHE	
FIELD	#ILDCAT		BAY LIZETTE		BAYOU RAPHAEL	
WELL NAME	C. R. MAYER NO. 1		STATE LEASE 5918 NO. 1		ALTA F. STONE ETAL NO. 1	
LOCATION	SEC. 24, T9, R32		SEC. 11, T21S, R23E		SEC. 45, T19S, R22E	
OWNER	KELLY OIL CO.		ATLANTIC RICHFIELD CO.		NORTHCOTT EXPLORATION CO.	
COMPLETED	05/19/61		06/24/73		06/19/73	
SAMPLED	09/05/61		02/04/74		09/19/73	
FORMATION	NOT GIVEN		MIOC-TEXTULARIA "L"-1		-STONE	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	13493		14495		1687	
WELLHEAD PRESSURE,PSIG	8420		5234		735	
OPEN FLOW, MCFD	200000		NOT GIVEN		187	
COMPONENT, MOLE PCT						
METHANE	89.7		96.8		99.3	
ETHANE	4.6		1.1		TRACE	
PROPANE	2.2		0.2		0.1	
N-BUTANE	0.5		0.1		0.0	
ISOBUTANE	0.7		0.0		0.0	
N-PENTANE	0.1		0.0		0.0	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	0.1		0.0		0.0	
NITROGEN	0.6		0.8		0.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.6		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		1.0		0.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1109		1009		1008	
SPECIFIC GRAVITY	0.633		0.576		0.558	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2629 SAMPLE 3812	INDEX 2630 SAMPLE 10094	INDEX 2631 SAMPLE 15935
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	BULLY CAMP	CHEGBY	CUT OFF
WELL NAME	DELTA SECURITIES CO. NO. 1	CRISTELLARIA A SUA BOWIE 1-A	E. P. BRAND NO. 1
LOCATION	SEC. 1, T19S, R22E	SEC. 6, T14S, R17E	SEC. 3, T18S, R21E
OWNER	GULF OIL CO.	TEXAS PACIFIC OIL CO.	MCALESTER FUEL CO.
COMPLETED	11/11/42	03/06/64	12/28/78
SAMPLED	04/18/44	09/02/65	04/10/80
FORMATION	MIOC-	-CRISTELLARIA	MIOC-UL-2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	996	12040	13867
WELLHEAD PRESSURE,PSIG	200	6150	9160
OPEN FLOW, MCFD	NOT GIVEN	7600	200000
COMPONENT, MOLE PCT			
METHANE	94.0	92.9	94.9
ETHANE	0.2	4.0	2.9
PROPANE	---	1.4	0.7
N-BUTANE	---	0.3	0.2
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	5.1	0.3	0.3
OXYGEN	0.4	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.5
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	956	1083	1059
SPECIFIC GRAVITY	0.582	0.610	0.594

	INDEX 2632 SAMPLE 14241	INDEX 2633 SAMPLE 13370	INDEX 2634 SAMPLE 12944
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	GOLDEN MEADOW	GRAND ISLE BLOCK 25	GRAND ISLE-OFFSHORE
WELL NAME	SL378 CATFISH LAKE NO. 101	STATE LEASE 3523 NO. 6	STATE LEASE 3523 NO. 5
LOCATION	SEC. 3, T20S, R21E	GRAND ISLE BLOCK 25	GRAND ISLE BLOCK NO. 25
OWNER	TEXACO INC.	HUNT OIL CO.	HUNT OIL CO.
COMPLETED	11/13/74	03/12/72	06/11/70
SAMPLED	12/06/74	08/31/72	08/05/71
FORMATION	MIOC-	MIOC-	MIOC-X-SERIES
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10286	18480	17948
WELLHEAD PRESSURE,PSIG	1800	3550	5100
OPEN FLOW, MCFD	518000	5000	1500
COMPONENT, MOLE PCT			
METHANE	93.8	92.6	96.1
ETHANE	2.9	3.4	1.0
PROPANE	1.2	1.1	0.6
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.3	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.8	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1086	1057	1034
SPECIFIC GRAVITY	0.611	0.614	0.591

	INDEX 2635 SAMPLE 14565	INDEX 2636 SAMPLE 15747	INDEX 2637 SAMPLE 15208
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	JOE MCHUGH	LAKE BOEUF	LAKE BOEUF SW
WELL NAME	ARMAND BOURG ETAL NO. 1	SABINE ROYALTY CORP. NO. 1	LAUREL VALLEY PLAN NO. 1
LOCATION	SEC. 37, T15S, R20E	SEC. 29, T15S, R18E	SEC. 51, T15S, R17E
OWNER	AMOCO PRODUCTION CO.	MCMORAN EXPLORATION CO.	R. L. BURNS OIL & GAS CORP.
COMPLETED	02/19/75	05/--/78	NOT GIVEN
SAMPLED	03/26/75	09/12/79	02/13/78
FORMATION	MIOC-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11788	9510	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5100	3100	4200
OPEN FLOW, MCFD	NOT GIVEN	650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.3	93.6	86.7
ETHANE	4.4	2.9	5.6
PROPANE	1.7	1.2	3.2
N-BUTANE	0.3	0.3	0.9
ISOBUTANE	0.5	0.4	1.1
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	0.4	0.7	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1103	1086	1183
SPECIFIC GRAVITY	0.618	0.611	0.678

	INDEX 2638 SAMPLE 13200	INDEX 2639 SAMPLE 14114	INDEX 2640 SAMPLE 14140
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	LEEVILLE	RACCOON LAKE	RACCOON LAKE
WELL NAME	LL&E NO. 44	STATE LEASE 6052 NO. 1	FASTERLING NO. 9
LOCATION	SEC. 13, T21S, R22E	SEC. 20, T21S, R24E	SEC. 20, T21S, R24E
OWNER	TEXACO INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	05/05/72	01/29/74	NOT GIVEN
SAMPLED	05/04/72	01/30/74	07/22/74
FORMATION	PLIO-1900 FT. SAND	MIOC-TEXT L6	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1908	15178	NOT GIVEN
WELLHEAD PRESSURE,PSIG	810	5200	750
OPEN FLOW, MCFD	0	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	99.4	87.5	92.0
ETHANE	TRACE	3.0	3.0
PROPANE	TRACE	2.9	1.7
N-BUTANE	TRACE	0.8	0.3
ISOBUTANE	TRACE	2.0	0.6
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	0.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	2.4	1.5
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1007	1140	1078
SPECIFIC GRAVITY	0.555	0.680	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2641 SAMPLE 13348	INDEX 2642 SAMPLE 13349	INDEX 2643 SAMPLE 15115
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	STATE LEASE 3088	TIMBALIER BAY	VALENTINE NE
WELL NAME	STATE LEASE 3088 NO. 11	STATE LEASE 3088 NO. 12	D. V. DOUSSEN, O&PLNTG NO. 1
LOCATION	TIMBALIER BAY	TIMBALIER BAY	SEC 100, T17S, R20E
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	SUPERIOR OIL CO.
COMPLETED	02/23/71	11/28/71	07/27/76
SAMPLED	08/09/72	08/09/72	09/07/77
FORMATION	NOT GIVEN	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2912	2295	12338
WELLHEAD PRESSURE,PSIG	1200	900	NOT GIVEN
OPEN FLOW, MCFD	2650	3000	2014
COMPONENT, MOLE PCT			
METHANE	99.3	99.3	96.1
ETHANE	0.1	0.1	1.4
PROPANE	0.1	TRACE	0.5
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1010	1008	1039
SPECIFIC GRAVITY	0.559	0.558	0.588

	INDEX 2644 SAMPLE 15850	INDEX 2645 SAMPLE 4713	INDEX 2646 SAMPLE 15711
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	CLAY	HICO-KNOWLES	HICO-KNOWLES
WELL NAME	BENNETT NO.1	T. L. MCCRARY UNIT B-31	RAY E. UPCHURCH NO. 1
LOCATION	SEC. 2, T12N,R3W	SEC. 14, T19N, R4W	SEC. 7, T19N, R3W
OWNER	ARKLA EXPLORATION CO.	CALIFORNIA CO.	I.M.C. EXPLORATION CO.
COMPLETED	06/18/79	10/13/48	03/08/79
SAMPLED	12/06/79	01/14/49	07/25/79
FORMATION	CRET-HOSSTON	JURA-COTTON VALLEY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8189	8910	9466
WELLHEAD PRESSURE,PSIG	3375	3223	4800
OPEN FLOW, MCFD	2300	14500	500
COMPONENT, MOLE PCT			
METHANE	96.0	78.4	86.3
ETHANE	0.8	9.6	7.2
PROPANE	0.1	4.5	2.7
N-BUTANE	0.1	1.2	0.6
ISOBUTANE	TRACE	0.6	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.2	2.5	0.5
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.6	2.5	1.5
HELIUM	0.04	0.01	0.01
HEATING VALUE*	998	1173	1138
SPECIFIC GRAVITY	0.583	0.726	0.662

	INDEX 2647 SAMPLE 12837	INDEX 2648 SAMPLE 5106	INDEX 2649 SAMPLE 3851
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	MIDDLE FORK	NOT GIVEN	RUSTON
WELL NAME	RESER NO. 1	BURFORD NO. 1	W. F. JILES NO. 1
LOCATION	SEC. 2, T20N, R3W	SEC. 11, T17N, R4W	SEC. 19, T19N, R2W
OWNER	CRYSTAL OIL CO.	PAN AMERICAN SOUTHERN CORP.	ARKANSAS-LOUISIANA GAS CO.
COMPLETED	01/14/71	06/09/51	10/26/43
SAMPLED	05/24/71	09/26/51	03/20/44
FORMATION	JURA-SMACKOVER	CRET-GARDNER	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10775	6533	5878
WELLHEAD PRESSURE,PSIG	A50	2221	2350
OPEN FLOW, MCFD	300000	7300	84000
COMPONENT, MOLE PCT			
METHANE	81.8	96.6	93.8
ETHANE	5.1	1.0	1.5
PROPANE	0.0	0.2	---
N-BUTANE	5.0	0.1	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	2.7	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.4	0.0	---
NITROGEN	1.7	1.0	3.5
OXYGEN	0.0	TRACE	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.3	0.9	0.6
HELIUM	0.02	0.03	0.09
HEATING VALUE*	1225	1011	977
SPECIFIC GRAVITY	0.757	0.577	0.584

	INDEX 2650 SAMPLE 3910	INDEX 2651 SAMPLE 4775	INDEX 2652 SAMPLE 4776
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	RUSTON	RUSTON	RUSTON
WELL NAME	J. C. DOWLING NO. 1	DOWLING UNIT NO. 2-T	DOWLING UNIT NO. 2-C
LOCATION	SEC. 30, T19N, R2W	SEC. 30, T19N, R2W	SEC. 30, T19N, R2W
OWNER	ARKANSAS-LOUISIANA GAS CO.	ARKANSAS-LOUISIANA GAS CO.	ARKANSAS-LOUISIANA GAS CO.
COMPLETED	05/25/44	01/17/49	01/17/49
SAMPLED	12/14/44	06/19/49	06/19/49
FORMATION	CRET-PETTIT	JURA-	JURA-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5312	8760	8674
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3284	4011
OPEN FLOW, MCFD	NOT GIVEN	26000	8000
COMPONENT, MOLE PCT			
METHANE	94.9	92.3	87.5
ETHANE	0.5	3.1	6.5
PROPANE	---	1.0	2.4
N-BUTANE	---	0.4	0.7
ISOBUTANE	---	0.0	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	3.4	1.6	0.4
OXYGEN	0.2	TRACE	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	1.1	1.6
HELIUM	0.09	0.03	0.01
HEATING VALUE*	970	1049	1127
SPECIFIC GRAVITY	0.580	0.611	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2653 SAMPLE 10082	INDEX 2654 SAMPLE 10083	INDEX 2655 SAMPLE 14158
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	RUSTON	RUSTON	RUSTON
WELL NAME	M HOSS SUB, GILES NO. 4-D	L HOSS SUB, GILES NO. 4	PAUL E. BLACKMOND NO. 1
LOCATION	SEC. 19, T19N, R2W	SEC. 19, T19N, R2W	SEC. 1, T1AN, R2W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS-LOUSIANA GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	04/15/65	04/15/64	07/06/73
SAMPLED	08/26/65	08/26/65	10/24/74
FORMATION	CRET-HOSSTON	CRET-HOSSTON	JURA-BODCAW
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6703	7918	9320
WELLHEAD PRESSURE,PSIG	2700	3100	3000
OPEN FLOW, MCFD	2400	2300	6000
COMPONENT, MOLE PCT			
METHANE	96.0	94.2	86.9
ETHANE	1.3	2.2	5.3
PROPANE	0.6	0.7	1.9
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.1	0.7	1.2
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.6	2.9
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1023	1028	1081
SPECIFIC GRAVITY	0.582	0.598	0.659

	INDEX 2656 SAMPLE 5105	INDEX 2657 SAMPLE 5107	INDEX 2658 SAMPLE 5108
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	SIMSBORO	SIMSBORO	SIMSBORO
WELL NAME	GIVINS NO. 1	GIVINS NO. 2	GIVINS NO. 3
LOCATION	SEC. 11, T17N, R4W	SEC. 2, T17N, R4W	SEC. 2, T17N, R4W
OWNER	PAN AMERICAN SOUTHERN CORP.	PAN AMERICAN SOUTHERN CORP.	PAN AMERICAN SOUTHERN CORP.
COMPLETED	03/03/51	03/31/51	06/27/51
SAMPLED	09/26/51	09/26/51	09/26/51
FORMATION	CRET-JAMES	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5698	5434	7946
WELLHEAD PRESSURE,PSIG	2175	2449	3134
OPEN FLOW, MCFD	36200	4400	16500
COMPONENT, MOLE PCT			
METHANE	89.9	90.5	94.4
ETHANE	0.9	1.0	2.4
PROPANE	0.3	0.3	0.7
N-BUTANE	0.0	0.2	0.4
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	7.6	7.1	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.3	1.2
HELIUM	0.09	0.09	0.02
HEATING VALUE*	943	964	1050
SPECIFIC GRAVITY	0.604	0.604	0.601

	INDEX 2659 SAMPLE 5109	INDEX 2660 SAMPLE 5137	INDEX 2661 SAMPLE 9210
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	SIMSBORO	SIMSBORO	TERRYVILLE
WELL NAME	GIVINS NO. 3	GIVINS NO. 2	GALLOWAY UNIT
LOCATION	SEC. 2, T17N, R4W	SEC. 2, T17N, R4W	SEC. 17, T19N, R4W
OWNER	PAN AMERICAN SOUTHERN CORP.	PAN AMERICAN SOUTHERN CORP.	CROW ORLG. & PROD. CO. ET AL
COMPLETED	06/27/51	03/31/51	03/31/62
SAMPLED	09/26/51	01/16/52	12/18/63
FORMATION	CRET-GARDNER	CRET-RODESSA	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6570	5434	9354
WELLHEAD PRESSURE,PSIG	1700	2449	4000
OPEN FLOW, MCFD	8000	4400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	90.6	82.6
ETHANE	1.0	0.9	9.2
PROPANE	0.3	0.3	3.8
N-BUTANE	0.1	0.2	1.1
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	0.9	7.1	0.3
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.1	0.2	1.8
HELIUM	0.03	0.09	0.01
HEATING VALUE*	1011	969	1184
SPECIFIC GRAVITY	0.580	0.604	0.696

	INDEX 2662 SAMPLE 15712	INDEX 2663 SAMPLE 9529	INDEX 2664 SAMPLE 15475
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	NATCHITOCHES	NATCHITOCHES
FIELD	TERRYVILLE	BLACK LAKE	DEMERY CREEK
WELL NAME	LORAINE HOWARD ESTATE NO. 1	EDENBORN, INC. NO. 3	MARTIN LBR. CO. NO. 1
LOCATION	SEC. 32, T19N, R4W	SEC. 11, T11N, R6W	SEC. 3, T12N, R7W
OWNER	I.M.C. EXPLORATION CO.	PLACID OIL CO.	BODCAW CO.
COMPLETED	10/26/78	06/23/64	02/11/78
SAMPLED	07/25/79	08/05/64	10/31/78
FORMATION	CRET-HOSSTON	CRET-PETTIT	CRET-PALUXY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9367	8000	3817
WELLHEAD PRESSURE,PSIG	3600	3060	1615
OPEN FLOW, MCFD	250	14000	414
COMPONENT, MOLE PCT			
METHANE	86.2	82.3	90.8
ETHANE	3.4	3.9	1.3
PROPANE	1.7	4.3	0.6
N-BUTANE	0.5	1.1	0.2
ISOBUTANE	1.5	TRACE	0.2
N-PENTANE	0.8	0.4	0.1
ISOPENTANE	0.8	0.1	0.1
CYCLOPENTANE	0.4	TRACE	TRACE
HEXANES PLUS	2.4	0.2	0.1
NITROGEN	0.4	1.6	6.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	6.0	0.1
HELIUM	0.02	0.04	0.07
HEATING VALUE*	1252	1084	990
SPECIFIC GRAVITY	0.734	0.713	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2665 SAMPLE 15090	INDEX 2666 SAMPLE 9201	INDEX 2667 SAMPLE 15143
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	NATCHITOCHES	OUACHITA	CALHOUN
FIELD	GROGAN	CADEVILLE SW	BRIMBERRY GAS UNIT NO. 1
WELL NAME	MARTIN NO. A-1	GOLSON NO. 1	MITCHELL ENERGY CORP.
LOCATION	SEC. 28, T11N, R10W	SEC. 27, T17N, R1E	SEC. 7, T17N, R1E
OWNER	PHILLIPS PETROLEUM CO.	SINCLAIR OIL & GAS CO.	04/27/77
COMPLETED	08/09/76	02/01/62	11/09/77
SAMPLED	09/05/77	01/10/64	JURA-CADEVILLE
FORMATION	JURA-SMACKOVER	JURA-COTTON VALLEY	230
GEOLOGIC PROVINCE CODE	230	230	9580
DEPTH, FEET	13282	10056	6000
WELLHEAD PRESSURE,PSIG	8300	4700	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1850	
COMPONENT, MOLE PCT			
METHANE	93.7	96.1	77.2
ETHANE	0.1	1.2	8.2
PROPANE	0.1	0.6	5.5
N-BUTANE	0.1	0.0	2.5
ISOBUTANE	0.0	0.0	1.6
N-PENTANE	0.1	0.0	1.0
ISOPENTANE	0.1	0.0	1.0
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.7
NITROGEN	0.1	0.2	0.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	5.4	1.9	1.5
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	975	1011	1335
SPECIFIC GRAVITY	0.619	0.586	0.788

	INDEX 2668 SAMPLE 13759	INDEX 2669 SAMPLE 14676	INDEX 2670 SAMPLE 14858
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	DREW	DREW S	DREW S
WELL NAME	R.W. WILLIAMS NO. 1	MONROE SD. & GRAVEL NO. 1	J. MCINTOSH NO. 1
LOCATION	SEC. 22, T18N, R2E	SEC. 6, T17N, R3E	SEC. 19, T18N, R2E
OWNER	FRANKS PETROLEUM, INC.	JUSTISS-MEARS OIL CO., INC.	FRANKS PETROLEUM, INC.
COMPLETED	07/13/72	10/06/75	NOT GIVEN
SAMPLED	10/17/73	05/11/76	11/12/76
FORMATION	JURA-COTTON VALLEY	JURA-COTTON VALLEY	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9065	9551	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4000	3150	NOT GIVEN
OPEN FLOW, MCFD	7500	1960	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.9	79.2	89.1
ETHANE	3.7	8.1	4.4
PROPANE	1.2	3.0	1.5
N-BUTANE	0.2	0.7	0.5
ISOBUTANE	0.3	0.6	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.5	1.1	0.7
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	6.4	3.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1055	1110	1062
SPECIFIC GRAVITY	0.616	0.730	0.643

	INDEX 2671 SAMPLE 15223	INDEX 2672 SAMPLE 15474	INDEX 2673 SAMPLE 1406
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	MILLHAVEN	MILLHAVEN	MONROE
WELL NAME	FATHREE NO. 1	B. RYHMES NO. 1	FUDICKER NO. 1
LOCATION	SEC. 14, T17N, R4E	SEC. 22, T17N, R4E	SEC. 13, T18N, R4E
OWNER	JUSTISS-MEARS OIL CO., INC.	JUSTISS-MEARS OIL CO., INC.	J. M. HUBER CO.
COMPLETED	10/15/77	10/17/78	NOT GIVEN
SAMPLED	03/12/78	10/17/78	06/20/27
FORMATION	CRET-HOSSTON	CRET-HOSSTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6633	5517	2206
WELLHEAD PRESSURE,PSIG	2675	2325	NOT GIVEN
OPEN FLOW, MCFD	825	750	1066
COMPONENT, MOLE PCT			
METHANE	93.2	93.2	80.3
ETHANE	0.9	0.9	10.7
PROPANE	0.2	0.2	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	TRACE	0.1	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	4.2	3.3	8.4
OXYGEN	TRACE	0.1	0.6
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	1.8	0.0
HELIUM	0.08	0.08	0.07
HEATING VALUE*	978	978	1005
SPECIFIC GRAVITY	0.591	0.597	0.645

	INDEX 2674 SAMPLE 1408	INDEX 2675 SAMPLE 4332	INDEX 2676 SAMPLE 5267
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	MONROE	MONROE	SWARTZ AREA
WELL NAME	PEERLESS NO. 1	FEE 152 NO. 1	BREECE LUMBER CO. NO. 1
LOCATION	SEC. 28, T19N, R5E	SEC. 4, T18N, R4E	SEC. 3, T18N, R5E
OWNER	PEERLESS CARBON CO.	UNION PRODUCING CO.	MONLA GAS CO.
COMPLETED	NOT GIVEN	06/09/47	01/06/52
SAMPLED	07/12/27	07/31/47	07/10/52
FORMATION	CRET-MONROE	CRET-U	JURA-BODCAW
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2219	2160	7345
WELLHEAD PRESSURE,PSIG	NOT GIVEN	335	3437
OPEN FLOW, MCFD	1472	1743	30000
COMPONENT, MOLE PCT			
METHANE	79.2	91.7	91.5
ETHANE	15.8	1.5	3.0
PROPANE	---	---	0.9
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	2.9	6.3	3.3
OXYGEN	1.6	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.3	0.5
HELIUM	0.09	0.11	0.06
HEATING VALUE*	1085	956	1029
SPECIFIC GRAVITY	0.660	0.591	0.608

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2677 SAMPLE 4712	INDEX 2678 SAMPLE 13848	INDEX 2679 SAMPLE 13851
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	PLAQUEMINES	PLAQUEMINES
FIELD	WILDCAT	BASTIAN BAY	BASTIAN BAY
WELL NAME	BREECE L&R, CO. NO. 2	FASTERLING 9 WEN NO. 9	DISC 12-SUA-FEE B NO. 1
LOCATION	SEC. 30, T17N, R5E	NOT GIVEN	NOT GIVEN
OWNER	CALIFORNIA CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/28/48	NOT GIVEN	NOT GIVEN
SAMPLED	07/09/49	12/26/73	12/26/73
FORMATION	CRET-L	MIOC-9200 FT. SAND	OLIG-DISCORBIS
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	5232	9328	10008
WELLHEAD PRESSURE,PSIG	2200	1000	2750
OPEN FLOW, MCFD	2240	1000	6000
COMPONENT, MOLE PCT			
METHANE	92.8	94.3	94.7
ETHANE	0.9	2.6	2.4
PROPANE	0.1	1.3	1.1
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.0	0.4	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	3.9	0.5	0.6
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	0.2	0.2
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	965	1085	1077
SPECIFIC GRAVITY	0.604	0.608	0.604

	INDEX 2680 SAMPLE 13846	INDEX 2681 SAMPLE 13847	INDEX 2682 SAMPLE 13849
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY E	BASTIAN BAY E	BASTIAN BAY E
WELL NAME	FASTERLING NO. 1	FASTERLING B NO. 1	FEE H NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/26/73	12/26/73	12/26/73
FORMATION	-5700 FT. SAND	-L SAND	-UPPER ROB 15
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5720	11416	10263
WELLHEAD PRESSURE,PSIG	1800	300	2500
OPEN FLOW, MCFD	1000	330	4500
COMPONENT, MOLE PCT			
METHANE	95.6	92.5	93.5
ETHANE	1.7	3.2	3.1
PROPANE	0.6	1.5	1.3
N-BUTANE	TRACE	0.4	0.4
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	0.7	0.6
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1042	1090	1082
SPECIFIC GRAVITY	0.587	0.622	0.609

	INDEX 2683 SAMPLE 13853	INDEX 2684 SAMPLE 13807	INDEX 2685 SAMPLE 13808
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY E	BASTIAN BAY SE	BASTIAN BAY SE
WELL NAME	L&E NO. 25	ABERCROMBIE NO. 5	P.P. NO. 3-D
LOCATION	NOT GIVEN	SEC. 4, T21S, R29E	SEC. 4, T21S, R29E
OWNER	PHILLIPS PETROLEUM CO.	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.
COMPLETED	02/01/74	02/03/71	07/04/70
SAMPLED	12/26/73	11/09/73	11/09/73
FORMATION	-6600 FT. SAND	-P-2 SAND	-SE S RA SUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6692	13171	13761
WELLHEAD PRESSURE,PSIG	2400	3850	2600
OPEN FLOW, MCFD	2300	1250	8000
COMPONENT, MOLE PCT			
METHANE	87.8	96.4	93.6
ETHANE	1.8	1.5	2.6
PROPANE	0.9	0.4	1.1
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.0	0.5	0.6
OXYGEN	1.3	0.0	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	968	1029	1061
SPECIFIC GRAVITY	0.623	0.581	0.605

	INDEX 2686 SAMPLE 13809	INDEX 2687 SAMPLE 13810	INDEX 2688 SAMPLE 13811
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY SE	BASTIAN BAY SE	BASTIAN BAY SE
WELL NAME	ABERCROMBIE NO. A-2	ABERCROMBIE NO. 3	P.P. NO. 3-A
LOCATION	SEC. 4, T21S, R29E	SEC. 9, T21S, R29E	SEC. 4, T21S, R29E
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.
COMPLETED	03/10/67	05/28/73	07/04/70
SAMPLED	11/09/73	11/09/73	11/09/73
FORMATION	-SE ORA SUB	-SE R RA SUA	-SE S-3 RA SUB
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12753	13769	13913
WELLHEAD PRESSURE,PSIG	1640	1650	3000
OPEN FLOW, MCFD	4400	1000	13500
COMPONENT, MOLE PCT			
METHANE	91.2	92.9	93.6
ETHANE	4.1	2.7	2.5
PROPANE	1.6	1.3	1.2
N-BUTANE	0.5	0.3	0.3
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	0.9	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1099	1066	1070
SPECIFIC GRAVITY	0.629	0.615	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2689 SAMPLE 13812	INDEX 2690 SAMPLE 13850	INDEX 2691 SAMPLE 13852
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY SE	BASTIAN BAY W	BASTIAN BAY W
WELL NAME	ABERCROMBIE NO. A-2-D	LL&E FEE 24 NO. 24	SUA-LL&E NO. 24-D
LOCATION	SEC. 4, T21S, R29E	NOT GIVEN	NOT GIVEN
OWNER	GULF OIL CO.- U.S.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	03/10/67	NOT GIVEN	NOT GIVEN
SAMPLED	11/09/73	12/26/73	12/26/73
FORMATION	-SE N RB SUB	OLIG-5100 FT. SAND	-7000 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12244	5176	6984
WELLHEAD PRESSURE,PSIG	2740	1025	2300
OPEN FLOW, MCFD	10200	330	2100
COMPONENT, MOLE PCT			
METHANE	92.7	97.4	95.1
ETHANE	3.3	1.3	2.1
PROPANE	1.4	0.4	1.2
N-BUTANE	0.3	TRACE	0.2
ISOBUTANE	0.5	0.1	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1084	1029	1075
SPECIFIC GRAVITY	0.616	0.571	0.599

	INDEX 2692 SAMPLE 11429	INDEX 2693 SAMPLE 9184	INDEX 2694 SAMPLE 13473
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BAYOU GENTILLY	BLOCK 20	BRETON SOUND BLOCK 30
WELL NAME	DELACROIX NO. 1	SL 1998 I-1	STATE LEASE 5670 NO. 1
LOCATION	SEC. 17, T15S, R14E	NOT GIVEN	BLOCK 30 OFFSHORE
OWNER	SINCLAIR OIL & GAS CO.	KERR-MCGEE OIL IND., INC.	DESPOT EXPLORATION, INC.
COMPLETED	11/15/66	12/04/62	02/20/72
SAMPLED	04/04/68	11/27/63	11/20/72
FORMATION	MIOC-CIRICIDES OPIMA	OLIG-DISCORBIS 12	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10859	5296	5652
WELLHEAD PRESSURE,PSIG	6600	2150	2520
OPEN FLOW, MCFD	NOT GIVEN	13	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	97.8	97.0
ETHANE	2.4	0.8	1.6
PROPANE	1.1	0.5	0.7
N-BUTANE	0.3	0.0	0.1
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	TRACE
NITROGEN	1.6	0.8	0.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1068	1018	1033
SPECIFIC GRAVITY	0.615	0.567	0.574

	INDEX 2695 SAMPLE 14752	INDEX 2696 SAMPLE 15028	INDEX 2697 SAMPLE 12843
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BRETON SOUND, BLK. 20	CLAM LAKE	CROOKED BAYOU
WELL NAME	STATE LEASE 1999 NO. 23	ORLEANS LEVEE BOARD NO. 1	STATE-SMITH NO. 1
LOCATION	BRETON SOUND AREA	T17S, R15E	SEC. 33, T15S, R15E
OWNER	KERR-MCGEE CORP.	PEL-TEX OIL CO., INC.	JONES-O'BRIEN INC.
COMPLETED	NOT GIVEN	06/09/76	11/--/70
SAMPLED	09/07/76	06/05/77	05/29/71
FORMATION	NOT GIVEN	MIOC-BASAL	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	12390	8507
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4426	3200
OPEN FLOW, MCFD	NOT GIVEN	2700	1550
COMPONENT, MOLE PCT			
METHANE	95.6	70.4	95.3
ETHANE	1.8	11.4	1.8
PROPANE	0.9	8.8	0.8
N-BUTANE	0.4	3.1	0.2
ISOBUTANE	0.3	2.8	0.4
N-PENTANE	0.2	0.8	0.2
ISOPENTANE	0.1	1.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.6	0.2
NITROGEN	0.3	0.0	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.8	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1040	1464	1061
SPECIFIC GRAVITY	0.599	0.852	0.596

	INDEX 2698 SAMPLE 16026	INDEX 2699 SAMPLE 13222	INDEX 2700 SAMPLE 10085
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	DRAKES BAY	MAIN PASS BLOCK 127	POINTE-A-LA-HACHE
WELL NAME	LL&E NO. 1	OCS-G-1312 NO. 2	UL-5 RJ SU A H. LESLEY NO. 1
LOCATION	SEC. 33, T20S, R29E	OFFSHORE	SEC. 25, T16S, R14E
OWNER	C&K PETROLEUM, INC.	CHEVRON OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	01/10/78	02/21/70	06/04/64
SAMPLED	07/30/80	05/23/72	08/26/65
FORMATION	MIOC-	MIOC-7900 FT. SAND	MIOC-UL-5
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10732	7952	10900
WELLHEAD PRESSURE,PSIG	1000	3300	3900
OPEN FLOW, MCFD	NOT GIVEN	1266	3500
COMPONENT, MOLE PCT			
METHANE	95.7	95.6	95.7
ETHANE	1.6	1.5	1.6
PROPANE	0.8	1.1	0.8
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.2	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1063	1074	1065
SPECIFIC GRAVITY	0.596	0.598	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2701 SAMPLE 12949	INDEX 2702 SAMPLE 14169	INDEX 2703 SAMPLE 14238
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	POTASH	SOUTH PASS BLOCK 27	SOUTH PASS BLOCK 27
WELL NAME	C. J. EDGERSON NO. 1	OCS0694 NO. 129	OCS 0697 NO. C-17
LOCATION	SEC. 6, T18S, R27E	EAST BAY OFF SHORE	BLOCK 27 OFFSHORE
OWNER	HUMBLE OIL & REFINING CO.	SHELL OIL CO.	TEXACO INC.
COMPLETED	02/01/70	12/08/72	02/15/72
SAMPLED	08/06/71	10/07/74	11/21/74
FORMATION	NOT GIVEN	PLIO-M4	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11732	7409	10555
WELLHEAD PRESSURE,PSIG	6150	2300	1450
OPEN FLOW, MCFD	3500	2900	1453
COMPONENT, MOLE PCT			
METHANE	94.7	94.4	91.4
ETHANE	1.1	2.5	3.8
PROPANE	0.4	1.2	1.8
N-BUTANE	0.1	0.3	0.6
ISOBUTANE	0.1	0.3	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	0.4	0.3	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.3	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1001	1079	1123
SPECIFIC GRAVITY	0.600	0.604	0.635

	INDEX 2704 SAMPLE 6488	INDEX 2705 SAMPLE 6489	INDEX 2706 SAMPLE 15169
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	VENICE	VENICE	WEST BAY
WELL NAME	MANHATTAN LAND&FRUIT CO. 2	MANHATTAN LAND&FRUIT CO. 19	STATE LEASE 192 "PP" 133
LOCATION	SEC. 21, T21S, R30E	SEC. 26, T21S, R30E	LAT 29 07 42 LONG 89 26 2
OWNER	TIDEWATER OIL CO.	TIDEWATER OIL CO.	GULF ENERGY & MINERALS CO.
COMPLETED	05/--/56	11/--/48	05/20/77
SAMPLED	01/22/58	01/22/58	12/15/77
FORMATION	MIOC-L	MIOC-L	PLEI-2MKR SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15700	8500	2484
WELLHEAD PRESSURE,PSIG	6220	2500	1000
OPEN FLOW, MCFD	NOT GIVEN	10000	2400
COMPONENT, MOLE PCT			
METHANE	88.7	86.4	99.2
ETHANE	4.3	6.0	0.0
PROPANE	2.6	2.6	TRACE
N-BUTANE	0.8	1.2	0.0
ISOBUTANE	0.7	1.0	0.0
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.1	0.5	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.7	0.0
NITROGEN	0.7	0.5	0.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.5	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1210	1005
SPECIFIC GRAVITY	0.650	0.691	0.557

	INDEX 2707 SAMPLE 12622	INDEX 2708 SAMPLE 10081	INDEX 2709 SAMPLE 13817
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	WEST DELTA 41	WEST DELTA BLOCK 30	WEST DELTA BLOCK 55
WELL NAME	OCS G-1072 NO. B-2	OCS-G-016,S-18	SL 2549 NO. 11
LOCATION	WEST DELTA BLOCK 40	OFFSHORE W. DELTA BL. 30	OFFSHORE
OWNER	CONTINENTAL OIL CO.	HUMBLE OIL & REFINING CO.	CONTINENTAL OIL CO.
COMPLETED	05/15/69	08/25/65	12/14/72
SAMPLED	12/18/70	08/25/65	11/17/73
FORMATION	MIOC-	MIOC-D-3D, BB	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9460	9320	3202
WELLHEAD PRESSURE,PSIG	3500	3700	1275
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	97.7	93.8	99.0
ETHANE	1.2	3.6	0.1
PROPANE	0.4	1.1	0.1
N-BUTANE	0.0	0.3	0.0
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.5	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1022	1069	1020
SPECIFIC GRAVITY	0.568	0.594	0.563

	INDEX 2710 SAMPLE 15068	INDEX 2711 SAMPLE 15246	INDEX 2712 SAMPLE 15553
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	POINTE COUPEE	POINTE COUPEE
FIELD	WEST DELTA BLOCK 55	FALSE RIVER	JUDGE DIGBY
WELL NAME	STATE LEASE 979 NO. 21	ALMA PLANTATION NO. 1	W. C. PARLANGE NO. 2
LOCATION	OFFSHORE	SEC. 87, T6S, R11E	SEC. 49, T5S, R9E
OWNER	CONTINENTAL OIL CO.	CHEVRON U.S.A., INC.	CHEVRON U.S.A. INC.
COMPLETED	11/15/76	06/04/75	06/02/78
SAMPLED	08/02/77	03/29/78	01/11/79
FORMATION	MIOC-	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	952	220	220
DEPTH, FEET	7764	19800	20268
WELLHEAD PRESSURE,PSIG	2700	13100	11620
OPEN FLOW, MCFD	2448	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	90.6	90.2
ETHANE	2.2	1.8	1.7
PROPANE	1.3	0.2	0.3
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.4	0.1	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	0.5	0.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	6.3	7.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1074	975	964
SPECIFIC GRAVITY	0.605	0.639	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2713 SAMPLE 16057	INDEX 2714 SAMPLE 4939	INDEX 2715 SAMPLE 13706
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POINTE COUPEE	POINTE COUPEE	POTTER
FIELD	JUDGE DIGBY	SHERBURNE	HUMPHREY
WELL NAME	LE BLANC-LE JUENE NO. 1	V. J. KURZWEG NO. 1	L.D. RIGGS NO. 2
LOCATION	SEC. 65, T5S, R10E	SEC. 24, T6S, R7E	SEC. 88, T17S, R16E
OWNER	CHEVRON U.S.A. INC.	TEXAS CO.	UNION TEXAS PETROLEUM
COMPLETED	09/14/79	04/29/50	11/05/72
SAMPLED	08/26/80	10/10/50	08/29/73
FORMATION	CRET-TUSCALOOSA	EOCE-COCKFIELD	MIOC-HOLLYWOOD
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	20490	10324	11574
WELLHEAD PRESSURE,PSIG	10160	6100	8150
OPEN FLOW, MCFD	17260	NOT GIVEN	165000
COMPONENT, MOLE PCT			
METHANE	89.8	89.9	92.7
ETHANE	2.2	5.3	3.6
PROPANE	0.4	2.5	1.4
N-BUTANE	0.1	0.7	0.3
ISOBUTANE	0.1	0.4	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	TRACE	0.5
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	7.0	0.5	0.4
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	976	1130	1094
SPECIFIC GRAVITY	0.646	0.639	0.617

	INDEX 2716 SAMPLE 14964	INDEX 2717 SAMPLE 3953	INDEX 2718 SAMPLE 3954
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RAPIDES	RED RIVER	RED RIVER
FIELD	NOT GIVEN	GAHAGAN	GAHAGAN
WELL NAME	R-1109(312442N0921210.D1)	SEMP RUSS NO. 1	SEMP RUSS NO. 1
LOCATION	SEC. 19, T5N, R3E	SEC. 16, T12N, R10W	SEC. 16, T12N, R10W
OWNER	U.S. GEOLOGICAL SURVEY	TEXAS CO.	TEXAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/11/77	11/18/44	NOT GIVEN
FORMATION	PLEI-PRAIRIE TERRACE	CRET-TRAVIS PEAK	CRET-L
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	50	7146	6750
WELLHEAD PRESSURE,PSIG	3	2250	710
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.8	96.4	96.3
ETHANE	0.2	1.6	2.8
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	33.6	0.0	0.0
OXYGEN	0.4	0.4	0.4
ARGON	0.5	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	5.4	1.6	0.5
HELIUM	0.02	0.05	0.05
HEATING VALUE*	609	1005	1026
SPECIFIC GRAVITY	0.752	0.580	0.575

	INDEX 2719 SAMPLE 3955	INDEX 2720 SAMPLE 4299	INDEX 2721 SAMPLE 5028
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RED RIVER	RICHLAND	RICHLAND
FIELD	GAHAGAN	DELHI	RICHLAND
WELL NAME	SEMP RUSS NO. 1	S. A. MAYES NO. 1	J. L. PIPES, NO. 1
LOCATION	SEC. 16, T12N, R10W	SEC. 23, T17N, R9E	SEC. 35, T17N, R6E
OWNER	TEXAS CO.	MURPHY-SUN INTERESTS	UNITED CARBON CO., INC.
COMPLETED	12/21/44	09/08/45	08/12/51
SAMPLED	12/9/44	04/09/47	03/29/51
FORMATION	CRET-RODESSA	CRET-U	CRET-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5000	3323	2384
WELLHEAD PRESSURE,PSIG	2480	1467	200
OPEN FLOW, MCFD	20000	30	400
COMPONENT, MOLE PCT			
METHANE	97.7	58.4	86.9
ETHANE	0.0	40.5	5.0
PROPANE	---	---	2.1
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	0.0	2.7
OXYGEN	0.2	0.8	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.1	0.3	1.3
HELIUM	0.05	TRACE	0.05
HEATING VALUE*	990	1317	1090
SPECIFIC GRAVITY	0.576	0.762	0.655

	INDEX 2722 SAMPLE 4148	INDEX 2723 SAMPLE 4368	INDEX 2724 SAMPLE 13723
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RICHLAND	RICHLAND	SABINE
FIELD	WILDCAT	WILDCAT	PLEASANT HILL
WELL NAME	SATRE NO. 1	FEDERAL LAND BANK NO. 1	LOGAN NO. 1
LOCATION	SEC. 34, T17N, R7E	SEC. 10, T17N, R9E	SEC. 21, T10N, R12W
OWNER	LVO CORP.	MURPHY-SUN INTERESTS	MCCULLOCH OIL CORP.
COMPLETED	08/02/46	04/15/47	12/04/72
SAMPLED	10/26/46	10/02/47	09/20/73
FORMATION	NOT GIVEN	CRET-L	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2598	3153	7470
WELLHEAD PRESSURE,PSIG	900	1515	3365
OPEN FLOW, MCFD	NOT GIVEN	9400	19500
COMPONENT, MOLE PCT			
METHANE	87.0	94.7	94.9
ETHANE	10.1	1.9	0.3
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	2.6	2.8	2.9
OXYGEN	0.2	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.5	1.6
HELIUM	TRACE	0.04	0.05
HEATING VALUE*	1042	993	978
SPECIFIC GRAVITY	0.617	0.581	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2725 SAMPLE 15293	INDEX 2726 SAMPLE 11821	INDEX 2727 SAMPLE 11826
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	SABINE	ST. BERNARD	ST. BERNARD
FIELD	WILDCAT	MAIN PASS BLK. 6	MAIN PASS BLK. 6
WELL NAME	BOISF SOUTHERN B-5 NO. 1	OCS-G-1366 NO. 7D	OCS-G-1499, NO. 2
LOCATION	SEC. 32, T9N, R12W	OFFSHORE	OFFSHORE
OWNER	SUN PRODUCTION CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	12/29/77	03/06/68	01/26/68
SAMPLED	05/25/78	02/07/69	02/07/69
FORMATION	CRET-MOORINGSPORT	-4800 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	4703	4800	6950
WELLHEAD PRESSURE,PSIG	2490	2100	2725
OPEN FLOW, MCFD	878	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.4	98.3	98.5
ETHANE	0.5	0.5	0.4
PROPANE	0.2	0.1	TRACE
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	5.1	0.7	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.06	0.01	TRACE
HEATING VALUE*	973	1008	1022
SPECIFIC GRAVITY	0.589	0.563	0.567

	INDEX 2728 SAMPLE 16055	INDEX 2729 SAMPLE 11804	INDEX 2730 SAMPLE 13763
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. BERNARD	ST. BERNARD	ST. CHARLES
FIELD	RIGOLETS	STUARDS BLUFF	NOT GIVEN
WELL NAME	STATE LEASE 6651 NO. 2	STATE LEASE 4909 NO. 2	RATHBORNE NO. 1
LOCATION	T11S, R16E, LAKE BORGNE	SEC. 17, T15S, R17E	SEC. 2, T13S, R19E
OWNER	CHEVRON U.S.A. INC.	TEXAS CRUDE OIL CO.	MIDWEST OIL CORP.
COMPLETED	05/02/80	06/28/68	NOT GIVEN
SAMPLED	08/20/80	03/29/69	10/--/73
FORMATION	NOT GIVEN	TERT-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13777	8932	11131
WELLHEAD PRESSURE,PSIG	3200	3300	NOT GIVEN
OPEN FLOW, MCFD	1700	NOT GIVEN	3141
COMPONENT, MOLE PCT			
METHANE	86.3	97.9	93.5
ETHANE	6.1	0.4	2.8
PROPANE	2.3	0.1	1.1
N-BUTANE	0.6	0.0	0.2
ISOBUTANE	0.4	0.0	0.6
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.9	1.1	0.6
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	0.3	0.6
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1104	1001	1075
SPECIFIC GRAVITY	0.666	0.566	0.610

	INDEX 2731 SAMPLE 3701	INDEX 2732 SAMPLE 3720	INDEX 2733 SAMPLE 14130
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. CHARLES	ST. CHARLES	ST. CHARLES
FIELD	PARADIS	PARADIS	TAFT S
WELL NAME	LOUISIANA LAND & EXPL. NO. 3	LOUISIANA LAND & EXPL. CO.	OCCIDENTAL PET. CORP. NO. 1
LOCATION	SEC. 40, T14S, R20E	SEC. 40, T14S, R20E	SEC. 58, T13S, R20E
OWNER	TEXAS CO.	TEXAS CO.	ASHLAND OIL, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	04/15/74
SAMPLED	11/28/43	02/19/44	08/16/74
FORMATION	MIOC-	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11394	10237	11122
WELLHEAD PRESSURE,PSIG	5457	NOT GIVEN	4000
OPEN FLOW, MCFD	20000	10000	1600
COMPONENT, MOLE PCT			
METHANE	88.7	88.8	94.6
ETHANE	10.1	9.9	2.1
PROPANE	---	---	0.9
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.1	0.0	0.6
OXYGEN	0.4	0.4	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	0.9	0.5
HELIUM	0.00	0.03	0.01
HEATING VALUE*	1080	1077	1066
SPECIFIC GRAVITY	0.614	0.614	0.602

	INDEX 2734 SAMPLE 14374	INDEX 2735 SAMPLE 13363	INDEX 2736 SAMPLE 15161
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. JAMES	ST. JAMES	ST. JAMES
FIELD	BAYOU CITAMON	COLLEGE POINT "HESTER"	LAPICE
WELL NAME	BOWIE LUMBER CO. NO. 1	MAI RA SUB, MATHERNE NO. 1	HAWTHORNE NO. 1
LOCATION	SEC. 18, T13S, R17E	SEC. 34, T12S, R4E	SEC. 41, T12S, R15E
OWNER	UNION TEXAS PETROLEUM DIV.	KENMORE OIL CO., INC.	BROCK EXPL. CORP.
COMPLETED	11/19/74	01/04/71	04/29/77
SAMPLED	05/22/75	08/29/72	11/25/77
FORMATION	MIOC-MA3	-MA-1	MIOC-J SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11450	10264	11314
WELLHEAD PRESSURE,PSIG	6900	1949	3900
OPEN FLOW, MCFD	NOT GIVEN	4694	1250
COMPONENT, MOLE PCT			
METHANE	95.1	90.8	89.3
ETHANE	2.5	4.8	5.1
PROPANE	0.6	1.9	1.7
N-BUTANE	0.1	0.5	0.4
ISOBUTANE	0.3	0.7	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.5	0.5	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.8
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1051	1124	1098
SPECIFIC GRAVITY	0.590	0.634	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2737 SAMPLE 14235		INDEX 2738 SAMPLE 4174		INDEX 2739 SAMPLE 14873	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. LANDRY		ST. LANDRY		ST. LANDRY	
FIELD	ANDREPONT		CANKTON		LAWTELL	
WELL NAME	DALLAS PITRE NO. 1		VINCENT BOAGNI NO. 1		M. O. RICHARD ETAL NO. 1	
LOCATION	SEC. 99, T5S, R3E		SEC. 28, T8S, R8E		SEC. 27, T6S, R3E	
OWNER	SOUTH LOUISIANA PROD. CO.		HUMBLE OIL & REFINING CO.		SABINE PRODUCTION CO.	
COMPLETED	08/05/74		09/05/46		08/26/75	
SAMPLED	11/19/74		11/07/46		12/16/76	
FORMATION	EOCE-WILCOX		MIOC-U		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	12573		3065		9340	
WELLHEAD PRESSURE,PSIG	4760		NOT GIVEN		3789	
OPEN FLOW, MCFD	750		NOT GIVEN		3000	
COMPONENT, MOLE PCT						
METHANE	83.7		99.7		88.4	
ETHANE	7.8		0.0		5.1	
PROPANE	3.9		---		3.2	
N-BUTANE	0.9		---		0.9	
ISOBUTANE	0.8		---		0.8	
N-PENTANE	0.2		---		0.2	
ISOPENTANE	0.8		---		0.3	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.2		---		0.2	
NITROGEN	0.8		0.0		0.6	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.3		0.2		0.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1186		1010		1159	
SPECIFIC GRAVITY	0.693		0.557		0.657	

	INDEX 2740 SAMPLE 4690		INDEX 2741 SAMPLE 15738		INDEX 2742 SAMPLE 9069	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. LANDRY		ST. LANDRY		ST. LANDRY	
FIELD	MELVILLE		MONCRIEF		SHUTESTON	
WELL NAME	SWIFT NO. 1		TURNER LUMBER CO. NO. 1		A. L. ALBARADO NO. 1	
LOCATION	SEC. 23, T4S, R6E		SEC. 4, T3S, R6E		SEC. 34, T7S, R3E	
OWNER	SUN OIL CO.		GULF OIL CORP.		FALCON SEABOARD DRILLING CO.	
COMPLETED	11/04/48		10/10/77		09/19/62	
SAMPLED	03/03/49		08/30/79		08/21/63	
FORMATION	EOCE-WILCOX		CRET-TUSCALOOSA		OLIG-NODOS ARIA BLANPIEDI	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11239		16498		10374	
WELLHEAD PRESSURE,PSIG	3125		5740		1600	
OPEN FLOW, MCFD	NOT GIVEN		7500		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	83.9		89.2		89.6	
ETHANE	5.7		3.3		5.0	
PROPANE	5.9		0.7		1.9	
N-BUTANE	1.2		0.2		0.5	
ISOBUTANE	0.7		0.2		0.6	
N-PENTANE	0.5		0.1		0.1	
ISOPENTANE	0.5		TRACE		0.3	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.6		0.1		0.1	
NITROGEN	1.8		0.6		1.5	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	1.1		5.6		0.4	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1189		1004		1106	
SPECIFIC GRAVITY	0.706		0.645		0.635	

	INDEX 2743 SAMPLE 14020		INDEX 2744 SAMPLE 13729		INDEX 2745 SAMPLE 14623	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARTIN		ST. MARTIN		ST. MARTIN	
FIELD	ARNAUDVILLE S		BAYOU DES GLAISES		BAYOU LONG	
WELL NAME	DR. SIDNEY FREDRICK NO. 1		STATE LEASE 5770 NO. 1		JEANERETTE L&S NO. 1	
LOCATION	SEC. 38, T8S, R5E		SEC. 84, T8S, R8E		SEC. 13, T13S, R11E	
OWNER	TEXACO INC.		TEXACO INC.		UNION OIL CO. OF CALIFORNIA	
COMPLETED	12/10/73		08/12/72		11/20/74	
SAMPLED	05/29/74		09/26/73		03/17/76	
FORMATION	EOCE-WILCOX		OLIG-FRIO		MIOC-PLANULINA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	15486		12470		13570	
WELLHEAD PRESSURE,PSIG	7000		4000		5200	
OPEN FLOW, MCFD	2300		3800		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	85.8		93.9		94.8	
ETHANE	7.0		2.9		2.3	
PROPANE	2.0		1.1		0.8	
N-BUTANE	0.3		0.2		0.1	
ISOBUTANE	0.5		0.4		0.3	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.3		0.6		0.5	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.7		0.6		1.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1087		1066		1045	
SPECIFIC GRAVITY	0.664		0.603		0.598	

	INDEX 2746 SAMPLE 14624		INDEX 2747 SAMPLE 14958		INDEX 2748 SAMPLE 4763	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARTIN		ST. MARTIN		ST. MARTIN	
FIELD	BAYOU LONG		BAYOU LONG		DUCK LAKE	
WELL NAME	JEANERETTE L&S NO. 3		JEANERETTE L & S NO. 1		STATE GOODRICH NO. 1	
LOCATION	SEC. 13, T13S, R11E		SEC. 12, T13S, R11E		SEC. 2, T15S, R11E	
OWNER	UNION OIL CO. OF CALIFORNIA		CHEVRON OIL CO.		HUNT OIL CO.	
COMPLETED	07/14/75		01/29/76		07/16/49	
SAMPLED	03/17/76		03/28/77		10/19/49	
FORMATION	MIOC-PLANULINA		MIOC-14300 SAND		MIOC-D-1 SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	13380		13966		12342	
WELLHEAD PRESSURE,PSIG	5200		5410		4580	
OPEN FLOW, MCFD	NOT GIVEN		3500		70	
COMPONENT, MOLE PCT						
METHANE	98.7		88.2		92.7	
ETHANE	0.3		2.3		3.6	
PROPANE	0.8		0.8		1.1	
N-BUTANE	0.2		0.3		0.2	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	TRACE		0.2		0.2	
ISOPENTANE	0.1		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.5		8.7		0.5	
OXYGEN	0.0		2.0		0.1	
ARGON	0.0		0.1		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.9		0.9		1.0	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1088		949		1070	
SPECIFIC GRAVITY	0.596		0.645		0.612	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2749 SAMPLE 14373	INDEX 2750 SAMPLE 15626	INDEX 2751 SAMPLE 3684
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	FAUSSE POINTE	HAPPYTOWN	LAKE VERRET W
WELL NAME	STATE LEASE 293 NO. 109	IBERVILLE LAND CO. NO. 1	JEANERETTE STATE UNIT NO. 1
LOCATION	T11S. R8E	SEC.120. T7S. R8E	SEC. 15. T14S. R12E
OWNER	TEXACO INC.	DOW CHEMICAL CO.	SHELL OIL CO.
COMPLETED	10/28/74	05/29/77	10/21/43
SAMPLED	05/22/75	05/24/79	10/20/43
FORMATION	PLIO-	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	810	10668	4633
WELLHEAD PRESSURE,PSIG	320	3350	1500
OPEN FLOW, MCFD	180	2375	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	87.5	94.0
ETHANE	2.6	5.4	4.7
PROPANE	1.0	3.1	---
N-BUTANE	0.1	0.9	---
ISOBUTANE	0.1	0.9	---
N-PENTANE	TRACE	0.3	---
ISOPENTANE	TRACE	0.5	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	0.8	0.6	0.0
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.4	0.3	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.9
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1046	1178	1036
SPECIFIC GRAVITY	0.587	0.665	0.589

	INDEX 2752 SAMPLE 12943	INDEX 2753 SAMPLE 13281	INDEX 2754 SAMPLE 13282
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	LITTLE BAY	SIMON PASS N	SIMON PASS N
WELL NAME	STATE LEASE 5097 NO. 2	W. T. SHINN NO. 1	HEBERT NO. 20
LOCATION	ATCHAFALAYA BAY	SEC. 23. T15S. R13E	NOT GIVEN
OWNER	AMARADA HESS CORP.	OCCIDENTAL PETROLEUM CORP.	OCCIDENTAL PETROLEUM CORP.
COMPLETED	09/06/69	09/18/71	NOT GIVEN
SAMPLED	08/03/71	06/22/72	06/22/72
FORMATION	OLIG-CIBICIDES OPIMA	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18705	12782	NOT GIVEN
WELLHEAD PRESSURE,PSIG	6600	4100	NOT GIVEN
OPEN FLOW, MCFD	3800	4510	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	92.8	93.8
ETHANE	5.8	2.9	2.6
PROPANE	2.8	1.3	1.1
N-BUTANE	0.7	0.4	0.3
ISOBUTANE	0.7	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	1.8	0.5	0.4
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.6	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1101	1101	1081
SPECIFIC GRAVITY	0.673	0.625	0.612

	INDEX 2755 SAMPLE 14395	INDEX 2756 SAMPLE 13891	INDEX 2757 SAMPLE 13892
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BALDWIN	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	J.A. HEINEN NO. 1	WK&L NO. 30	WAX BAYOU NO. 28
LOCATION	SEC. 13. T14S. R9E	NOT GIVEN	NOT GIVEN
OWNER	SUN OIL CO.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/20/75	02/02/74	02/03/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	5000	2000
COMPONENT, MOLE PCT			
METHANE	93.2	93.9	88.1
ETHANE	3.3	2.8	4.7
PROPANE	1.0	1.1	2.3
N-BUTANE	0.2	0.2	0.5
ISOBUTANE	0.3	0.4	0.7
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.8	0.4	1.2
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.8	1.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1060	1073	1108
SPECIFIC GRAVITY	0.608	0.609	0.653

	INDEX 2758 SAMPLE 13893	INDEX 2759 SAMPLE 13894	INDEX 2760 SAMPLE 13895
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	ST. MARY PARISH S.B. NO. 1	WK&L NO. 8	WAX BAYOU NO. 32
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/03/74	NOT GIVEN	02/03/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6000	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	94.8	94.3	94.2
ETHANE	2.8	2.9	3.0
PROPANE	0.9	1.1	1.2
N-BUTANE	0.1	0.2	0.3
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1057	1061	1061
SPECIFIC GRAVITY	0.594	0.595	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2761 SAMPLE 13896	INDEX 2762 SAMPLE 13897	INDEX 2763 SAMPLE 13898
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU NO. 11	ST. MARY PARISH S.B. NO. 3	WK&L NO. 18
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/02/74	02/03/74	02/02/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5000	3000	7000
COMPONENT, MOLE PCT			
METHANE	98.7	93.2	93.0
ETHANE	0.8	3.0	3.1
PROPANE	0.9	1.2	1.3
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.5	0.6	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1065	1076	1087
SPECIFIC GRAVITY	0.596	0.610	0.618

	INDEX 2764 SAMPLE 13899	INDEX 2765 SAMPLE 13901	INDEX 2766 SAMPLE 13902
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU NO. 3	WK&L NO 7	WK&L NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/03/74	02/05/74	02/05/74
FORMATION	NOT GIVEN	MIOC-10900 FT. SAND	-9900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6000	7000	3000
COMPONENT, MOLE PCT			
METHANE	93.0	93.9	94.3
ETHANE	3.1	2.9	3.1
PROPANE	1.3	1.2	1.2
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.6	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1095	1077	1072
SPECIFIC GRAVITY	0.620	0.608	0.601

	INDEX 2767 SAMPLE 13903	INDEX 2768 SAMPLE 13904	INDEX 2769 SAMPLE 13905
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU CO. NO. 52	WK&L NO. 22	WAX BAYOU CO. NO. 22
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/05/74	02/05/74	02/05/74
FORMATION	-10100 FT. SAND	-10500 FT. SAND	-SUN STATE SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	92.8	85.2
ETHANE	3.5	3.7	4.0
PROPANE	1.6	1.6	3.0
N-BUTANE	0.5	0.3	1.5
ISOBUTANE	0.7	0.4	1.4
N-PENTANE	0.2	0.1	0.7
ISOPENTANE	0.2	0.1	1.1
CYCLOPENTANE	0.2	TRACE	0.3
HEXANES PLUS	0.6	0.1	1.0
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	1.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1129	1085	1250
SPECIFIC GRAVITY	0.636	0.612	0.727

	INDEX 2770 SAMPLE 13906	INDEX 2771 SAMPLE 13907	INDEX 2772 SAMPLE 13908
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WK&L NO. 6	WAX BAYOU CO. NO. 39	MERANTO NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/05/74	02/06/74	02/06/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12483	535	831
COMPONENT, MOLE PCT			
METHANE	88.9	84.9	91.4
ETHANE	6.8	5.0	3.6
PROPANE	3.7	4.2	1.8
N-BUTANE	1.0	1.3	0.4
ISOBUTANE	1.0	1.6	0.6
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.6	0.5	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	2.4	0.5	0.5
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1208	1206	1092
SPECIFIC GRAVITY	0.693	0.704	0.629

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2773 SAMPLE 13909	INDEX 2774 SAMPLE 4033	INDEX 2775 SAMPLE 4034
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BAYOU SALE	BAYOU SALE
WELL NAME	WAX BAYOU CO. NO. 35	ST. MARY PSH. LD. CO. NO. 5	ST. MARY PSH. LD. CO. NO. 3
LOCATION	NOT GIVEN	SEC. 41, T17S, R9E	SEC. 41, T16S, R9E
OWNER	TEXACO INC.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	NOT GIVEN	05/23/42	04/27/42
SAMPLED	02/06/74	07/12/45	07/12/45
FORMATION	NOT GIVEN	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	10202	10698
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3825	3950
OPEN FLOW, MCFD	5000	218	2000
COMPONENT, MOLE PCT			
METHANE	89.6	91.7	90.3
ETHANE	4.4	8.0	9.2
PROPANE	2.2	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.9	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.4	0.0	0.0
OXYGEN	0.1	0.1	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	0.2	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1130	1072	1080
SPECIFIC GRAVITY	0.648	0.596	0.605

	INDEX 2776 SAMPLE 4035	INDEX 2777 SAMPLE 10009	INDEX 2778 SAMPLE 13765
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BAYOU SALE	BELLE ISLE W	EUGENE ISLAND BLK 273
WELL NAME	ST. MARY PSH. LD. CO. NO.C-1	ST. MARY LAND D NO. 2	EUGENE ISLAND 273 NO. A-1
LOCATION	SEC. 2, T17S, R9E	SEC. 15, T17S, R10E	OFFSHORE
OWNER	ATLANTIC REFINING CO.	SUN OIL CO.	FOREST OIL CORP.
COMPLETED	NOT GIVEN	05/09/64	08/31/70
SAMPLED	07/12/45	07/23/65	09/15/73
FORMATION	MIOC-TECHE	MIOC-X-5 SAND	PLEI-3500 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10460	13764	4982
WELLHEAD PRESSURE,PSIG	3900	6000	1340
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	89.9	99.6
ETHANE	8.0	4.1	0.1
PROPANE	---	1.5	TRACE
N-BUTANE	---	0.6	0.0
ISOBUTANE	---	0.8	0.0
N-PENTANE	---	0.3	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.3	0.0
HEXANES PLUS	---	0.8	0.0
NITROGEN	0.0	0.9	0.3
OXYGEN	0.0	0.0	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.6	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1070	1142	1011
SPECIFIC GRAVITY	0.599	0.645	0.558

	INDEX 2779 SAMPLE 13767	INDEX 2780 SAMPLE 13768	INDEX 2781 SAMPLE 13771
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273
WELL NAME	EUGENE ISLAND 273 NO. A-9	EUGENE ISLAND 273 NO. A-7	EUGENE ISLAND 273 NO. A-5
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	09/01/70	06/11/70	08/26/70
SAMPLED	09/15/73	09/15/73	09/15/73
FORMATION	PLEI-4600 FT. SAND	PLEI-3100 FT. SAND	PLEI-4500 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4712	3219	4746
WELLHEAD PRESSURE,PSIG	1860	1300	1650
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.3	99.6	99.1
ETHANE	1.0	0.2	0.5
PROPANE	0.3	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.1	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1021	1013	1015
SPECIFIC GRAVITY	0.565	0.557	0.561

	INDEX 2782 SAMPLE 13773	INDEX 2783 SAMPLE 13775	INDEX 2784 SAMPLE 13774
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 287
WELL NAME	EUGENE ISLAND 273 NO. A-3	EUGENE ISLAND 273 NO. A-2	EUGENE ISLAND 287 NO. D-2
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	08/23/70	04/27/70	04/05/71
SAMPLED	09/15/73	09/15/73	09/14/73
FORMATION	PLEI-4900" SAND	PLEI-4000 FT. SAND	PLEI-E.F. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4982	4130	4928
WELLHEAD PRESSURE,PSIG	1620	1620	1840
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	99.2	97.2
ETHANE	1.6	0.2	1.5
PROPANE	0.6	TRACE	0.6
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	0.3	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1031	1008	1034
SPECIFIC GRAVITY	0.572	0.558	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2785 SAMPLE 13769		INDEX 2786 SAMPLE 13772		INDEX 2787 SAMPLE 13776	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARY		ST. MARY		ST. MARY	
FIELD	EUGENE ISLAND BLK. 292		EUGENE ISLAND BLK. 292		EUGENE ISLAND BLK. 292	
WELL NAME	EUGENE ISLAND 292 NO. B5-D		EUGENE ISLAND 292 NO. B1-D		EUGENE ISLAND 292 NO. B-5	
LOCATION	OFFSHORE		OFFSHORE		OFFSHORE	
OWNER	FOREST OIL CORP.		FOREST OIL CORP.		FOREST OIL CORP.	
COMPLETED	12/31/69		01/16/70		12/31/69	
SAMPLED	09/14/73		09/14/73		09/14/73	
FORMATION	PLEI-E.B. SAND		PLEI-D.B. SAND		PLEI-E.E. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	4958		4208		5289	
WELLHEAD PRESSURE,PSIG	1995		1675		1995	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	95.8		98.1		95.5	
ETHANE	2.3		1.3		2.4	
PROPANE	0.9		0.2		1.0	
N-BUTANE	0.2		0.0		0.2	
ISOBUTANE	0.2		0.0		0.2	
N-PENTANE	0.1		0.0		TRACE	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	TRACE		0.0		0.1	
NITROGEN	0.3		0.5		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.4	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1053		1025		1055	
SPECIFIC GRAVITY	0.586		0.565		0.590	

	INDEX 2788 SAMPLE 13777		INDEX 2789 SAMPLE 13778		INDEX 2790 SAMPLE 13779	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARY		ST. MARY		ST. MARY	
FIELD	EUGENE ISLAND BLK. 292		EUGENE ISLAND BLK. 292		EUGENE ISLAND BLK. 307	
WELL NAME	EUGENE ISLAND 287 NO. D-1		EUGENE ISLAND 287 NO. D-8		EUGENE ISLAND 307 NO. E-2	
LOCATION	OFFSHORE		OFFSHORE		OFFSHORE	
OWNER	FOREST OIL CORP.		FOREST OIL CORP.		FOREST OIL CORP.	
COMPLETED	04/06/71		04/07/71		12/30/71	
SAMPLED	09/14/73		09/14/73		09/15/73	
FORMATION	PLEI-E.H. SAND		PLEI-C.H. SAND		PLEI-E.H. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5488		3564		6084	
WELLHEAD PRESSURE,PSIG	1930		1450		1650	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.9		99.4		96.8	
ETHANE	1.6		0.1		1.8	
PROPANE	0.6		TRACE		0.6	
N-BUTANE	0.1		0.0		0.1	
ISOBUTANE	0.1		0.0		0.2	
N-PENTANE	TRACE		0.0		TRACE	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	TRACE		0.0		0.1	
NITROGEN	0.3		0.4		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1033		1009		1044	
SPECIFIC GRAVITY	0.575		0.558		0.578	

	INDEX 2791 SAMPLE 13766		INDEX 2792 SAMPLE 12962		INDEX 2793 SAMPLE 12963	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARY		ST. MARY		ST. MARY	
FIELD	EUGENE ISLAND BLK. 314		EUGENE ISLAND BLOCK 273		EUGENE ISLAND BLOCK 273	
WELL NAME	EUGENE ISLAND 314 NO. F-4		OCS-G-0986 NO. 5		OCS-G-0987 NO. A-1	
LOCATION	OFFSHORE		OFFSHORE BLOCK 273		OFFSHORE BLOCK 273	
OWNER	FOREST OIL CORP.		FOREST OIL CORP.		FOREST OIL CORP.	
COMPLETED	05/03/72		08/26/70		08/31/70	
SAMPLED	09/15/73		08/03/71		08/03/71	
FORMATION	PLEI-B.C. SAND		PLEI-4500 FT. SAND		PLEI--3500 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2416		4746		3498	
WELLHEAD PRESSURE,PSIG	900		1829		1426	
OPEN FLOW, MCFD	NOT GIVEN		138800		36600	
COMPONENT, MOLE PCT						
METHANE	99.6		99.2		99.7	
ETHANE	TRACE		0.5		0.1	
PROPANE	TRACE		0.1		0.1	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.3		0.2		0.2	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1009		1016		1014	
SPECIFIC GRAVITY	0.557		0.559		0.559	

	INDEX 2794 SAMPLE 10965		INDEX 2795 SAMPLE 14187		INDEX 2796 SAMPLE 14196	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	ST. MARY		ST. MARY		ST. MARY	
FIELD	FRANKLIN E		GARDEN CITY		HORSESHOE BAYOU	
WELL NAME	W. P. FOSTER ET AL. NO. 1		BLANCHE L. SMITH NO. 1		PARISH LAND CO. NO. 22	
LOCATION	SEC. 39, T15S, R10E		SEC. 27, T15S, R9E		SEC. 7, T17S, R10E	
OWNER	ATLANTIC RICHFIELD CO.		NORTH AMERICAN ROYALTIES		TEXACO INC.	
COMPLETED	01/12/66		08/16/73		09/03/73	
SAMPLED	12/29/66		10/17/74		10/29/74	
FORMATION	MIOC-MA5 SAND		MIOC-MA5 SAND		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	15395		15948		13715	
WELLHEAD PRESSURE,PSIG	10300		8400		7800	
OPEN FLOW, MCFD	NOT GIVEN		11000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.6		85.6		86.7	
ETHANE	5.8		6.7		5.7	
PROPANE	1.9		3.2		1.8	
N-BUTANE	0.2		0.6		0.8	
ISOBUTANE	0.5		1.0		0.9	
N-PENTANE	0.0		0.2		0.3	
ISOPENTANE	0.2		0.2		0.5	
CYCLOPENTANE	0.0		0.1		0.1	
HEXANES PLUS	0.0		0.2		0.4	
NITROGEN	1.1		0.8		4.1	
OXYGEN	0.2		TRACE		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.3		0.7	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1052		1155		1107	
SPECIFIC GRAVITY	0.611		0.674		0.667	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2797 SAMPLE 4032	INDEX 2798 SAMPLE 13388	INDEX 2799 SAMPLE 13819
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	JEANERETTE N	LITTLE BAY	MYETTE POINT
WELL NAME	TECHE SUGAR FACT. NO. 1	STATE LEASE 5097 NO. 2	STATE LEASE 5705 NO. 1
LOCATION	SEC. 19, T13S, R9E	T19S, R11E	T13S R10E
OWNER	ATLANTIC REFINING CO.	AMERADA HESS CORP.	MCCORMICK O+G CORP.
COMPLETED	01/25/45	03/09/71	03/03/72
SAMPLED	07/13/45	09/19/72	11/26/72
FORMATION	MIOC-	MIOC-CIBICIDES OPIMA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11880	18705	15156
WELLHEAD PRESSURE,PSIG	1200	6500	8800
OPEN FLOW, MCFD	551	6650	1900
COMPONENT, MOLE PCT			
METHANE	89.3	83.4	77.8
ETHANE	9.6	7.0	7.3
PROPANE	---	3.4	5.8
N-BUTANE	---	0.9	1.6
ISOBUTANE	---	0.9	1.8
N-PENTANE	---	0.3	0.8
ISOPENTANE	---	TRACE	0.7
CYCLOPENTANE	---	0.1	0.7
HEXANES PLUS	---	0.2	1.5
NITROGEN	0.0	0.7	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.0	3.1	1.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1077	1146	1351
SPECIFIC GRAVITY	0.612	0.696	0.795

	INDEX 2800 SAMPLE 5067	INDEX 2801 SAMPLE 11855	INDEX 2802 SAMPLE 11832
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	PATTERSON	POINT CHEVREUIL	SHELL ISLAND
WELL NAME	ZENOR NO. 1	STATE LEASE 5047 NO. 1	CITRUS LAND CO. INC. NO. 1-A
LOCATION	SEC. 42, T15S, R11E	ATCHAFALAYA BAY	SEC. 2, T18S, R11E
OWNER	SUN OIL CO.	TEXACO INC.	CHEVRON OIL CO.
COMPLETED	01/15/51	11/28/68	06/14/68
SAMPLED	06/15/51	05/06/69	01/23/69
FORMATION	MIOC-L	OLIG-TEXTULARIA W	MIOC-13800 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11365	10650	13844
WELLHEAD PRESSURE,PSIG	3500	3920	4457
OPEN FLOW, MCFD	18000	3746	3200
COMPONENT, MOLE PCT			
METHANE	89.3	96.1	88.0
ETHANE	4.5	2.1	5.7
PROPANE	2.0	0.7	2.4
N-BUTANE	0.6	0.0	0.8
ISOBUTANE	0.8	0.0	0.5
N-PENTANE	0.6	0.0	0.3
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.8	0.0	0.3
NITROGEN	0.8	0.8	0.6
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1155	1050	1137
SPECIFIC GRAVITY	0.659	0.578	0.653

	INDEX 2803 SAMPLE 14376	INDEX 2804 SAMPLE 4696	INDEX 2805 SAMPLE 4791
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	TERREBONNE	TERREBONNE
FIELD	SWEET BAY LAKE	BAY BAPTISTE	BAY STE. ELAINE
WELL NAME	MIAMI CORPORATION NO. 12	STATE BAY BAPTISTE NO. 1	STATE NO. 1-C
LOCATION	SEC. 20, T17S, R12E	SEC. 41, T19S, R19E	SEC. 15, T22S, R18E
OWNER	TEXACO INC.	UNION PRODUCING CO.	TEXAS CO.
COMPLETED	10/31/74	05/09/45	09/26/48
SAMPLED	05/23/75	01/20/49	06/23/49
FORMATION	MIOC-	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12A52	8780	13718
WELLHEAD PRESSURE,PSIG	A50	3375	4500
OPEN FLOW, MCFD	1200	49000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	95.7	94.3
ETHANE	5.0	2.1	3.3
PROPANE	2.5	0.7	0.9
N-BUTANE	0.7	0.3	0.3
ISOBUTANE	0.8	0.1	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.8	0.6	0.4
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.8	0.0	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1137	1058	1060
SPECIFIC GRAVITY	0.655	0.590	0.596

	INDEX 2806 SAMPLE 14907	INDEX 2807 SAMPLE 14908	INDEX 2808 SAMPLE 15091
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	BAYOU CAPASAW	BAYOU CAPASAW	CAILLOU ISLAND
WELL NAME	CONTINENTAL L&F CO. A NO. 1	CONTINENTAL L&F CO. A NO. 1	STATE LEASE 188 NO. 645
LOCATION	SEC. 18, T18S, R15E	SEC. 18, T18S, R15E	TIMBALIER BAY, T23S, R20E
OWNER	SOUTHPORT EXPLORATION, INC.	SOUTHPORT EXPLORATION, INC.	TEXACO INC.
COMPLETED	03/--/76	02/17/77	11/09/76
SAMPLED	02/17/77	02/17/77	09/07/77
FORMATION	MIOC-	MIOC-TEXTULARIAN	MIOC-X SAND
GEOLOGIC PROVINCE CODE	220	220	952
DEPTH, FEET	10188	8617	19970
WELLHEAD PRESSURE,PSIG	3500	3300	12000
OPEN FLOW, MCFD	2000	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	94.9	77.7
ETHANE	1.7	2.6	6.3
PROPANE	0.3	1.0	5.0
N-BUTANE	TRACE	0.2	3.3
ISOBUTANE	0.1	0.2	2.1
N-PENTANE	TRACE	TRACE	1.1
ISOPENTANE	TRACE	0.1	1.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.9
NITROGEN	0.6	0.7	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	1.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1023	1060	1364
SPECIFIC GRAVITY	0.572	0.595	0.807

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2809 SAMPLE 10679	INDEX 2810 SAMPLE 3849	INDEX 2811 SAMPLE 3786
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	CRESCENT FARMS	DEER ISLAND	DELARGE
WELL NAME	REALTY RB-SUA TRAHAN, ET. AL	CONTINENTAL LAND & FUR NO. 2	FITZPATRICK-VIZARD NO. 1
LOCATION	SEC. 49, T17S, R16E	SEC. 24, T18S, R12E	SEC. 77, T19S, R17E
OWNER	GULF OIL CORP.	HUMBLE OIL & REFINING CO.	UNION PRODUCING CO., ET AL.
COMPLETED	10/19/62	09/29/42	07/06/43
SAMPLED	07/20/66	05/25/44	NOT GIVEN
FORMATION	MIOC-REALTY	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11116	9565	13460
WELLHEAD PRESSURE,PSIG	4710	4200	4500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12
COMPONENT, MOLE PCT			
METHANE	95.0	89.0	88.4
ETHANE	3.1	7.0	9.9
PROPANE	0.9	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.3	3.4	0.3
OXYGEN	0.0	0.4	0.4
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	1.0
HELIUM	0.06	0.00	0.00
HEATING VALUE*	1058	1027	1073
SPECIFIC GRAVITY	0.590	0.607	0.617

	INDEX 2812 SAMPLE 10105	INDEX 2813 SAMPLE 14250	INDEX 2814 SAMPLE 13175
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	FIDDLERS LAKE	FOUR ISLE DOME	GIBSON
WELL NAME	LL&E B-1	R. W. BUCKLEY U9 NO. 6	KLEINSCHMIDT NO. 1
LOCATION	SEC. 12, T21S, R13E	SEC. 11, T12S, R16E	SEC. 5, T17S, R15E
OWNER	TEXACO INC.	SUPERIOR OIL CO.	QUINTANA PETROLEUM CORP.
COMPLETED	NOT GIVEN	03/15/74	10/20/71
SAMPLED	09/15/65	12/27/74	04/03/72
FORMATION	MIOC-	-NO. 92 SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15510	17203	15136
WELLHEAD PRESSURE,PSIG	10175	4550	10500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	89.9	88.6	92.8
ETHANE	5.5	5.0	3.0
PROPANE	1.8	2.0	1.0
N-BUTANE	0.5	0.3	0.2
ISOBUTANE	0.4	0.8	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	0.3	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	2.6	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1109	1099	1059
SPECIFIC GRAVITY	0.635	0.654	0.613

	INDEX 2815 SAMPLE 6490	INDEX 2816 SAMPLE 13722	INDEX 2817 SAMPLE 5022
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	HOLLYWOOD	HUMPHREYS	KENT BAYOU
WELL NAME	SOUTHDOWN UNIT 3, WELL NO. 1	J.A. ARTILL NO. 1	CONTINENTAL LD & FUR CO. 1
LOCATION	SEC. 5, T17S, R17E	SEC. 35, T17S, R16E	SEC. 35, T17S, R13E
OWNER	TIDEWATER OIL CO.	PENNZOIL PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	08/--/57	11/29/71	10/07/50
SAMPLED	01/28/58	09/14/73	03/22/51
FORMATION	MIOC-	MIOC-LL SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14400	14800	11085
WELLHEAD PRESSURE,PSIG	10500	8200	4464
OPEN FLOW, MCFD	22000	15000	56000
COMPONENT, MOLE PCT			
METHANE	93.2	92.9	91.2
ETHANE	3.0	3.1	4.0
PROPANE	1.0	1.1	1.8
N-BUTANE	0.3	0.2	0.6
ISOBUTANE	0.3	0.4	0.7
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.5
NITROGEN	0.5	0.4	0.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	1.3	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1067	1073	1128
SPECIFIC GRAVITY	0.611	0.617	0.640

	INDEX 2818 SAMPLE 13113	INDEX 2819 SAMPLE 13269	INDEX 2820 SAMPLE 14637
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	LAKE BOUDREAUX	LAKE GERO	LAKE HATCH
WELL NAME	STATE LEASE 5351 NO. 1	C. RICE NO. 1	FEE NO. 2
LOCATION	T19S, R14W	SEC. 13, T19S, R17E	SEC. 8, T18S, R16E
OWNER	AMOCO PRODUCTION CO. ETAL	LOUISIANA LAND & EXPL. CO.	LOUISIANA LAND & EXP. CO.
COMPLETED	08/30/71	10/12/70	09/29/74
SAMPLED	12/16/71	06/--/72	03/30/76
FORMATION	MIOC-TEXTULARIAN	MIOC-DULARGE	MIOC-DD-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12637	14710	8670
WELLHEAD PRESSURE,PSIG	7200	3200	3096
OPEN FLOW, MCFD	30000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.8	94.1	96.6
ETHANE	4.1	2.8	1.9
PROPANE	1.7	0.8	0.5
N-BUTANE	0.3	0.1	0.1
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	0.8	0.6	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.3	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1096	1038	1040
SPECIFIC GRAVITY	0.616	0.597	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2821 SAMPLE 13984	INDEX 2822 SAMPLE 15247	INDEX 2823 SAMPLE 15276
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	LAPEYROUSE	MOSQUITO BAY	MOSQUITO BAY
WELL NAME	AURELIE ESCHETE NO. 1	JOHN M. SMYTH ETAL. NO. 1	JOHN M. SMYTH ETAL NO. 1
LOCATION	SEC. 30, T19S, R18E	SEC. 35, T20S, R12E	SEC. 35, T20S, R12E
OWNER	QUINTANA PRODUCTION CO.	LADD PETROLEUM CORP.	LADD PETROLEUM CORP.
COMPLETED	11/06/73	02/19/78	09/19/78
SAMPLED	04/18/74	03/22/78	05/--/78
FORMATION	MIOC-TEXTULARIAN W-4	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	16284	12116	12116
WELLHEAD PRESSURE,PSIG	11940	4200	4200
OPEN FLOW, MCFD	NOT GIVEN	2620	2620
COMPONENT, MOLE PCT			
METHANE	89.1	90.0	92.3
ETHANE	5.9	3.8	3.3
PROPANE	2.1	2.0	1.4
N-BUTANE	0.3	0.7	0.4
ISOBUTANE	0.6	1.5	0.7
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.4	0.7	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.6	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1146	1095
SPECIFIC GRAVITY	0.637	0.655	0.626

	INDEX 2824 SAMPLE 15277	INDEX 2825 SAMPLE 14193	INDEX 2826 SAMPLE 13399
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	MOSQUITO BAY	POINT AU FER	SHIP SHOAL BLK. 23
WELL NAME	JOHN M. SMYTH ETAL NO. 1	SL 649, NELSON LL&E VUA NO.5	STATE LEASE 4533 NO. 2
LOCATION	SEC. 35, T20S, R12E	SEC. 6, T20S, R11E	STATE LEASE BLOCK 23
OWNER	LADD PETROLEUM CORP.	TEXACO INC.	EXCHANGE OIL & GAS CORP.
COMPLETED	02/19/78	03/07/73	11/08/71
SAMPLED	05/--/78	10/27/74	09/26/72
FORMATION	NOT GIVEN	MIOC-	MIOC-14400 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12116	9075	14424
WELLHEAD PRESSURE,PSIG	4200	3300	4952
OPEN FLOW, MCFD	2620	4400	2000
COMPONENT, MOLE PCT			
METHANE	92.2	93.4	92.3
ETHANE	3.3	2.9	3.8
PROPANE	1.4	0.8	1.3
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.7	0.3	0.3
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.7	1.1	0.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	1.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1098	1067	1071
SPECIFIC GRAVITY	0.628	0.609	0.615

	INDEX 2827 SAMPLE 13753	INDEX 2828 SAMPLE 13752	INDEX 2829 SAMPLE 15020
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	UNION
FIELD	SHIP SHORE BLK. 23	SHIP SHORE BLOCK 23	MONROE
WELL NAME	LL&E NO. 10	LL + E NO. 1	LITTLE NO. 1
LOCATION	SEC. 22, T22S, R15E	SEC. 22, T22S, R15E	SEC. 23, T22N, R2E
OWNER	EXCHANGE OIL & GAS CORP.	EXCHANGE OIL & GAS CORP.	ERGON INC.
COMPLETED	11/01/72	11/01/72	02/03/77
SAMPLED	10/11/73	10/11/73	06/10/77
FORMATION	MIOC-14200 FT. SAND	MIOC-14400 FT. SAND	CRET-SARATOGA
GEOLOGIC PROVINCE CODE	220	220	230
DEPTH, FEET	13834	9198	2130
WELLHEAD PRESSURE,PSIG	3900	2200	500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	40
COMPONENT, MOLE PCT			
METHANE	92.1	83.2	89.6
ETHANE	3.6	6.7	0.7
PROPANE	1.4	4.6	0.2
N-BUTANE	0.3	1.1	0.1
ISOBUTANE	0.5	1.4	0.1
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.8	0.9	9.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	TRACE
HELIUM	0.01	TRACE	0.09
HEATING VALUE*	1083	1210	937
SPECIFIC GRAVITY	0.620	0.706	0.604

	INDEX 2830 SAMPLE 15347	INDEX 2831 SAMPLE 14640	INDEX 2832 SAMPLE 13686
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	UNION	UNION	VERMILION
FIELD	MONROE	MT. OLIVE	ABBEVILLE
WELL NAME	C. H. ALLEN NO. 1	L. C. MINTER NO. 1	L.S. GOLDBERG NO. 1
LOCATION	SEC. 26, T22N, R2E	SEC. 3, T21N, R3W	SEC. 30, T12S, R3E
OWNER	ERGON INC.	GETTY OIL CO.	SUPERIOR OIL CO.
COMPLETED	NOT GIVEN	01/13/76	05/22/73
SAMPLED	08/15/78	04/22/76	08/21/73
FORMATION	CRET-	JURA-HAYNESVILLE	MIOC-DUHON
GEOLOGIC PROVINCE CODE	230	230	220
DEPTH, FEET	2100	10310	11110
WELLHEAD PRESSURE,PSIG	420	2531	4275
OPEN FLOW, MCFD	NOT GIVEN	8600	5054
COMPONENT, MOLE PCT			
METHANE	90.9	81.7	95.1
ETHANE	0.7	8.3	2.6
PROPANE	0.1	3.5	0.8
N-BUTANE	0.1	1.0	0.2
ISOBUTANE	0.0	0.9	0.2
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	2.5	0.3
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.2	0.5
HELIUM	0.08	0.02	TRACE
HEATING VALUE*	949	1158	1054
SPECIFIC GRAVITY	0.597	0.695	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2833 SAMPLE 13087	INDEX 2834 SAMPLE 13088	INDEX 2835 SAMPLE 6492
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	BUCK POINT N	BUCK POINT N	ERATH
WELL NAME	STATE LEASE 3020 NO. 1	STATE LEASE 3020 NO. 1	R. Y. ROSE
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 40, T13S, R4E
OWNER	SAMEDAN OIL CORP.	SAMEDAN OIL CORP.	TIDEWATER OIL CO.
COMPLETED	11/04/70	11/04/70	NOT GIVEN
SAMPLED	10/19/71	10/19/71	01/29/58
FORMATION	MIOC-11600 FT. SAND	MIOC-11900 FT. SAND	OLIG-U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11602	11936	7800
WELLHEAD PRESSURE,PSIG	3785	3985	2450
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	90.3	90.7	93.9
ETHANE	4.8	4.4	3.5
PROPANE	2.3	2.0	1.0
N-BUTANE	0.5	0.5	0.2
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.7	0.6	0.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.2
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1112	1099	1069
SPECIFIC GRAVITY	0.637	0.628	0.599

	INDEX 2836 SAMPLE 15948	INDEX 2837 SAMPLE 3808	INDEX 2838 SAMPLE 15228
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	CLOENCE S	FRESH WATER BAYOU	GROSSE ISLE
WELL NAME	E. M. WATKINS NO. 33	LOUISIANA FURS, INC. 1-C	MOLEUS RICHARD NO. 1
LOCATION	SEC. 25, T13S, R2W	SEC. 33, T16S, R2E	SEC. 15, T12S, R4E
OWNER	AMOCO PRODUCTION CO.	UNION OIL CO. OF CALIFORNIA	TEXACO INC.
COMPLETED	07/12/79	11/29/43	07/19/77
SAMPLED	04/02/80	04/16/44	03/13/78
FORMATION	-P-3 SAND	MIOC-BASAL	-RICHARD SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11028	11115	14496
WELLHEAD PRESSURE,PSIG	3A00	4000	750
OPEN FLOW, MCFD	1000	NOT GIVEN	677
COMPONENT, MOLE PCT			
METHANE	95.1	87.0	77.1
ETHANE	2.6	8.2	7.6
PROPANE	0.7	---	5.8
N-BUTANE	0.2	---	2.1
ISOBUTANE	0.2	---	4.3
N-PENTANE	0.1	---	0.7
ISOPENTANE	TRACE	---	0.8
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.6
NITROGEN	0.3	3.8	0.2
OXYGEN	0.0	0.4	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.6	0.6	0.8
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1056	1028	1382
SPECIFIC GRAVITY	0.595	0.619	0.802

	INDEX 2839 SAMPLE 14438	INDEX 2840 SAMPLE 14439	INDEX 2841 SAMPLE 13041
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	GUEYDAN E	GUEYDAN E	GUEYDAN SE
WELL NAME	CAMILE ADAM NO. 1	CAMILE ADAM ET AL. NO. 3	GAYLE ET AL NO. 1
LOCATION	SEC. 30, T11S, R1E	SEC. 31, T11S, R1E	SEC. 1A, T12S, R1W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	SUPERIOR OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/16/70
SAMPLED	08/15/75	08/--/75	09/08/71
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12896	11469	16308
WELLHEAD PRESSURE,PSIG	9650	5950	9700
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6605
COMPONENT, MOLE PCT			
METHANE	93.5	93.0	86.3
ETHANE	3.3	3.8	5.2
PROPANE	1.0	1.4	2.9
N-BUTANE	0.1	0.3	0.7
ISOBUTANE	0.3	0.5	0.9
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.7	0.4	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	2.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1055	1083	1137
SPECIFIC GRAVITY	0.603	0.609	0.679

	INDEX 2842 SAMPLE 15798	INDEX 2843 SAMPLE 14286	INDEX 2844 SAMPLE 14878
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	GUEYDAN SW	KAPLAN	KAPLAN N
WELL NAME	GARDINER NO. 1	E. DARTEZ NO. 1	W. J. GREEN NO. 1
LOCATION	SEC. 14, T12S, R2W	SEC. 14, T12S, R1E	SEC. 25, T12S, R1E
OWNER	MCALESTER FUEL CO.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	03/23/79	06/11/74	NOT GIVEN
SAMPLED	10/02/79	02/25/75	12/27/76
FORMATION	OLIG-ALLIANCE	-MIOGYP	OLIG-CAMERINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11610	19434	17200
WELLHEAD PRESSURE,PSIG	3668	NOT GIVEN	9554
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	91.6	82.6
ETHANE	3.1	2.0	8.3
PROPANE	1.1	0.3	3.6
N-BUTANE	0.3	0.1	0.9
ISOBUTANE	0.3	0.1	0.8
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.4	1.6	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	4.2	2.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1090	983	1171
SPECIFIC GRAVITY	0.615	0.620	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2845 SAMPLE 10870	INDEX 2846 SAMPLE 13683	INDEX 2847 SAMPLE 14160
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	LE ROY S	LELEUX	LIVE OAK
WELL NAME	MONTET NO. 1	T.M. ABSHIRE NO. 1	GODCHAUX NO. 7-D
LOCATION	SEC. 30, T11S, R3E	SEC. 8, T11S, R2E	SEC. 88, T14S, R3E
OWNER	OWEN DRILLING CO.	EASON OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/30/66	11/01/71	07/01/73
SAMPLED	NOT GIVEN	08/19/73	10/03/74
FORMATION	MIOC-ALLIANCE	OLIG-MARGINULINA TEXANA	MIOC-12300 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11230	16352	12282
WELLHEAD PRESSURE,PSIG	4050	6750	2265
OPEN FLOW, MCFD	2000	6700	5400
COMPONENT, MOLE PCT			
METHANE	92.6	90.4	91.7
ETHANE	3.6	4.8	4.1
PROPANE	1.3	1.3	1.5
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	0.2	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	2.3	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1078	1065	1082
SPECIFIC GRAVITY	0.613	0.627	0.618

	INDEX 2848 SAMPLE 5090	INDEX 2849 SAMPLE 13918	INDEX 2850 SAMPLE 13164
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	NOT GIVEN	PARCPERDUE N	PARCPERDUE W
WELL NAME	NO. A-5	LANDRY A NO. 1	DUHON NO. 1
LOCATION	STATE LEASE 880, BLK. 39	SEC. 27, T11S, R4E	SEC. 53, T11S, R4E
OWNER	PURE OIL CO.	PHILLIPS PETROLEUM CO.	CHEVRON OIL CO.
COMPLETED	02/09/51	NOT GIVEN	05/05/70
SAMPLED	06/24/51	02/13/74	03/02/72
FORMATION	MIOC-	MIOC-CAMERINA	OLIG-CAMERINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7360	15550	15649
WELLHEAD PRESSURE,PSIG	3420	10100	11400
OPEN FLOW, MCFD	10000	50000	3125
COMPONENT, MOLE PCT			
METHANE	96.0	87.0	92.3
ETHANE	1.6	6.3	3.8
PROPANE	0.6	2.8	1.5
N-BUTANE	0.2	0.6	0.2
ISOBUTANE	0.1	1.2	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.7	0.3	0.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.2	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1040	1155	1080
SPECIFIC GRAVITY	0.584	0.666	0.618

	INDEX 2851 SAMPLE 12950	INDEX 2852 SAMPLE 13975	INDEX 2853 SAMPLE 13976
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	PECAN ISLAND	REDFISH POINT	REDFISH POINT
WELL NAME	VERMILION NO. 1	STATE LEASE 3306 NO. 3	STATE LEASE 3306 NO. 3
LOCATION	SEC. 16, T17S, R1E	T16S, R4E	OFFSHORE, T16S, R4E
OWNER	HUMBLE OIL & REFINING CO.	GULF OIL CO.-U.S.	GULF OIL CO.-U.S.
COMPLETED	12/19/69	03/06/72	03/06/72
SAMPLED	08/05/71	03/19/74	03/19/74
FORMATION	-MARY 36-A	-M SAND	-N SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18414	15192	15629
WELLHEAD PRESSURE,PSIG	10500	9000	NOT GIVEN
OPEN FLOW, MCFD	10200	1600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	79.8	80.5
ETHANE	0.5	5.1	5.1
PROPANE	0.1	4.8	4.8
N-BUTANE	0.0	1.8	1.7
ISOBUTANE	0.0	2.8	2.6
N-PENTANE	0.0	0.7	0.6
ISOPENTANE	0.0	1.0	0.9
CYCLOPENTANE	0.0	0.2	0.2
HEXANES PLUS	0.0	1.0	0.7
NITROGEN	0.4	1.2	1.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.7	1.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1011	1311	1284
SPECIFIC GRAVITY	0.561	0.782	0.766

	INDEX 2854 SAMPLE 5074	INDEX 2855 SAMPLE 5075	INDEX 2856 SAMPLE 5097
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	ROLLOVER	ROLLOVER	ROLLOVER
WELL NAME	NO. A-3	WELL A-4	A-1
LOCATION	STATE LEASE 880, BLK. 39	STATE LEASE 879, BLK. 39	STATE LEASE 878, BLK. 38
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	01/21/51	01/27/51	12/30/50
SAMPLED	06/24/51	06/24/51	06/24/51
FORMATION	MIOC-	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7736	7783	7824
WELLHEAD PRESSURE,PSIG	3700	3709	3713
OPEN FLOW, MCFD	10000	10000	10000
COMPONENT, MOLE PCT			
METHANE	95.9	96.1	94.6
ETHANE	2.1	2.0	1.7
PROPANE	0.7	0.6	1.7
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.4	1.1
OXYGEN	0.1	0.1	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1045	1043	1042
SPECIFIC GRAVITY	0.588	0.584	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2857 SAMPLE 15012	INDEX 2858 SAMPLE 12289	INDEX 2859 SAMPLE 11822
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	TIGRE LAGOON	VERMILION	VERMILION BLK. 131
WELL NAME	EDNA DELCAMBRE NO. 1	OCS G 1152 A-4	A-4
LOCATION	6 MI. S. OF DELCAMBRE	BLOCK 255 AREA	OFFSHORE
OWNER	GEOTHERMIC RESOURCES	FOREST OIL CORP.	MOBIL OIL CORP.
COMPLETED	05/--/77	05/24/69	12/16/68
SAMPLED	05/29/77	06/05/70	02/04/69
FORMATION	MIOC-PLANULINA	PLIO-8350 FT. SAND	MIOC-NO. 14 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12870	8350	12556
WELLHEAD PRESSURE,PSIG	5600	3270	4400
OPEN FLOW, MCFD	950	3500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.4	93.9	92.3
ETHANE	2.6	2.9	3.4
PROPANE	0.8	1.3	1.3
N-BUTANE	0.2	0.3	0.4
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	0.5	0.5	0.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.2	0.8
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1044	1070	1107
SPECIFIC GRAVITY	0.609	0.600	0.628

	INDEX 2860 SAMPLE 13652	INDEX 2861 SAMPLE 11819	INDEX 2862 SAMPLE 11820
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	VERMILION BLK. 16	VERMILION BLK. 46	VERMILION BLK. 46
WELL NAME	S.L. 5008 NO. 1	BLK. 46; NO. 2, OCS079	A-4D OCS 079
LOCATION	BLK. 3, ZONE 1	OFFSHORE	OFFSHORE
OWNER	EXCHANGE OIL & GAS CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/29/73	09/19/67	06/10/57
SAMPLED	06/17/73	02/02/69	02/02/69
FORMATION	-15700" SAND	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	15242	6981
WELLHEAD PRESSURE,PSIG	9100	7400	2500
OPEN FLOW, MCFD	NOT GIVEN	8000	6000
COMPONENT, MOLE PCT			
METHANE	91.6	90.9	96.5
ETHANE	2.7	3.3	1.6
PROPANE	1.2	2.0	0.4
N-BUTANE	0.2	0.5	0.1
ISOBUTANE	0.4	0.9	0.0
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	1.1	0.3	0.6
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.4	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1041	1115	1038
SPECIFIC GRAVITY	0.622	0.644	0.579

	INDEX 2863 SAMPLE 3918	INDEX 2864 SAMPLE 15517	INDEX 2865 SAMPLE 15201
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	W. BATON ROUGE
FIELD	WHITE LAKE W	WILDCAT	FALSE RIVER
WELL NAME	STATE LEASE 340 NO. 1-A	BRUSSARD LAND CO. NO. 2	POPLAR GROVE P & R CO. NO. 1
LOCATION	T14S, R2W	SEC. 20, T14S, R2E	SEC. 9, T6S, R11E
OWNER	UNION OIL CO. OF CALIF.	INEXCO OIL CO.	CHEVRON U.S.A., INC.
COMPLETED	12/31/43	NOT GIVEN	06/18/76
SAMPLED	10/19/44	11/15/78	01/13/78
FORMATION	MIOC-	NOT GIVEN	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10650	NOT GIVEN	19700
WELLHEAD PRESSURE,PSIG	3750	4300	12380
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.4	91.0	89.5
ETHANE	5.9	4.9	2.7
PROPANE	---	1.5	0.3
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.0	0.4	0.5
OXYGEN	0.4	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.3	0.9	6.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1042	1099	975
SPECIFIC GRAVITY	0.598	0.627	0.640

	INDEX 2866 SAMPLE 5233	INDEX 2867 SAMPLE 1980	INDEX 2868 SAMPLE 6878
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WASHINGTON	WEBSTER	WEBSTER
FIELD	ANGIE	CARTERVILLE	MINDEN
WELL NAME	GAYLORD CONTAINER CORP. C-1	BAKER NO. 2	I. W. YOUNGBLOOD NO. 1
LOCATION	SEC. 47, T1S, R14E	SEC. 32, T23N, R11W	SEC. 21, T19N, R8W
OWNER	HUMBLE OIL & REFINING CO.	MAGNOLIA PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/06/51	06/05/28	09/29/58
SAMPLED	04/24/52	04/03/30	11/25/58
FORMATION	CRET-TUSCALOOSA	CRET-TOKIO	CRET-PALUXY
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	9004	3078	7468
WELLHEAD PRESSURE,PSIG	4143	150	2875
OPEN FLOW, MCFD	51500	1500	45000
COMPONENT, MOLE PCT			
METHANE	96.3	97.8	94.1
ETHANE	0.5	1.1	3.0
PROPANE	0.3	---	0.8
N-BUTANE	0.1	---	0.0
ISOBUTANE	0.1	---	0.5
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	1.5	0.0	0.1
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.9	0.2	1.2
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1008	1010	1059
SPECIFIC GRAVITY	0.582	0.567	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2869 SAMPLE 15310	INDEX 2870 SAMPLE 15311	INDEX 2871 SAMPLE 15224
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	CALVIN	CALVIN	HATTAWAY BRANCH
WELL NAME	USA 3-31 NO. 1	F. B. TREAT NO. 1	PARDEE NO. 1
LOCATION	SEC. 31, T12N, R4W	SEC. 5, T12N, R4W	SEC. 22, T12N, R1E
OWNER	GETTY OIL CO.	GETTY OIL CO.	JUSTISS-MEARS OIL CO., INC.
COMPLETED	02/06/78	01/05/78	11/02/77
SAMPLED	07/01/78	07/01/78	03/12/78
FORMATION	-TERRYVILLE	-TROY LIME	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	13000	15520	2781
WELLHEAD PRESSURE,PSIG	7200	10650	1100
OPEN FLOW, MCFD	750	650	347
COMPONENT, MOLE PCT			
METHANE	91.6	91.0	97.6
ETHANE	0.2	0.1	0.1
PROPANE	0.1	TRACE	0.0
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.0	0.3	1.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.1	8.5	0.2
HELIUM	0.02	0.01	0.02
HEATING VALUE*	934	924	995
SPECIFIC GRAVITY	0.630	0.638	0.565

	INDEX 2872 SAMPLE 14970	INDEX 2873 SAMPLE 14961	INDEX 2874 SAMPLE 14971
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	HICKORY VALLEY	HICKORY VALLEY N	HICKORY VALLEY NE
WELL NAME	LOUISIANA-PACIFIC B NO. 1	HERRING NO. 1	MORRIS EST. & BOZEMAN NO. 1
LOCATION	SEC. 10, T12N, R1E	SEC. 33, T13N, R1E	SEC. 2, T12N, R1E
OWNER	TRIDENT OIL & GAS CORP.	JUSTISS-MEARS OIL CO.	TRIDENT OIL & GAS CORP.
COMPLETED	12/15/75	07/16/76	05/21/76
SAMPLED	04/18/77	04/06/77	04/18/77
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2007	2050	2136
WELLHEAD PRESSURE,PSIG	855	800	920
OPEN FLOW, MCFD	1000	250	1000
COMPONENT, MOLE PCT			
METHANE	97.7	97.1	97.3
ETHANE	0.2	0.1	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.9	2.5	2.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	996	988	987
SPECIFIC GRAVITY	0.565	0.567	0.566

	INDEX 2875 SAMPLE 14206	INDEX 2876 SAMPLE 2479	INDEX 2877 SAMPLE 14988
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	HICKORY VALLEY W	NOT GIVEN	WILDCAT
WELL NAME	OLINKRAFT NO. 2	SALT MINE	BODCAW NO. 1
LOCATION	SEC. 24, T12N, R1W	SEC. 20, T11N, R3W	SEC. 30, T12N, R4W
OWNER	TRIDENT OIL & GAS CORP.	CAREY SALT CO.	GETTY OIL CO.
COMPLETED	01/16/74	NOT GIVEN	12/31/76
SAMPLED	10/20/74	NOT GIVEN	04/29/77
FORMATION	EOCE-WILCOX	NOT GIVEN	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2471	800	9081
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	2900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	97.8	0.0	94.2
ETHANE	TRACE	0.0	0.2
PROPANE	TRACE	---	0.1
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	2.0	5.8	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	94.2	3.1
HELIUM	0.03	0.03	0.06
HEATING VALUE*	991	0	960
SPECIFIC GRAVITY	0.563	1.496	0.597

	INDEX 2878 SAMPLE 14995	INDEX 2879 SAMPLE 5008	INDEX 2880 SAMPLE 5240
STATE	LOUISIANA	MARYLAND	MARYLAND
PARISH	WINN	GARRETT	GARRETT
FIELD	WILDCAT	DEER PARK ANTICLINE	LOCH LYNN HEIGHTS
WELL NAME	BODCAW NO. 1	OREN T. GRASER NO. 1	GEORGE PERRINE NO. 1
LOCATION	SEC. 30, T12N, R4W	NOT GIVEN	NOT GIVEN
OWNER	GETTY OIL CO.	COLUMBIAN CARBON CO.	DELAWARE GAS CO.
COMPLETED	12/31/76	01/14/51	12/16/51
SAMPLED	05/11/77	03/13/51	04/24/52
FORMATION	CRET-SLIGO	DEVO-M	DEVO-CORNIFEROUS & CHERT
GEOLOGIC PROVINCE CODE	230	160	160
DEPTH, FEET	8413	2969	3711
WELLHEAD PRESSURE,PSIG	3400	1435	1000
OPEN FLOW, MCFD	1650	249	1500
COMPONENT, MOLE PCT			
METHANE	77.3	95.6	96.4
ETHANE	1.1	1.1	1.0
PROPANE	0.9	0.1	TRACE
N-BUTANE	1.2	0.0	0.0
ISOBUTANE	0.9	TRACE	0.0
N-PENTANE	0.6	0.0	0.0
ISOPENTANE	0.8	TRACE	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.5	TRACE	0.0
NITROGEN	6.4	2.8	2.2
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	10.1	0.0	0.1
HELIUM	0.05	0.08	0.08
HEATING VALUE*	986	992	995
SPECIFIC GRAVITY	0.767	0.573	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2881 SAMPLE 10418	INDEX 2882 SAMPLE 4852	INDEX 2883 SAMPLE 4972
STATE	MARYLAND	MARYLAND	MARYLAND
COUNTY	GARRETT	GARRETT	GARRETT
FIELD	NEGRO MOUNTAIN	NOT GIVEN	OAKLAND
WELL NAME	USA TRACT NO. 186-A	ELMER N. BEACHY NO. 428	N. K. WELCH NO. 1
LOCATION	GRANTSVILLE TOWNSHIP	NOT GIVEN	NOT GIVEN
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	CUMBERLAND&ALLEGHENY GAS CO.	COLUMBIAN CARBON CO.
COMPLETED	12/17/65	06/23/49	09/25/50
SAMPLED	02/08/66	02/21/50	01/15/51
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8545	4910	2834
WELLHEAD PRESSURE,PSIG	3050	1600	1610
OPEN FLOW, MCFD	8250	582	8029
COMPONENT, MOLE PCT			
METHANE	98.0	95.5	95.9
ETHANE	1.0	1.1	1.1
PROPANE	0.0	0.2	0.1
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.8	2.7	2.1
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.04	0.08	0.07
HEATING VALUE*	1011	1000	1003
SPECIFIC GRAVITY	0.565	0.577	0.576

	INDEX 2884 SAMPLE 5084	INDEX 2885 SAMPLE 5156	INDEX 2886 SAMPLE 5372
STATE	MARYLAND	MARYLAND	MARYLAND
COUNTY	GARRETT	GARRETT	GARRETT
FIELD	OAKLAND	OAKLAND	OAKLAND
WELL NAME	JONI J. MILLER NO. 1 GW-1504	H. M. WEEKS NO. 1	JASPER RILEY NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	DIST. 7
OWNER	COLUMBIAN CARBON CO.	CUMBERLAND&ALLEGHENY GAS CO.	CUMBERLAND&ALLEGHENY GAS CO.
COMPLETED	03/13/51	11/14/51	06/--/52
SAMPLED	07/14/51	01/28/52	10/29/52
FORMATION	DEVO-M	DEVO-CHERT & ORISKANY	DEVO-HUNTERSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3860	3608	3293
WELLHEAD PRESSURE,PSIG	1600	670	1300
OPEN FLOW, MCFD	363	409	1430
COMPONENT, MOLE PCT			
METHANE	94.2	95.9	96.2
ETHANE	1.0	0.1	1.0
PROPANE	0.1	0.1	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	4.3	2.2	2.6
OXYGEN	0.2	0.2	0.1
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	975	985	992
SPECIFIC GRAVITY	0.580	0.565	0.570

	INDEX 2887 SAMPLE 3130	INDEX 2888 SAMPLE 5001	INDEX 2889 SAMPLE 14409
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ALLEGAN	ANTRIM	ANTRIM
FIELD	WILDCAT	ANTRIM COUNTY	MANCELONA
WELL NAME	MEASLEY NO. 2	STATE-CUSTER NO. 1	STATE MANCELONA C NO. 1
LOCATION	SEC. 21, T4N, R13W	SEC. 16, T29N, R7W	SEC. 34, T29N, R5W
OWNER	REGAL DUTCH PETROLEUM CO.	OHIO OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	10/21/41	11/08/50	06/13/74
SAMPLED	02/17/42	01/24/51	07/07/75
FORMATION	SILU-SALINA BASAL	DEVO-TRAVERSE	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2706	1070	6580
WELLHEAD PRESSURE,PSIG	1200	500	2668
OPEN FLOW, MCFD	314	3000	22000
COMPONENT, MOLE PCT			
METHANE	71.5	93.1	82.6
ETHANE	26.6	1.6	8.9
PROPANE	---	0.2	4.0
N-BUTANE	---	0.1	1.0
ISOBUTANE	---	TRACE	1.3
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.5
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.2
NITROGEN	1.5	3.9	1.3
OXYGEN	0.1	0.1	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.7	TRACE
HELIUM	0.10	0.01	0.02
HEATING VALUE*	1201	981	1218
SPECIFIC GRAVITY	0.694	0.589	0.697

	INDEX 2890 SAMPLE 3833	INDEX 2891 SAMPLE 3132	INDEX 2892 SAMPLE 3137
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ARENAC	ARENAC	ARENAC
FIELD	ADAMS	ARENAC	ARENAC
WELL NAME	MEE NO. 1	SWAFFIELD NO. 1	CRANDALL NO. 1
LOCATION	SEC. 4, T19N, R3E	SEC. 10, T20N, R4E	SEC. 14, T20N, R4E
OWNER	DON RAYBURN	ARENAC OIL & GAS CO.	ARENAC OIL & GAS CO.
COMPLETED	11/15/42	07/20/37	08/11/37
SAMPLED	05/03/44	02/20/42	02/10/42
FORMATION	MISS-BEREA	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1500	1128	1190
WELLHEAD PRESSURE,PSIG	400	414	434
OPEN FLOW, MCFD	500	3720	2870
COMPONENT, MOLE PCT			
METHANE	60.2	61.7	66.0
ETHANE	10.0	14.6	12.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	28.7	22.1	21.0
OXYGEN	0.4	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.72	0.46	0.46
HEATING VALUE*	789	867	885
SPECIFIC GRAVITY	0.722	0.723	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2893 SAMPLE 3134	INDEX 2894 SAMPLE 3832	INDEX 2895 SAMPLE 3133
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ARENAC	ARENAC	BAY
FIELD	DEEP RIVER	DEEP RIVER	KAWKAWLIN
WELL NAME	MUTCH NO. 2	KLIMEK NO. 1	BATESON NO. 1
LOCATION	SEC. 17, T19N, R4E	SEC. 18, T19N, R4E	SEC. 2, T14N, R4E
OWNER	ARENAC OIL & GAS CO.	ARENAC OIL & GAS CO.	GULF OIL CO.
COMPLETED	02/07/42	NOT GIVEN	10/26/41
SAMPLED	02/10/42	05/03/44	02/11/42
FORMATION	MISS-BEREA	MISS-BEREA	SILU-SALINA BASAL
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1493	1500	NOT GIVEN
WELLHEAD PRESSURE,PSIG	835	750	5113
OPEN FLOW, MCFD	6200	10000	7000
COMPONENT, MOLE PCT			
METHANE	68.8	60.8	65.8
ETHANE	9.8	10.0	31.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.2	28.0	0.4
OXYGEN	0.4	0.4	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	1.8
HELIUM	0.68	0.75	0.00
HEATING VALUE*	873	795	1238
SPECIFIC GRAVITY	0.687	0.718	0.732

	INDEX 2896 SAMPLE 3073	INDEX 2897 SAMPLE 7198	INDEX 2898 SAMPLE 11508
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	ALBION	ALBION	CAL-LEE
WELL NAME	J. C. TURNER NO. 1	MILLER-FARLEY NO. 1	R-K-V NO. 1
LOCATION	SEC. 15, T3S, R4W	SEC. 22, T3S, R4W	SEC. 16, T1S, R5W
OWNER	CONTINENTAL OIL CO.	OHIO OIL CO.	MASK-MARKEL-WOOD
COMPLETED	12/27/41	04/20/59	NOT GIVEN
SAMPLED	02/04/42	09/02/59	05/03/68
FORMATION	DEVO-TRAVERSE	ORDO-TRENTON & BLACK RIVER	SILU-SALINA & NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1592	4164	3200
WELLHEAD PRESSURE,PSIG	552	825	1000
OPEN FLOW, MCFD	10300	810	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.9	63.0	78.5
ETHANE	4.0	7.2	7.6
PROPANE	---	3.2	3.4
N-BUTANE	---	0.7	0.9
ISOBUTANE	---	TRACE	1.2
N-PENTANE	---	TRACE	0.4
ISOPENTANE	---	2.7	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	5.7	22.7	7.0
OXYGEN	0.9	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.36	0.20	0.12
HEATING VALUE*	972	998	1141
SPECIFIC GRAVITY	0.602	0.783	0.709

	INDEX 2899 SAMPLE 11486	INDEX 2900 SAMPLE 3129	INDEX 2901 SAMPLE 3144
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CALHOUN	CALHOUN	CLARE
FIELD	PARTELLO	WILDCAT	FREEMAN
WELL NAME	PUTNEY-ROOP COMM. NO. 3	J. C. TURNER NO. 1	PERKINS-WILLEM NO. 8
LOCATION	SEC. 13, T1S, R5W	SEC. 15, T3S, R4W	SEC. 15, T18N, R6W
OWNER	HUMBLE OIL & REFINING CO.	CONTINENTAL OIL CO.	TAGGART BROTHERS CO.
COMPLETED	10/28/65	12/27/41	07/10/39
SAMPLED	05/10/68	02/12/42	02/04/42
FORMATION	SILU-SALINA A-2	DEVO-TRAVERSE	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3184	1600	1469
WELLHEAD PRESSURE,PSIG	1200	565	562
OPEN FLOW, MCFD	15600	3004	6175
COMPONENT, MOLE PCT			
METHANE	75.9	86.0	72.7
ETHANE	6.7	4.5	17.0
PROPANE	2.8	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	11.9	8.7	8.6
OXYGEN	0.0	0.3	1.1
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.13	0.37	0.39
HEATING VALUE*	1050	952	1041
SPECIFIC GRAVITY	0.705	0.614	0.680

	INDEX 2902 SAMPLE 3149	INDEX 2903 SAMPLE 5363	INDEX 2904 SAMPLE 3143
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	FREEMAN	HAMILTON W	LINCOLN
WELL NAME	N. H. SMITH NO. 16	IUTZI-WOODS, ET AL, NO. 1	FRACKELTON NO. 5
LOCATION	SEC. 13, T18N, R6W	SEC. 6, T19N, R3W	SEC. 20, T18N, R5W
OWNER	TAGGART BROTHERS CO.	SUN OIL CO.	AMERICAN PRODUCTION CO.
COMPLETED	09/09/39	05/27/52	05/29/41
SAMPLED	02/04/42	07/08/52	02/04/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1474	1469	1539
WELLHEAD PRESSURE,PSIG	555	600	592
OPEN FLOW, MCFD	468	9000	14200
COMPONENT, MOLE PCT			
METHANE	79.6	71.7	75.5
ETHANE	12.3	6.1	14.4
PROPANE	---	1.9	---
N-BUTANE	---	0.3	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.0	---
NITROGEN	7.2	19.1	9.2
OXYGEN	0.2	TRACE	0.4
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.40	0.69	0.40
HEATING VALUE*	1027	903	1023
SPECIFIC GRAVITY	0.647	0.689	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2905 SAMPLE 3147	INDEX 2906 SAMPLE 2469	INDEX 2907 SAMPLE 3755
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	LINCOLN	MCKAY-MERCIER	SUMMERFIELD
WELL NAME	O. W. FRACKELTON NO. 13	MCKAY NO. A	MILLS-KFEHN-MILTNER NO. 1
LOCATION	SEC. 18, T14N, R5W	SEC. 6, T17N, R4W	SEC. 2, T20N, R6W
OWNER	TAGGART BROTHERS CO.	JAMES A. MCKAY & SON	TAGGART BROTHERS CO.
COMPLETED	08/21/39	12/25/31	01/25/43
SAMPLED	02/04/42	02/19/32	04/01/44
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1511	1406	1285
WELLHEAD PRESSURE, PSIG	554	620	515
OPEN FLOW, MCFD	5325	13800	11600
COMPONENT, MOLE PCT			
METHANE	76.6	79.6	77.2
ETHANE	16.4	7.9	16.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.4	11.5	5.4
OXYGEN	0.2	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.33	0.55	0.27
HEATING VALUE*	1070	948	1080
SPECIFIC GRAVITY	0.663	0.642	0.662

	INDEX 2908 SAMPLE 3920	INDEX 2909 SAMPLE 4100	INDEX 2910 SAMPLE 3128
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	SUMMERFIELD	SURRY (DOMESTIC USE)	WILDCAT
WELL NAME	STATE NO. A-1	FRIZZELL NO. 1	J. F. MCKENNA NO. 2
LOCATION	SEC. 15, T20N, R5W	SEC. 23, T17N, R5W	SEC. 15, T19N, R3W
OWNER	PURE OIL CO.	MICHIGAN CONSOLIDATED GAS CO	SUN OIL CO.
COMPLETED	05/22/44	NOT GIVEN	06/19/41
SAMPLED	10/20/44	NOT GIVEN	02/10/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1309	1458	1211
WELLHEAD PRESSURE, PSIG	551	NOT GIVEN	465
OPEN FLOW, MCFD	520	475	21700
COMPONENT, MOLE PCT			
METHANE	78.8	73.5	63.8
ETHANE	10.2	13.3	8.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.8	12.4	25.9
OXYGEN	0.2	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.55	0.62	1.07
HEATING VALUE*	981	983	804
SPECIFIC GRAVITY	0.648	0.671	0.703

	INDEX 2911 SAMPLE 3148	INDEX 2912 SAMPLE 3151	INDEX 2913 SAMPLE 13597
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CRAWFORD
FIELD	WINTERFIELD	WINTERFIELD	FREDERIC
WELL NAME	ACKER-BLACKLEDGE NO. 96	THOMAS NO. 28	STATE-FREDERIC NO. 1-20
LOCATION	SEC. 19, T20N, R6W	SEC. 28, T20N, R6W	SEC. 20, T28N, R4W
OWNER	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.	SHELL OIL CO.
COMPLETED	12/13/41	09/23/41	05/10/73
SAMPLED	02/04/42	02/04/42	05/10/73
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1374	1336	7167
WELLHEAD PRESSURE, PSIG	541	540	2912
OPEN FLOW, MCFD	14400	1125	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	77.2	85.5
ETHANE	17.5	16.6	5.4
PROPANE	---	---	2.8
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	1.5
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	4.9	5.3	0.8
OXYGEN	0.4	0.4	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.2	2.2
HELIUM	0.25	0.25	0.01
HEATING VALUE*	1093	1080	1152
SPECIFIC GRAVITY	0.662	0.661	0.687

	INDEX 2914 SAMPLE 13711	INDEX 2915 SAMPLE 15160	INDEX 2916 SAMPLE 12153
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CRAWFORD	GRAND TRAVERSE	GRAND TRAVERSE
FIELD	FREDERIC	BLAIR 21	BOARDMAN S
WELL NAME	STALLING-HANSON NO. 1-13	STATE-BLAIR NO 2-21A	STATE-UNION NO. 1
LOCATION	SEC. 13,	SEC. 21, T26N, R11W	SEC. 12, T26N, R9W
OWNER	SHELL OIL CO.	NORTHERN MICHIGAN EXPL.	MCCLURE OIL CO.
COMPLETED	NOT GIVEN	02/04/77	10/13/69
SAMPLED	09/07/73	11/28/77	12/02/69
FORMATION	NOT GIVEN	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	5533	6779
WELLHEAD PRESSURE, PSIG	NOT GIVEN	2519	2191
OPEN FLOW, MCFD	NOT GIVEN	5825	18400
COMPONENT, MOLE PCT			
METHANE	83.1	84.4	76.8
ETHANE	7.0	7.4	8.6
PROPANE	3.6	3.2	5.6
N-BUTANE	1.8	1.0	1.9
ISOBUTANE	1.6	1.2	3.1
N-PENTANE	0.2	0.5	0.7
ISOPENTANE	0.6	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.6	0.6
NITROGEN	0.9	1.3	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	TRACE	0.6
HELIUM	0.01	0.04	0.01
HEATING VALUE*	1193	1213	1320
SPECIFIC GRAVITY	0.706	0.694	0.773

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2917 SAMPLE 15746	INDEX 2918 SAMPLE 14173	INDEX 2919 SAMPLE 15810
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	GRAND TRAVERSE	GRAND TRAVERSE	GRAND TRAVERSE
FIELD	MAXFIELD	MAYFIELD	UNION
WELL NAME	SCHAUB NO. 6	SCHMUCHAL NO. 1-3	ST. UNION "O" NO. 1-22
LOCATION	SEC. 13, T25N, R11W	SEC. 3, T25N, R11W	SEC. 22, T26N, R9W
OWNER	SHELL OIL CO.	SHELL OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	04/13/78	04/03/73	07/10/78
SAMPLED	09/07/79	09/20/74	10/23/79
FORMATION	SILU-NIAGARA	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	6594	5974	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2250	2120	2022
OPEN FLOW, MCFD	3619	80000	12200
COMPONENT, MOLE PCT			
METHANE	87.3	84.0	87.8
ETHANE	5.8	7.9	5.6
PROPANE	2.5	3.4	2.5
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	1.4	1.1	1.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.4	0.4	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	1.7	0.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1166	1184	1175
SPECIFIC GRAVITY	0.666	0.682	0.666

	INDEX 2920 SAMPLE 13717	INDEX 2921 SAMPLE 15059	INDEX 2922 SAMPLE 13785
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	GRAND TRAVERSE	GRAND TRAVERSE	GRAND TRAVERSE
FIELD	UNION 8	WHITEWATER	WILDCAT
WELL NAME	UNION NO. 1-8	STATE WHITEWATER-E NO. 1	WHITEWATER NO. 1-36
LOCATION	NOT GIVEN	SEC. 22, T27N, R9W	SEC. 36, T27N, R9W
OWNER	SHELL OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	10/05/76	03/12/71
SAMPLED	09/05/73	07/18/77	10/25/73
FORMATION	NOT GIVEN	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	6172	6360
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2440	1340
OPEN FLOW, MCFD	NOT GIVEN	5500	6000
COMPONENT, MOLE PCT			
METHANE	87.3	86.1	87.2
ETHANE	6.1	6.8	5.7
PROPANE	2.5	3.0	2.6
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	0.9	1.1	1.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.7	1.2	1.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1144	1171	1168
SPECIFIC GRAVITY	0.656	0.668	0.667

	INDEX 2923 SAMPLE 3899	INDEX 2924 SAMPLE 4623	INDEX 2925 SAMPLE 3158
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	GRATIOT	GRATIOT	GRATIOT
FIELD	ITHACA NW	NEWARK	NOT GIVEN
WELL NAME	DAVIDSON NO. 1	WILLIAMS-GRAY ET AL. NO. 1	EARL COOK NO. 1
LOCATION	SEC. 36, T11N, R3W	SEC. 25, T10N, R4W	SEC. 4, T10N, R2W
OWNER	C. E. WELLER&T. F. CALDWELL	SOHIO PETROLEUM CO.	VICTOR R. WILSON
COMPLETED	11/28/43	09/02/48	10/01/40
SAMPLED	06/15/44	11/08/48	02/02/42
FORMATION	JURA-MORRISON C	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	890	985	870
WELLHEAD PRESSURE,PSIG	420	450	391
OPEN FLOW, MCFD	16000	5200	1180
COMPONENT, MOLE PCT			
METHANE	84.8	78.4	77.4
ETHANE	14.4	11.5	10.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	9.2	10.8
OXYGEN	0.0	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.0	0.1
HELIUM	0.03	0.65	0.65
HEATING VALUE*	1117	1000	972
SPECIFIC GRAVITY	0.634	0.649	0.652

	INDEX 2926 SAMPLE 6553	INDEX 2927 SAMPLE 7199	INDEX 2928 SAMPLE 7200
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	HILLSDALE	HILLSDALE	HILLSDALE
FIELD	SCIPIO	SCIPIO	SCIPIO
WELL NAME	STEPHENS NO. 1	LATTAS NO. 1	STEPHENS NO. 1
LOCATION	SEC. 10, T5S, R3W	SEC. 10, T5S, R3W	SEC. 10, T5S, R3W
OWNER	MCCLURE OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	09/19/57	02/22/58	09/13/57
SAMPLED	04/14/58	09/02/59	09/02/59
FORMATION	ORDO-TRENTON	ORDO-TRENTON & BLACK RIVER	ORDO-TRENTON & BLACK RIVER
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	3744	3755
WELLHEAD PRESSURE,PSIG	1529	585	900
OPEN FLOW, MCFD	NOT GIVEN	206	956
COMPONENT, MOLE PCT			
METHANE	50.2	50.4	50.0
ETHANE	9.6	17.1	TRACE
PROPANE	9.5	15.0	5.6
N-BUTANE	3.9	4.6	2.8
ISOBUTANE	1.6	1.9	TRACE
N-PENTANE	1.0	0.4	TRACE
ISOPENTANE	0.7	2.1	2.7
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.4	0.3
NITROGEN	22.0	7.9	36.6
OXYGEN	0.6	TRACE	1.2
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.20	0.03	0.20
HEATING VALUE*	1210	1556	881
SPECIFIC GRAVITY	0.917	0.982	0.875

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2929 SAMPLE 7201	INDEX 2930 SAMPLE 7203	INDEX 2931 SAMPLE 13648
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	HILLSDALE	HILLSDALE	INGHAM
FIELD	SCIPIO	SCIPIO	VEVAY 19
WELL NAME	ROWE NO. 2	W. ROWE A-2	E. LOVETTE UNIT NO. 1
LOCATION	SEC. 10, T5S, R3W	SEC. 3, T5S, R3W	SEC. 18, T2N, R1W
OWNER	OHIO OIL CO.	OHIO OIL CO.	MOBIL OIL CORP.
COMPLETED	04/20/59	03/30/59	05/04/72
SAMPLED	09/02/59	09/02/59	07/13/73
FORMATION	ORDO-TRENTON & BLACK RIVER	ORDO-TRENTON & BLACK RIVER	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3898	3948	3998
WELLHEAD PRESSURE,PSIG	200	400	1475
OPEN FLOW, MCFD	NOT GIVEN	237	8736
COMPONENT, MOLE PCT			
METHANE	49.8	60.2	82.4
ETHANE	17.9	7.4	7.4
PROPANE	6.3	4.4	3.7
N-BUTANE	4.7	1.3	0.9
ISOBUTANE	3.6	0.7	1.1
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	3.0	1.1	0.4
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.4	0.2
NITROGEN	11.9	23.7	2.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.1	1.4
HELIUM	0.01	0.20	0.06
HEATING VALUE*	1443	1004	1166
SPECIFIC GRAVITY	0.984	0.799	0.696

	INDEX 2932 SAMPLE 3145	INDEX 2933 SAMPLE 3150	INDEX 2934 SAMPLE 10255
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ISABELLA	ISABELLA	ISABELLA
FIELD	BROOMFIELD	FREMONT	UNION TOWNSHIP
WELL NAME	WINTERS NO. 1	RIGGLE NO. 1	ELMER THERING NO. 1
LOCATION	SEC. 10, T14N, R6W	SEC. 21, T13N, R5W	SEC. 6, T14N, R4W
OWNER	FLETCHER & LEMAN	BELVIDERE OIL CO.	MERRILL DRILLING CO.
COMPLETED	05/03/41	09/15/41	09/--/65
SAMPLED	02/05/42	01/30/42	10/28/65
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1332	1311	1387
WELLHEAD PRESSURE,PSIG	335	529	470
OPEN FLOW, MCFD	500	1000	7450
COMPONENT, MOLE PCT			
METHANE	74.3	75.8	81.8
ETHANE	19.8	17.5	3.6
PROPANE	---	---	0.5
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	5.2	5.9	13.3
OXYGEN	0.3	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.34	0.38	0.71
HEATING VALUE*	1107	1081	906
SPECIFIC GRAVITY	0.675	0.666	0.630

	INDEX 2935 SAMPLE 3146	INDEX 2936 SAMPLE 3138	INDEX 2937 SAMPLE 7202
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ISABELLA	ISABELLA	JACKSON
FIELD	VERNON	WISE NO. 2	PULASKI
WELL NAME	GUSS POLLARD NO. 1	COMMUNITY LEASE A	BARTELL NO. 1
LOCATION	SEC. 1, T15N, R4W	SEC. 21, T16N, R3W	SEC. 7, T4S, R3W
OWNER	CHARTIERS OIL CO.	CITIES SERVICE OIL CO.	OHIO OIL CO.
COMPLETED	02/28/35	10/24/40	06/20/59
SAMPLED	02/05/42	02/05/42	09/03/59
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	ORDO-TRENTON & BLACK RIVER
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1288	1248	4196
WELLHEAD PRESSURE,PSIG	NOT GIVEN	577	600
OPEN FLOW, MCFD	100	2970	459
COMPONENT, MOLE PCT			
METHANE	77.9	78.9	51.6
ETHANE	5.7	4.3	16.8
PROPANE	---	---	13.1
N-BUTANE	---	---	3.7
ISOBUTANE	---	---	2.1
N-PENTANE	---	---	0.7
ISOPENTANE	---	---	1.8
CYCLOPENTANE	---	---	0.7
HEXANES PLUS	---	---	2.0
NITROGEN	15.6	15.7	7.4
OXYGEN	0.5	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.73	0.70	0.03
HEATING VALUE*	886	876	1595
SPECIFIC GRAVITY	0.648	0.639	0.997

	INDEX 2938 SAMPLE 13196	INDEX 2939 SAMPLE 13786	INDEX 2940 SAMPLE 15749
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KALKASKA	KALKASKA
FIELD	BLUE LAKE	BLUE LAKE	BLUE LAKE
WELL NAME	STATE BLUE LAKE NO. 1-28	SIMPSON C NO. 1-33	RICHMAN STATE-BLUE NO. 5
LOCATION	SEC. 28, T28N, R5W	SEC. 33, T28N, R5W	SEC. 23, T28N, R5W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	12/15/70	12/31/71	12/20/77
SAMPLED	04/24/72	10/23/73	09/05/79
FORMATION	SILU-NIAGARA	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	7105	7350	6785
WELLHEAD PRESSURE,PSIG	2880	1150	1480
OPEN FLOW, MCFD	17762	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	89.1	73.1
ETHANE	5.0	4.7	5.0
PROPANE	2.8	2.3	2.5
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	1.3	1.5	1.3
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.3	0.5	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.5	0.4
NITROGEN	0.4	0.4	12.7
OXYGEN	TRACE	0.0	3.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1154	1173	1027
SPECIFIC GRAVITY	0.648	0.659	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2941 SAMPLE 13080	INDEX 2942 SAMPLE 13716	INDEX 2943 SAMPLE 14410
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KALKASKA	KALKASKA
FIELD	BOARDMAN S	BOARDMAN UNIT	EXCELSIOR
WELL NAME	UNIT NO. 1-4	BOARDMAN NO. 2-4	SIMPSON-WESTERMAN NO. 1
LOCATION	SEC. 4, T26N, R8W	NOT GIVEN	SEC. 31, T28N, R6W
OWNER	SHELL OIL CO.	SHELL OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	10/09/71	NOT GIVEN	12/10/74
SAMPLED	10/12/71	09/05/73	07/07/75
FORMATION	SILU-NIAGARA	NOT GIVEN	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	6925	NOT GIVEN	6880
WELLHEAD PRESSURE,PSIG	2680	NOT GIVEN	2736
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	150000
COMPONENT, MOLE PCT			
METHANE	76.7	75.1	87.1
ETHANE	6.2	10.2	6.0
PROPANE	3.2	6.4	2.9
N-BUTANE	0.7	2.1	0.9
ISOBUTANE	1.3	3.0	1.4
N-PENTANE	0.2	0.4	0.1
ISOPENTANE	0.2	1.0	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	8.8	1.2	0.8
OXYGEN	2.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1066	1362	1173
SPECIFIC GRAVITY	0.712	0.787	0.667

	INDEX 2944 SAMPLE 14054	INDEX 2945 SAMPLE 14172	INDEX 2946 SAMPLE 3126
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KALKASKA	KENT
FIELD	KALKASKA N	RAPID RIVER	WALKER
WELL NAME	STATE KALKASKA "F" NO. 1-24	RAPID RIVER NO. 1-35	BERLIN STATE BANK NO. 8
LOCATION	SEC. 24, T27N, R8W	SEC. 35, T28N, R7W	SEC. 5, T6N, R12W
OWNER	AMOCO PRODUCTION CO.	SHELL OIL CO.	WEST MICHIGAN CONSUMERS CO.
COMPLETED	07/17/74	10/04/73	05/03/41
SAMPLED	07/16/74	09/20/74	02/18/42
FORMATION	SILU-NIAGARA	SILU-NIAGARA	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	6388	6613	1083
WELLHEAD PRESSURE,PSIG	2382	2582	NOT GIVEN
OPEN FLOW, MCFD	95000	770000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	88.3	59.0
ETHANE	10.9	4.7	17.6
PROPANE	6.1	2.3	---
N-BUTANE	1.8	0.9	---
ISOBUTANE	2.3	1.7	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.7	0.4	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.7	0.3	22.3
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	1.1	0.1
HELIUM	0.02	0.01	0.67
HEATING VALUE*	1313	1158	913
SPECIFIC GRAVITY	0.762	0.667	0.733

	INDEX 2947 SAMPLE 15080	INDEX 2948 SAMPLE 15081	INDEX 2949 SAMPLE 10951
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LAPEER	LAPEER	LENAWEE
FIELD	RICH	RICH	MORENCI
WELL NAME	COOPER CONSOLIDATED NO. 1	RANDALL NO. 2	ALLEN NO. 1
LOCATION	SEC. 27, T10N, R10E	SEC. 27, T10N, R10E	SEC. 10, T8S, R2W
OWNER	MID-STATE OIL & GAS CO.	MID-STATE OIL & GAS CO.	LIBERTY PETROLEUM CORP.
COMPLETED	--/--/75	--/--/74	07/01/66
SAMPLED	08/25/77	08/25/77	05/04/67
FORMATION	MISS-BEREA	DEVO-DETROIT RIVER	DEVO-TRAVERSE
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1500	3000	620
WELLHEAD PRESSURE,PSIG	720	980	172
OPEN FLOW, MCFD	260	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	71.9	59.7	80.5
ETHANE	5.8	13.5	2.2
PROPANE	1.9	6.4	0.2
N-BUTANE	0.4	1.8	0.0
ISOBUTANE	0.1	0.6	0.0
N-PENTANE	TRACE	0.4	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.2	0.0
NITROGEN	19.4	0.2	12.9
OXYGEN	0.0	0.0	2.5
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	13.0	0.0
CARBON DIOXIDE	TRACE	3.9	1.4
HELIUM	0.38	0.03	0.04
HEATING VALUE*	903	1217	860
SPECIFIC GRAVITY	0.690	0.862	0.649

	INDEX 2950 SAMPLE 10952	INDEX 2951 SAMPLE 11468	INDEX 2952 SAMPLE 8356
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LENAWEE	LENAWEE	LIVINGSTON
FIELD	MORENCI	WILDCAT	FOWLERVILLE
WELL NAME	WOODLEY NO. 1	BROWER ET AL.	L. HOUSE NO. 1
LOCATION	NOT GIVEN	SEC. 27, T7S, R2E	SEC. 1, T3N, R3E
OWNER	LIBERTY PETROLEUM CORP.	BELL & GAULT DRILLING, INC.	HUMBLE OIL & REFINING CO.
COMPLETED	08/01/66	03/07/68	01/08/62
SAMPLED	05/04/67	04/30/68	01/03/62
FORMATION	DEVO-TRAVERSE	DEVO-TRAVERSE	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	620	737	3835
WELLHEAD PRESSURE,PSIG	170	290	1435
OPEN FLOW, MCFD	2500	1000	3500
COMPONENT, MOLE PCT			
METHANE	93.0	94.9	86.4
ETHANE	2.9	1.3	4.6
PROPANE	0.4	0.2	2.8
N-BUTANE	0.2	0.0	0.8
ISOBUTANE	0.0	0.0	1.3
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	2.7	2.8	2.2
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.9
HELIUM	0.05	0.13	0.16
HEATING VALUE*	1011	990	1142
SPECIFIC GRAVITY	0.593	0.581	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2953 SAMPLE 4445	INDEX 2954 SAMPLE 4333	INDEX 2955 SAMPLE 11501
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LIVINGSTON	LIVINGSTON	MACOMB
FIELD	HOWELL	NOT GIVEN	MUTTONVILLE
WELL NAME	BRAYTON NO. 1	CARRIE FRANCIS NO. 1	KETHE NO. 1
LOCATION	SEC. 1, T2N, R4E	MARION TWP.	SEC. 13, T4N, R13E
OWNER	PANHANDLE EASTERN PIPELINE	PANHANDLE EASTERN PIPELINE	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	NOT GIVEN	NOT GIVEN	08/09/67
SAMPLED	02/27/48	08/11/47	05/10/68
FORMATION	SILU-SALINA	-BAY	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2760
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1217
OPEN FLOW, MCFD	NOT GIVEN	4000	52
COMPONENT, MOLE PCT			
METHANE	70.0	83.6	88.5
ETHANE	24.6	6.8	4.7
PROPANE	---	2.6	2.2
N-BUTANE	---	0.5	0.7
ISOBUTANE	---	0.6	0.8
N-PENTANE	---	0.7	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	4.1	3.8	2.6
OXYGEN	0.2	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.0	1.1	TRACE
HELIUM	0.08	0.08	0.09
HEATING VALUE*	1150	1103	1116
SPECIFIC GRAVITY	0.703	0.671	0.644

	INDEX 2956 SAMPLE 8496	INDEX 2957 SAMPLE 10206	INDEX 2958 SAMPLE 15750
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MACOMB	MACOMB	MANISTEE
FIELD	RAY	RAY	CLEON
WELL NAME	OHMAN	LASKOWSKI NO. 5-1	DROTLEFF NO. 1
LOCATION	SEC. 1, T4N, R13E	SEC. 1, T4N, R13E	SEC. 31, T24N, R13W
OWNER	PANHANDLE EASTERN PIPELINE	CONSUMERS POWER CO.	SHELL OIL CO.
COMPLETED	12/12/61	06/29/65	11/18/77
SAMPLED	04/09/62	10/12/65	09/07/79
FORMATION	SILU-SALINA A-1	SILU-SALINA A-1	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2985	3213	5262
WELLHEAD PRESSURE,PSIG	1317	1101	2025
OPEN FLOW, MCFD	53800	3100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	87.3	81.7
ETHANE	5.0	5.0	7.9
PROPANE	2.2	2.4	4.1
N-BUTANE	0.7	0.8	1.3
ISOBUTANE	1.0	1.2	1.5
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.5
NITROGEN	1.8	2.4	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.07	0.10	0.04
HEATING VALUE*	1122	1135	1242
SPECIFIC GRAVITY	0.644	0.659	0.718

	INDEX 2959 SAMPLE 15032	INDEX 2960 SAMPLE 2622	INDEX 2961 SAMPLE 3730
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MANISTEE	MECOSTA	MECOSTA
FIELD	CLEON 19-24N-13W	AUSTIN	BIG RAPIDS
WELL NAME	STATE CLEON NO. 1-19	FISH NO. 1	GUS HAMFLUND NO. 1
LOCATION	SEC. 19, T24N, R13W	SEC. 10, T14N, R9W	SEC. 13, T15N, R10W
OWNER	MILLER BROTHERS	TAGGART BROTHERS CO.	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	NOT GIVEN	07/01/33	08/16/43
SAMPLED	06/17/77	07/19/33	03/27/44
FORMATION	SILU-NIAGARA	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	5073	1449	1140
WELLHEAD PRESSURE,PSIG	2266	530	NOT GIVEN
OPEN FLOW, MCFD	5500	4000	726
COMPONENT, MOLE PCT			
METHANE	83.2	74.8	70.0
ETHANE	8.0	16.9	18.0
PROPANE	3.7	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	1.8	6.7	10.9
OXYGEN	0.0	0.4	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	0.04	0.42	0.55
HEATING VALUE*	1192	1061	1032
SPECIFIC GRAVITY	0.688	0.674	0.689

	INDEX 2962 SAMPLE 11479	INDEX 2963 SAMPLE 11483	INDEX 2964 SAMPLE 4018
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	BIG RAPIDS	BIG RAPIDS	COLFAX
WELL NAME	TOTH-COTTER	COREY NO. 4	BUSH NO. 1
LOCATION	BIG RAPIDS TOWNSHIP	BIG RAPID TOWNSHIP	SEC. 4, T15N, R9W
OWNER	N. N. DONLEY ET AL.	MICHIGAN CONSOLIDATED GAS CO	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	06/22/65	12/04/45	04/14/45
SAMPLED	05/06/68	05/06/68	05/12/45
FORMATION	DEVO-DUNDEE	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3850	1180	1290
WELLHEAD PRESSURE,PSIG	420	75	498
OPEN FLOW, MCFD	1500	1750	9000
COMPONENT, MOLE PCT			
METHANE	79.0	78.1	76.3
ETHANE	11.5	9.0	15.1
PROPANE	3.7	2.8	---
N-BUTANE	1.0	0.9	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.3	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	3.6	8.3	6.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	1.4
HELIUM	0.19	0.45	0.45
HEATING VALUE*	1173	1056	1044
SPECIFIC GRAVITY	0.694	0.675	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2965 SAMPLE 3966	INDEX 2966 SAMPLE 4280	INDEX 2967 SAMPLE 4821
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	MARTINY	MORTON	PARIS
WELL NAME	EVANS NO. 1	F. S. STICKLER NO. 1	LEO BRENNAN NO. 1
LOCATION	SEC. 12, T15N, R8W	SEC. 15, T14N, R8W	SEC. 28, T16N, R10W
OWNER	MICHIGAN CONSOLIDATED GAS CO	MICHIGAN CONSOLIDATED GAS CO	CITIES SERVICE OIL CO.
COMPLETED	11/11/44	11/23/46	07/09/49
SAMPLED	01/05/45	01/14/47	12/29/49
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	DEVO-
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1386	1280	3404
WELLHEAD PRESSURE,PSIG	NOT GIVEN	520	1526
OPEN FLOW, MCFD	400	1663	1840
COMPONENT, MOLE PCT			
METHANE	67.2	99.0	77.8
ETHANE	23.4	0.0	12.0
PROPANE	---	---	3.9
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.3
NITROGEN	8.9	0.0	3.9
OXYGEN	0.0	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.35	0.40	0.13
HEATING VALUE*	1100	1003	1184
SPECIFIC GRAVITY	0.706	0.558	0.705

	INDEX 2968 SAMPLE 5024	INDEX 2969 SAMPLE 3156	INDEX 2970 SAMPLE 4479
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	PARIS	SIX LAKES	WHEATLAND
WELL NAME	MCFARLANE NO. 1	R. S. SWETT NO. 1	SMITH PET. CO. NO. 1
LOCATION	SEC. 21, T16N, R10W	SEC. 23, T13N, R8W	SEC. 9, T14N, R7W
OWNER	CITIES SERVICE OIL CO.	COLUMBIA OIL & GAS CO.	CARTER OIL CO.
COMPLETED	01/19/51	06/19/36	11/04/47
SAMPLED	03/20/51	01/30/42	04/15/48
FORMATION	MISS-U	MISS-MICHIGAN STRAY	MISS-
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1215	1326	1399
WELLHEAD PRESSURE,PSIG	480	425	NOT GIVEN
OPEN FLOW, MCFD	2000	1800	400
COMPONENT, MOLE PCT			
METHANE	77.0	72.4	67.7
ETHANE	8.7	18.9	15.8
PROPANE	2.9	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	9.6	7.7	14.0
OXYGEN	0.2	0.5	1.9
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.50	0.41	0.33
HEATING VALUE*	1042	1072	969
SPECIFIC GRAVITY	0.684	0.682	0.703

	INDEX 2971 SAMPLE 3078	INDEX 2972 SAMPLE 11466	INDEX 2973 SAMPLE 11465
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MISSAUKEE	MISSAUKEE
FIELD	WILDCAT	FALMOUTH	FORWARD
WELL NAME	GEO. R. SAPP NO. 1	EDWARDS NO. 1-36	BAAS BROTHERS NO. 1-25
LOCATION	SEC. 6, T14N, R8W	SEC. 36, T22N, R7W	SEC. 25, T21N, R7W
OWNER	COLMUR OIL & GAS SYNDICATE	CONSUMERS POWER CO.	CONSUMERS POWER CO.
COMPLETED	08/29/34	05/01/62	03/11/61
SAMPLED	01/27/42	04/30/68	04/30/68
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1292	1424	1399
WELLHEAD PRESSURE,PSIG	560	185	140
OPEN FLOW, MCFD	196	779	590
COMPONENT, MOLE PCT			
METHANE	77.0	80.6	79.3
ETHANE	15.1	9.3	9.3
PROPANE	---	2.4	3.6
N-BUTANE	---	0.5	0.6
ISOBUTANE	---	0.0	0.2
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	6.2	5.8	5.9
OXYGEN	1.1	TRACE	0.2
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.5	0.0
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.42	0.22	0.23
HEATING VALUE*	1051	1066	1108
SPECIFIC GRAVITY	0.661	0.664	0.680

	INDEX 2974 SAMPLE 2306	INDEX 2975 SAMPLE 9626	INDEX 2976 SAMPLE 9674
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MISSAUKEE	MISSAUKEE	MISSAUKEE
FIELD	NOT GIVEN	REEDER	REEDER
WELL NAME	MILLER NO. 1	STROTH MCBAIN NO. 1	DESWAN-DYKSTRA-STATE NO. 1
LOCATION	SEC. 24, T24N, R7W	SEC. 32, T22N, R7W	SEC. 5, T21N, R7W
OWNER	HENRY MILTNER	CONSUMERS POWER CO.	CONSUMERS POWER CO.
COMPLETED	NOT GIVEN	08/--/64	11/09/64
SAMPLED	03/22/31	11/13/64	12/22/64
FORMATION	-SILICA SAND	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2610	1385	1388
WELLHEAD PRESSURE,PSIG	1200	535	561
OPEN FLOW, MCFD	100	1495	1230
COMPONENT, MOLE PCT			
METHANE	83.6	82.4	82.7
ETHANE	1.3	8.6	6.5
PROPANE	---	2.2	1.9
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	TRACE	0.0
NITROGEN	11.7	5.5	5.7
OXYGEN	0.3	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	3.1	0.3	0.3
HELIUM	0.05	0.25	0.24
HEATING VALUE*	870	1070	1064
SPECIFIC GRAVITY	0.641	0.654	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2977 SAMPLE 3074	INDEX 2978 SAMPLE 3084	INDEX 2979 SAMPLE 3085
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MISSAUKEE	MISSAUKEE	MISSAUKEE
FIELD	RIVERSIDE	RIVERSIDE	WILDCAT
WELL NAME	SCHURMAN NO. 38	GEESEMAN NO. 25	MILLER NO. 1
LOCATION	SEC. 16, T21N, R7W	SEC. 20, T21N, R7W	SEC. 24, T24N, R7W
OWNER	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.	HENRY MILTNER
COMPLETED	09/03/40	09/05/41	05/26/31
SAMPLED	01/28/42	01/28/42	01/28/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	DEVO-ANTRIM
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1923	1431	2630
WELLHEAD PRESSURE,PSIG	538	531	1
OPEN FLOW, MCFD	2350	2350	60
COMPONENT, MOLE PCT			
METHANE	72.4	80.0	80.0
ETHANE	16.4	14.7	14.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.3	4.4	3.1
OXYGEN	1.5	0.4	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	2.2
HELIUM	0.23	0.22	0.00
HEATING VALUE*	1027	1074	1063
SPECIFIC GRAVITY	0.683	0.650	0.662

	INDEX 2980 SAMPLE 3135	INDEX 2981 SAMPLE 3136	INDEX 2982 SAMPLE 3172
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MONTCALM	MONTCALM	MONTCALM
FIELD	SIX LAKES	SUMNER-NEW HAVEN-CRYSTAL	WILDCAT
WELL NAME	F. L. PETERSON NO. 1	HONDERICH NO. 1	PACKARD & WARD COM. NO. 1
LOCATION	SEC. 12, T12N, R7W	SEC. 1, T10N, R5E	SEC. 27, T11N, R8W
OWNER	FLETCHER & LEMAN, TR.	ROWNER CORP.	H. L. GENTRY
COMPLETED	01/09/36	05/04/36	09/17/40
SAMPLED	02/16/42	02/11/42	02/03/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	DEVO-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1245	963	1134
WELLHEAD PRESSURE,PSIG	380	283	380
OPEN FLOW, MCFD	11625	13800	225
COMPONENT, MOLE PCT			
METHANE	77.2	73.9	76.2
ETHANE	16.2	12.9	10.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.0	12.5	12.1
OXYGEN	0.2	0.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.3
HELIUM	0.38	0.64	0.34
HEATING VALUE*	1072	980	951
SPECIFIC GRAVITY	0.659	0.668	0.656

	INDEX 2983 SAMPLE 6596	INDEX 2984 SAMPLE 3072	INDEX 2985 SAMPLE 3080
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MONTCALM	MONTCALM	MONTCALM
FIELD	WILDCAT	WINFIELD	WINFIELD
WELL NAME	MADDMES NO. 1	WEIKERT-SCHNICK NO. 13	CARR-JACK-ROWE NO. 8
LOCATION	SEC. 16, T11N, R9W	SEC. 7, T12N, R9W	SEC. 6, T12N, R9W
OWNER	MCCLURE OIL CO.	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.
COMPLETED	05/06/58	06/07/39	12/05/38
SAMPLED	05/09/58	01/27/42	01/27/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1132	1122	1141
WELLHEAD PRESSURE,PSIG	400	390	390
OPEN FLOW, MCFD	660	10400	1075
COMPONENT, MOLE PCT			
METHANE	76.7	74.4	72.9
ETHANE	6.3	13.2	13.8
PROPANE	2.0	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	13.2	11.4	11.9
OXYGEN	0.0	0.2	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	1.00	0.75	0.75
HEATING VALUE*	968	990	986
SPECIFIC GRAVITY	0.667	0.664	0.673

	INDEX 2986 SAMPLE 4589	INDEX 2987 SAMPLE 4849	INDEX 2988 SAMPLE 2754
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MUSKEGON	MUSKEGON	MUSKEGON
FIELD	CASNOVIA	NOT GIVEN	RAVENNA
WELL NAME	DEWEY TODD NO. 1	BERGHUIS-GILES ET AL.	JACKSON WELL 108
LOCATION	SEC. 26, T10N, R13W	SEC. 7, T10N, R15W	SEC. 8, T9N, R14W
OWNER	REX OIL & GAS CO.	P. W. DEGENTHER	WEST MICHIGAN CONSUMERS CO.
COMPLETED	NOT GIVEN	12/09/49	01/08/37
SAMPLED	10/13/48	02/16/50	05/30/37
FORMATION	NOT GIVEN	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1930	1047	1191
WELLHEAD PRESSURE,PSIG	720	540	550
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	260
COMPONENT, MOLE PCT			
METHANE	78.5	69.3	63.4
ETHANE	8.6	5.2	13.2
PROPANE	---	2.0	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	TRACE	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.0	---
NITROGEN	11.9	21.9	22.1
OXYGEN	0.2	0.1	0.6
ARGON	---	TRACE	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.42	0.81	0.65
HEATING VALUE*	929	891	879
SPECIFIC GRAVITY	0.662	0.703	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2989 SAMPLE 3968	INDEX 2990 SAMPLE 3915	INDEX 2991 SAMPLE 3795
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	NEWAYGO	NEWAYGO	NEWAYGO
FIELD	BIG PRAIRIE	WILDCAT	WOODVILLE
WELL NAME	CONSUMERS POWER CO. NO. 1	W. A. JAMES NO. 1	GAS UNIT NO. 1
LOCATION	SEC. 16, T13N, R11W	SEC. 3, T15N, R12W	SEC. 29, T15N, R11W
OWNER	TAGGART BROTHERS CO.	REX OIL & GAS CO.	OHIO OIL CO.
COMPLETED	08/07/44	05/24/44	06/23/43
SAMPLED	03/01/45	05/06/44	04/13/44
FORMATION	MISS-MICHIGAN STRAY	DEVO-TRAVERSE	DEVO-TRAVERSE
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1031	2671	1138
WELLHEAD PRESSURE,PSIG	410	NOT GIVEN	415
OPEN FLOW, MCFD	4	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	85.5	0.0	73.2
ETHANE	1.6	29.4	13.7
PROPANE	---	42.5	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.3	25.6	11.9
OXYGEN	0.1	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	2.5	0.0
HELIUM	1.11	TRACE	0.63
HEATING VALUE*	895	1627	987
SPECIFIC GRAVITY	0.609	1.255	0.671

	INDEX 2992 SAMPLE 11482	INDEX 2993 SAMPLE 3082	INDEX 2994 SAMPLE 3081
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OGEMAW	OSCEOLA	OSCEOLA
FIELD	LOGAN CHURCHILL	OSCEOLA TOWNSHIP	REED CITY
WELL NAME	STAHLBUSH	COOKE NO. 2	GRILL-KINGSBURY NO. 31
LOCATION	SEC. --, T22N, R14E	SEC. 27, T18N, R8W	SEC. 16, T18N, R10W
OWNER	MINNESOTA MINING & MFG.	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.
COMPLETED	05/16/61	12/17/41	12/24/41
SAMPLED	05/08/68	01/28/42	01/28/42
FORMATION	MISS-BEREA	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1510	1391	1202
WELLHEAD PRESSURE,PSIG	520	572	415
OPEN FLOW, MCFD	590	3100	5050
COMPONENT, MOLE PCT			
METHANE	76.5	75.6	73.8
ETHANE	5.1	18.1	14.9
PROPANE	2.2	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	15.1	5.2	9.5
OXYGEN	0.0	0.6	1.2
ARGON	0.1	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.31	0.32	0.38
HEATING VALUE*	944	1090	1015
SPECIFIC GRAVITY	0.674	0.669	0.674

	INDEX 2995 SAMPLE 3162	INDEX 2996 SAMPLE 13082	INDEX 2997 SAMPLE 14171
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OSCEOLA	OSTEGO	OTSEGO
FIELD	WILDCAT	CHESTER	CHARLTON
WELL NAME	PRITCHARD NO. 1	CHESTER N NO. 1	CHARLTON NO. 1-31
LOCATION	SEC. 7, T18N, R7W	SEC. 15, T29N, R2W	SEC. 31, T30N, R1W
OWNER	TURNER PETROLEUM CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/27/41	05/18/70	01/05/73
SAMPLED	02/04/42	10/13/71	09/17/74
FORMATION	MISS-MICHIGAN STRAY	SILU-SALINA & NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1538	6352	5822
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2250	2250
OPEN FLOW, MCFD	3900	NOT GIVEN	52000
COMPONENT, MOLE PCT			
METHANE	69.4	82.2	78.6
ETHANE	15.3	7.2	8.7
PROPANE	---	3.6	5.1
N-BUTANE	---	0.7	2.0
ISOBUTANE	---	1.3	2.4
N-PENTANE	---	0.2	0.5
ISOPENTANE	---	0.2	1.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.5
NITROGEN	13.3	3.6	0.9
OXYGEN	1.2	0.7	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	TRACE
HELIUM	0.34	0.02	0.02
HEATING VALUE*	977	1150	1331
SPECIFIC GRAVITY	0.695	0.689	0.764

	INDEX 2998 SAMPLE 15084	INDEX 2999 SAMPLE 15085	INDEX 3000 SAMPLE 11226
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTSEGO	OTSEGO	OTSEGO
FIELD	CHESTER TOWNSHIP	CHESTER TOWNSHIP	STATE CHESTER
WELL NAME	STATE CHESTER NO. N-1	STATE CHESTER NO. 1	CHESTER NO. 7
LOCATION	SEC. 15, T29N, R2W	SEC. 15, T29N, R2W	SEC. 10, T29N, R2W
OWNER	MURELL L. WELCH	MURELL L. WELCH	MURELL L. WELCH
COMPLETED	--/--/70	--/--/68	11/05/66
SAMPLED	08/29/77	08/29/77	11/15/67
FORMATION	SILU-NIAGARA	DEVO-ANTRIM	DEVO-ANTRIM
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	6500	1500	1500
WELLHEAD PRESSURE,PSIG	2800	400	456
OPEN FLOW, MCFD	50	200	2250
COMPONENT, MOLE PCT			
METHANE	83.7	91.9	93.3
ETHANE	8.3	0.6	0.1
PROPANE	3.5	0.3	0.1
N-BUTANE	1.0	0.0	0.0
ISOBUTANE	1.2	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.1	0.3	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	6.9	6.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1202	949	950
SPECIFIC GRAVITY	0.691	0.629	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3001 SAMPLE 3125	INDEX 3002 SAMPLE 4379	INDEX 3003 SAMPLE 2820
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTTAWA	OTTAWA	SAGINAW
FIELD	COOPERSVILLE	ZEELAND	NOT GIVEN
WELL NAME	HAMBLTON NO. 1	GEORGE TIMMER NO. 1	WATER WELL
LOCATION	SEC. 19, T4N, R13W	SEC. 10, T5N, R14W	NOT GIVEN
OWNER	WEST MICHIGAN CONSUMERS CO.	TRI-COUNTY DEVELOPMENT CO.	EDSON A. SCOGIN
COMPLETED	12/24/39	02/--/47	NOT GIVEN
SAMPLED	02/17/42	11/22/47	08/14/39
FORMATION	MISS-BEREA	MISS-	NOT GIVEN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1190	976	67
WELLHEAD PRESSURE,PSIG	625	425	NOT GIVEN
OPEN FLOW, MCFD	3440	1	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.5	61.7	0.0
ETHANE	14.0	4.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	22.3	33.1	99.2
OXYGEN	0.4	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.66	0.86	0.02
HEATING VALUE*	888	697	0
SPECIFIC GRAVITY	0.716	0.709	0.971

	INDEX 3004 SAMPLE 11496	INDEX 3005 SAMPLE 9912	INDEX 3006 SAMPLE 10415
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	ALPINE	BELLE RIVER MILLS	BIG HAND
WELL NAME	RAUSCH NO. 1	G. ROOD NO. 1	FRANK CHASE NO. 1
LOCATION	SEC. 32, T6N, R16E	SEC. 14, T4N, R16E	SEC. 23, T5N, R15E
OWNER	SULLIVAN & LEROUX	MICHIGAN CONSOLIDATED GAS CO	SUN OIL CO.
COMPLETED	11/20/63	11/11/61	01/24/66
SAMPLED	05/10/68	06/03/65	02/23/66
FORMATION	SILU-NIAGARA	SILU-NIAGARAN	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3353	2176	3122
WELLHEAD PRESSURE,PSIG	1340	710	1170
OPEN FLOW, MCFD	1	164000	5000
COMPONENT, MOLE PCT			
METHANE	84.6	87.2	87.4
ETHANE	5.1	4.8	4.3
PROPANE	2.5	2.2	1.8
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	1.1	1.0	1.0
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	4.5	3.2	3.6
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.11	0.10	0.11
HEATING VALUE*	1102	1106	1110
SPECIFIC GRAVITY	0.669	0.650	0.655

	INDEX 3007 SAMPLE 10196	INDEX 3008 SAMPLE 11843	INDEX 3009 SAMPLE 9675
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	CAPAC	CAPAC	COLUMBUS
WELL NAME	WM. KERSTEN UNIT NO. 1	BEEBE NO. 1	DUPONT NO. 1
LOCATION	SEC. 5, T7N, R13E	SEC. 16, T7N, R13E	SEC. 22, T5N, R15E
OWNER	SUNRAY DX OIL CO.	LAMPHAR OIL & GAS CORP.	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	08/30/65	04/28/69	08/25/64
SAMPLED	10/04/65	03/28/69	12/18/64
FORMATION	SILU-NIAGARA	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	4592	4600	2738
WELLHEAD PRESSURE,PSIG	1280	800	1220
OPEN FLOW, MCFD	1225	500	62
COMPONENT, MOLE PCT			
METHANE	80.8	85.6	87.5
ETHANE	5.1	5.5	4.3
PROPANE	1.9	2.1	1.8
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	1.0	0.8	0.9
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	9.1	4.2	3.5
OXYGEN	0.2	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.09	0.10	0.11
HEATING VALUE*	1058	1106	1101
SPECIFIC GRAVITY	0.684	0.659	0.653

	INDEX 3010 SAMPLE 12143	INDEX 3011 SAMPLE 11360	INDEX 3012 SAMPLE 11671
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	COLUMBUS	COLUMBUS W	COLUMBUS W
WELL NAME	F. WINN B NO. 1	BERNEY UNIT NO. 1	ED & MARIE SZYSKA NO. 1
LOCATION	SEC. 10, T5N, R15E	SEC. 18, T5N, R15E	COLUMBUS TOWNSHIP
OWNER	SUN OIL CO.	SUN OIL CO.	NORTH AMERICAN DRILLING CO.
COMPLETED	09/11/69	11/13/67	10/25/67
SAMPLED	12/13/69	03/07/68	10/02/68
FORMATION	SILU-NIAGARA	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3202	2995	3233
WELLHEAD PRESSURE,PSIG	1201	1295	1196
OPEN FLOW, MCFD	3000	100000	4380
COMPONENT, MOLE PCT			
METHANE	78.9	86.4	83.9
ETHANE	4.8	4.4	4.5
PROPANE	2.5	2.0	2.3
N-BUTANE	0.6	0.9	0.8
ISOBUTANE	0.9	0.9	1.2
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	10.8	4.2	4.8
OXYGEN	0.0	0.1	0.3
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.1	1.2
HELIUM	0.18	0.11	0.10
HEATING VALUE*	1023	1106	1091
SPECIFIC GRAVITY	0.695	0.660	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3013 SAMPLE 11434	INDEX 3014 SAMPLE 11435	INDEX 3015 SAMPLE 11500
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	COTTRELLVILLE	COTTRELLVILLE	FOUR CORNERS
WELL NAME	ORVILLE JONES NO. 1	SAUER-CLAYTON NO. 1	CAIN NO. 1
LOCATION	SEC. 7, T3N, R16E	SEC. 7, T3N, R16E	SEC. 36, T4N, R15E
OWNER	GLEN A. MILLS	GLEN A. MILLS	CONSUMERS POWER CO.
COMPLETED	07/24/62	09/30/62	12/10/66
SAMPLED	04/04/68	04/04/68	05/07/68
FORMATION	SILU-NIAGARA	SILU-NIAGARA	SILU-SALINA & NIAGARA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2355	2478	2436
WELLHEAD PRESSURE,PSIG	800	800	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	47500
COMPONENT, MOLE PCT			
METHANE	87.1	75.1	86.3
ETHANE	4.4	3.9	4.5
PROPANE	2.0	1.8	2.0
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.8	0.7	0.8
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	4.5	14.5	4.8
OXYGEN	0.0	2.6	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.16	0.12	0.17
HEATING VALUE*	1078	936	1078
SPECIFIC GRAVITY	0.643	0.693	0.651

	INDEX 3016 SAMPLE 11499	INDEX 3017 SAMPLE 9737	INDEX 3018 SAMPLE 5306
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	MARSAC CREEK	PETERS	PORT HURON
WELL NAME	KUSKOWSKI NO. 2	SCHOMBERG-BOUSSON NO. 2	RINGEL NO. 1-31
LOCATION	SEC. 30, T4N, R15E	SEC. 26, T4N, R15E	SEC. 31, T4N, R15E
OWNER	CONSUMERS POWER CO.	SUN OIL CO.	PANHANDLE EASTERN PIPELINE
COMPLETED	07/12/66	02/10/64	06/16/52
SAMPLED	05/07/68	02/10/65	09/27/52
FORMATION	SILU-SALINA & NIAGARA	SILU-SALINA	NOT GIVEN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2689	2474	2468
WELLHEAD PRESSURE,PSIG	1000	450	1151
OPEN FLOW, MCFD	33500	2119	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	83.5	81.9
ETHANE	4.8	4.7	5.7
PROPANE	2.3	2.2	2.2
N-BUTANE	0.6	1.1	0.5
ISOBUTANE	0.9	1.2	0.7
N-PENTANE	0.1	0.7	0.3
ISOPENTANE	0.2	0.6	0.1
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	1.7	0.1
NITROGEN	3.6	3.9	8.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.13	0.18	0.14
HEATING VALUE*	1102	1215	1051
SPECIFIC GRAVITY	0.650	0.721	0.667

	INDEX 3019 SAMPLE 11498	INDEX 3020 SAMPLE 11984	INDEX 3021 SAMPLE 5420
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	PUTTYGUT	SWAN CREEK	WILDCAT
WELL NAME	DONOGHUE SROKA NO. 1	WISSMAN-DRAVES NO. 3	ADAMSKI NO. 2
LOCATION	SEC. 11, T4N, R15E	SEC. 36, T4N, R15E	SEC. 2, T3N, R15E
OWNER	CONSUMERS POWER CO.	CONSUMERS POWER CO.	PANHANDLE EASTERN PIPELINE
COMPLETED	10/31/61	08/26/67	01/19/53
SAMPLED	05/07/68	07/22/69	03/20/53
FORMATION	SILU-SALINA A-1	SILU-NIAGARA	SILU-SALINA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2782	2368	2276
WELLHEAD PRESSURE,PSIG	300	1160	1088
OPEN FLOW, MCFD	6300	25000	8900
COMPONENT, MOLE PCT			
METHANE	86.7	85.8	86.1
ETHANE	5.2	4.8	4.5
PROPANE	2.6	2.2	2.1
N-BUTANE	0.9	0.6	0.7
ISOBUTANE	1.3	0.8	0.7
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.5	5.0	4.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.09	0.16	0.15
HEATING VALUE*	1135	1083	1078
SPECIFIC GRAVITY	0.660	0.651	0.653

	INDEX 3022 SAMPLE 11395	INDEX 3023 SAMPLE 11396	INDEX 3024 SAMPLE 3173
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	WASHTENAW	WASHTENAW	WASHTENAW
FIELD	LYNDON	LYNDON	WILDCAT
WELL NAME	SCHOONOVER NO. 1	MAY NO. 1	REHRL NO. 1
LOCATION	SEC. 6, T1S, R3E	SEC. 6, T1S, R3E	SEC. 12, T1S, R7E
OWNER	WM. R. ALBERS	WM. R. ALBERS	LEE BROWN
COMPLETED	05/08/59	08/04/64	03/25/37
SAMPLED	03/18/68	03/18/68	02/06/42
FORMATION	DEVO-DETROIT RIVER	DEVO-TRAVERSE	SILU-SALINA BASAL
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1730	1321	2900
WELLHEAD PRESSURE,PSIG	695	545	1000
OPEN FLOW, MCFD	1500	650	300
COMPONENT, MOLE PCT			
METHANE	79.0	81.4	63.2
ETHANE	12.5	6.3	21.6
PROPANE	3.9	1.7	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	2.3	9.3	14.6
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.14	0.16	0.25
HEATING VALUE*	1185	1019	1027
SPECIFIC GRAVITY	0.696	0.658	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3025 SAMPLE 9743	INDEX 3026 SAMPLE 9744	INDEX 3027 SAMPLE 15748
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	WAYNE	WAYNE	WEXFORD
FIELD	NORTHVILLE	NORTHVILLE	WEXFORD
WELL NAME	N-20A	N-207	MIDDAUGH NO. 2
LOCATION	SEC. 16, T1S, R8E	SEC. 16, T1S, R8E	SEC. 4, T24N, R12W
OWNER	CONSUMERS POWER CO.	CONSUMERS POWER CO.	SHELL OIL CO.
COMPLETED	12/01/64	11/20/64	01/24/78
SAMPLED	02/11/65	02/11/65	09/07/79
FORMATION	ORDO-TRENTON	ORDO-TRENTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3988	3977	6095
WELLHEAD PRESSURE,PSIG	1100	1275	NOT GIVEN
OPEN FLOW, MCFD	3000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	66.9	83.5
ETHANE	8.5	7.7	8.1
PROPANE	2.5	3.7	3.7
N-BUTANE	0.7	0.6	0.8
ISOBUTANE	0.2	TRACE	1.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.6	13.5	1.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	6.9	TRACE
HELIUM	0.21	0.20	0.03
HEATING VALUE*	9880	9510	1186
SPECIFIC GRAVITY	0.724	0.769	0.684

	INDEX 3028 SAMPLE 2794	INDEX 3029 SAMPLE 2850	INDEX 3030 SAMPLE 4145
STATE	MINNESOTA	MINNESOTA	MISSISSIPPI
COUNTY	COTTONWOOD	FLOYD	ADAMS
FIELD	NOT GIVEN	NOT GIVEN	CRANFIELD
WELL NAME	WATER WELL	SOUTH WILLOW LAKE FARM	ELLA G. LEES NO. 9
LOCATION	SEC. 34, T105, R35	SEC. 3, T104N, R35W	SEC. 45, T7N, R1W
OWNER	JAMES S. THOMPSON	JAMES S. THOMPSON	CALIFORNIA CO.
COMPLETED	08/02/38	NOT GIVEN	06/24/46
SAMPLED	08/02/38	08/12/40	10/03/46
FORMATION	NOT GIVEN	NOT GIVEN	CRET-PALUXY
GEOLOGIC PROVINCE CODE	320	320	210
DEPTH, FEET	85	60	11768
WELLHEAD PRESSURE,PSIG	260	NOT GIVEN	4400
OPEN FLOW, MCFD	3000	NOT GIVEN	5750
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	87.4
ETHANE	0.0	0.0	1.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	89.4	98.5	4.0
OXYGEN	1.9	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.9	1.3	6.9
HELIUM	0.00	0.00	0.07
HEATING VALUE*	0	0	912
SPECIFIC GRAVITY	0.930	0.975	0.646

	INDEX 3031 SAMPLE 5269	INDEX 3032 SAMPLE 9242	INDEX 3033 SAMPLE 3969
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	ADAMS	CHICKASAW	CLAIBORNE
FIELD	STANTON	THORN	BRUINSBURG
WELL NAME	LETTIE PROBY NO. 1	H. I. BLACK UNIT NO. 1	W. R. HAMMETT NO. 1-A
LOCATION	SEC. 41, T4N, R1W	SEC. 22, T2S, R13E	SEC. 2, T11N, R1W
OWNER	AUSTIN STEWART	PAN AMERICAN PETROLEUM CORP.	SUN OIL CO.
COMPLETED	02/23/52	01/27/64	11/22/44
SAMPLED	06/26/52	02/18/64	02/14/45
FORMATION	EOCE-WILCOX	MISS-SANDERS	EOCE-MOODYS BRANCH
GEOLOGIC PROVINCE CODE	210	200	210
DEPTH, FEET	3980	3461	930
WELLHEAD PRESSURE,PSIG	1724	1330	406
OPEN FLOW, MCFD	20000	20000	14000
COMPONENT, MOLE PCT			
METHANE	98.0	97.7	94.9
ETHANE	0.4	1.3	4.8
PROPANE	0.0	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.3	0.7	0.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.02	0.10	0.04
HEATING VALUE*	1003	1013	1047
SPECIFIC GRAVITY	0.565	0.564	0.581

	INDEX 3034 SAMPLE 12324	INDEX 3035 SAMPLE 14739	INDEX 3036 SAMPLE 15978
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CLARK	CLAY	CLAY
FIELD	NANCY W	CORRINE	WILDCAT
WELL NAME	M. M. MCCOY 6-10 NO. 1	WILSON NO. 24-1	JAMES G. FOSTER NO. 1
LOCATION	SEC. 6, T1N, R14E	SEC. 24, T16S, R7E	SEC. 29, T16S, R6E
OWNER	GETTY OIL CO.	R. L. BURNS CORP.	SHELL OIL CO.
COMPLETED	02/01/70	12/29/73	NOT GIVEN
SAMPLED	07/16/70	08/23/76	NOT GIVEN
FORMATION	JURA-SMACKOVER	MISS-CARTER	CRET-LEWIS
GEOLOGIC PROVINCE CODE	210	200	200
DEPTH, FEET	13800	5191	10310
WELLHEAD PRESSURE,PSIG	2000	1890	996
OPEN FLOW, MCFD	760000	2000	2610
COMPONENT, MOLE PCT			
METHANE	61.0	87.1	91.5
ETHANE	16.1	6.8	5.5
PROPANE	9.7	2.7	1.3
N-BUTANE	3.2	0.8	0.5
ISOBUTANE	1.9	0.4	0.2
N-PENTANE	0.8	0.3	0.1
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	2.3	1.0	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	1.8	0.0	0.0
CARBON DIOXIDE	1.8	0.1	0.5
HELIUM	0.02	0.08	0.03
HEATING VALUE*	1436	1154	1090
SPECIFIC GRAVITY	0.890	0.656	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3037 SAMPLE 8820	INDEX 3038 SAMPLE 12427	INDEX 3039 SAMPLE 10678
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	FORREST	GREENE	HANCOCK
FIELD	MAXIE	STATE LINE S	WAVELAND
WELL NAME	MAXIE G.U. NO. 1	LUCAS NO. 1	WAVELAND GAS UNIT NO. 1
LOCATION	SEC. 13, T1S, R13W	SEC. 14, T4N, R5W	SEC. 22, T4S, R15W
OWNER	MAYFLO OIL CO.	SHELL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/31/62	05/24/70	07/19/65
SAMPLED	01/05/63	09/30/70	07/15/66
FORMATION	CRET-EUTAW	JURA-NORPHLET	CRET-MOORINGSPORT
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	7012	18207	13848
WELLHEAD PRESSURE,PSIG	2600	5770	4100
OPEN FLOW, MCFD	7000	3560	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	69.4	90.7
ETHANE	0.9	11.6	1.6
PROPANE	0.5	6.4	0.7
N-BUTANE	0.2	2.2	0.4
ISOBUTANE	0.2	2.9	0.2
N-PENTANE	0.1	0.8	0.1
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.8	0.2
NITROGEN	2.7	2.6	1.2
OXYGEN	TRACE	0.1	0.6
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.5	4.8
HELIUM	0.03	0.01	0.03
HEATING VALUE*	1018	1354	1005
SPECIFIC GRAVITY	0.595	0.837	0.640

	INDEX 3040 SAMPLE 15210	INDEX 3041 SAMPLE 2605	INDEX 3042 SAMPLE 12241
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	HANCOCK	HINDS	HINDS
FIELD	WAVELAND	JACKSON	LEARNED
WELL NAME	CROSBY ESTATE "F" NO. 1	FONDREN NO. 1	SHELL-MCNAIR NO. 1
LOCATION	SEC. 1, T4S, R15W	SEC. 24, T6N, R1E	SEC. 13, T4N, R4W
OWNER	PHILLIPS PETROLEUM CO.	UNITED GAS PUBLIC SERVICE CO	SHELL OIL CO.
COMPLETED	NOT GIVEN	01/07/33	10/21/69
SAMPLED	02/--/78	02/15/33	04/15/70
FORMATION	CRET-MOORINGSPORT	EOCE-	CRET-SLIGO
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13338	2440	13300
WELLHEAD PRESSURE,PSIG	3715	970	4910
OPEN FLOW, MCFD	4100	28000	5100
COMPONENT, MOLE PCT			
METHANE	92.0	92.7	92.0
ETHANE	0.8	0.0	0.2
PROPANE	0.3	---	TRACE
N-BUTANE	0.2	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.2	---	0.0
NITROGEN	1.5	6.2	3.7
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	4.5	0.7	4.0
HELIUM	0.03	0.08	0.05
HEATING VALUE*	988	939	936
SPECIFIC GRAVITY	0.626	0.588	0.609

	INDEX 3043 SAMPLE 13179	INDEX 3044 SAMPLE 12044	INDEX 3045 SAMPLE 4020
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	HUMPHREYS	JASPER	JASPER
FIELD	FOMOSLA	PAULDING W	SOSO
WELL NAME	PAT BARRETT NO. 1	MASONITE NO. 1	EDWARDS-BAILEY UNIT NO. 1
LOCATION	PAT BARRETT LEASE	SEC. 8, T2N, R12E	SEC. 27, T10N, R13W
OWNER	AMOCO PRODUCTION CO.	GETTY OIL CO.	GULF OIL CO.
COMPLETED	12/19/71	06/24/69	02/28/45
SAMPLED	12/19/71	09/16/69	05/10/45
FORMATION	JURA-SMACKOVER	JURA-BUCKNER	CRET-EUTAW & TUSCALOOSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	9384	14186	6590
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	2550
OPEN FLOW, MCFD	NOT GIVEN	825	62000
COMPONENT, MOLE PCT			
METHANE	57.8	70.0	52.7
ETHANE	4.2	13.4	46.5
PROPANE	1.7	7.4	---
N-BUTANE	0.7	2.2	---
ISOBUTANE	0.8	2.5	---
N-PENTANE	0.3	0.7	---
ISOPENTANE	0.3	0.4	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.4	---
NITROGEN	3.5	2.6	0.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	30.1	0.1	0.2
HELIUM	0.04	0.02	0.05
HEATING VALUE*	800	1367	1367
SPECIFIC GRAVITY	0.944	0.808	0.788

	INDEX 3046 SAMPLE 4175	INDEX 3047 SAMPLE 5066	INDEX 3048 SAMPLE 13075
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	FAYETTE	FAYETTE S	GWINVILLE
WELL NAME	M. R. SMITH NO. C-1	R. T. LIDDELL	GWINVILLE GAS UNIT NO. 3
LOCATION	SEC. 27, T9N, R1W	SEC. 67, T9N, R1E	SEC. 21, T9N, R19W
OWNER	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/05/46	02/04/51	02/24/71
SAMPLED	12/21/46	07/13/51	10/06/71
FORMATION	CRET-TUSCALOOSA	CRET-TUSCALOOSA	CRET-PALUXY
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	3650	10064	12256
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4186	2450
OPEN FLOW, MCFD	NOT GIVEN	42600	7200
COMPONENT, MOLE PCT			
METHANE	99.8	83.2	95.8
ETHANE	0.0	7.6	0.5
PROPANE	---	2.7	0.1
N-BUTANE	---	0.7	0.1
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.3	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.0	2.4	1.7
OXYGEN	0.0	0.4	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	2.1	1.7
HELIUM	0.02	0.12	0.04
HEATING VALUE*	1011	1106	990
SPECIFIC GRAVITY	0.556	0.677	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3049 SAMPLE 13076	INDEX 3050 SAMPLE 15548	INDEX 3051 SAMPLE 4288
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	GWINVILLE	UNION CHURCH	WILDCAT
WELL NAME	GWINVILLE GAS UNIT NO. 3	SARAH G. CUPIT NO. 1	W. G. GREER NO. 2
LOCATION	SEC. 21, T9N, R19W	SEC. 2, T8N, R4E	SEC. 10, T9N, R4E
OWNER	HUMBLE OIL & REFINING CO.	INEXCO OIL CO.	CALIFORNIA CO.
COMPLETED	02/24/71	05/--/78	01/05/47
SAMPLED	10/06/71	12/27/78	03/17/47
FORMATION	CRET-PALUXY	CRET-HOSSTON	EOCE-
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	11116	NOT GIVEN	1452
WELLHEAD PRESSURE,PSIG	1650	6200	579
OPEN FLOW, MCFD	6600	NOT GIVEN	986
COMPONENT, MOLE PCT			
METHANE	95.9	91.3	95.3
ETHANE	0.3	2.5	0.1
PROPANE	0.1	0.8	---
N-BUTANE	TRACE	0.2	---
ISOBUTANE	0.1	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.8	1.0	4.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.5	3.6	0.2
HELIUM	0.04	0.02	0.02
HEATING VALUE*	992	1018	967
SPECIFIC GRAVITY	0.584	0.626	0.575

	INDEX 3052 SAMPLE 14956	INDEX 3053 SAMPLE 15909	INDEX 3054 SAMPLE 15910
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	BASSFIELD	CARSON	CARSON
WELL NAME	G. L. OEEN NO. 1	MAGNOLIA NO. 1	MAGNOLIA NO. 1
LOCATION	SEC. 27, T7N, R17W	SEC. 11, T7N, R18W	SEC. 11, T7N, R18W
OWNER	SUN OIL CO.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	12/15/76	10/--/78	10/99/78
SAMPLED	04/02/77	02/24/80	02/24/80
FORMATION	CRET-HOSSTON & BOOTH	CRET-HOSSTON	-SINCLAIR
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	16143	14766	14605
WELLHEAD PRESSURE,PSIG	5200	4600	3237
OPEN FLOW, MCFD	10500	1600	5300
COMPONENT, MOLE PCT			
METHANE	93.5	88.5	93.0
ETHANE	0.3	3.7	1.5
PROPANE	0.1	1.5	0.4
N-BUTANE	0.1	0.7	0.2
ISOBUTANE	TRACE	0.5	0.1
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.5	1.4	1.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	2.9	2.6
HELIUM	0.03	0.02	0.03
HEATING VALUE*	968	1083	1008
SPECIFIC GRAVITY	0.608	0.659	0.611

	INDEX 3055 SAMPLE 7137	INDEX 3056 SAMPLE 15949	INDEX 3057 SAMPLE 16033
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	GRANGE	GREEN'S CREEK	GREEN'S CREEK
WELL NAME	JEFF HOLLOWAY NO. 1	DALE UNIT 8-10 NO. 1	W. H. LANGSTON NO. 1
LOCATION	SEC. 24, T8N, R20W	SEC. 8, T5N, R19W	SEC. 4, T5N, R19W
OWNER	PAN AMERICAN PETROLEUM CORP.	HARKINS & CO.	MARION CORP.
COMPLETED	05/15/22/59	09/22/79	10/18/79
SAMPLED	07/01/59	04/22/80	08/11/80
FORMATION	CRET-PALUXY	CRET-HOSSTON	CRET-SLIGO
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13248	16272	15780
WELLHEAD PRESSURE,PSIG	5300	5800	6000
OPEN FLOW, MCFD	NOT GIVEN	5500	3400
COMPONENT, MOLE PCT			
METHANE	95.0	89.0	94.0
ETHANE	0.7	0.3	0.3
PROPANE	0.0	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.6	4.4	1.2
OXYGEN	0.0	0.9	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	4.8	4.1
HELIUM	0.01	0.02	0.03
HEATING VALUE*	984	935	969
SPECIFIC GRAVITY	0.587	0.639	0.605

	INDEX 3058 SAMPLE 4190	INDEX 3059 SAMPLE 9243	INDEX 3060 SAMPLE 4077
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	KEMPER	LAMAR
FIELD	GWINVILLE	NOT GIVEN	BAXTERVILLE
WELL NAME	VINNIE WALKER NO. 1	ROSIE MCNEIL	SNOWDEN NO. 1
LOCATION	SEC. 34, T9N, R19W	SEC. 32, T10N, R14E	SEC. 7, T1N, R16W
OWNER	GULF OIL CO.	ROSIE MCNEIL	SUN OIL CO.
COMPLETED	02/02/46	NOT GIVEN	05/22/45
SAMPLED	11/19/46	02/26/64	07/09/45
FORMATION	CRET-U	EOCE-WILCOX	CRET-U
GEOLOGIC PROVINCE CODE	210	200	210
DEPTH, FEET	8074	175	7674
WELLHEAD PRESSURE,PSIG	3280	NOT GIVEN	3048
OPEN FLOW, MCFD	31000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	0.0	94.8
ETHANE	2.0	0.0	3.3
PROPANE	---	0.0	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	1.4	96.8	0.5
OXYGEN	0.4	0.0	0.0
ARGON	---	1.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.9	2.0	1.3
HELIUM	0.04	0.11	0.05
HEATING VALUE*	1001	0	1019
SPECIFIC GRAVITY	0.581	0.982	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3061 SAMPLE 5131	INDEX 3062 SAMPLE 15968	INDEX 3063 SAMPLE 15549
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	LAMAR	LAMAR	LAWRENCE
FIELD	BAXTERVILLE	TATUM'S CAMP	MONTICELLO
WELL NAME	VIRGIL DAVIS ET AL, NO. G-2	ROSS BEATTY NO. 8-7	SMITH ESTATE NO. 1
LOCATION	SEC. 7, T1N, R16W	SEC. 8, T3N, R15W	SEC. 3, T7N, R11E
OWNER	GULF OIL CO.	SUN GAS CO.	INEXCO OIL CO.
COMPLETED	04/06/51	07/19/79	07/--/78
SAMPLED	11/13/51	05/27/80	12/28/78
FORMATION	EOCE-WILCOX	CRET-HOSSTON	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	5182	15699	15791
WELLHEAD PRESSURE,PSIG	2341	5200	5000
OPEN FLOW, MCFD	6000	3843	5000
COMPONENT, MOLE PCT			
METHANE	96.6	90.3	91.3
ETHANE	0.5	0.8	1.0
PROPANE	0.3	0.4	0.2
N-BUTANE	0.1	0.3	0.1
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	1.5	2.3	2.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	4.8	4.6
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1017	997	967
SPECIFIC GRAVITY	0.582	0.645	0.624

	INDEX 3064 SAMPLE 15931	INDEX 3065 SAMPLE 15599	INDEX 3066 SAMPLE 5060
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	LOWNDES	MADISON	MADISON
FIELD	CALENDONIA	GLUCKSTATD	NOT GIVEN
WELL NAME	SMITH NO. 1-4	D. R. YANDALL NO. 1	J. R. CAMERON NO. 1
LOCATION	SEC. 4, T16S, R17W	NOT GIVEN	SEC. 36, T10N, R1E
OWNER	ELF AQUITAINE OIL & GAS	TEXAS PACIFIC OIL CO. INC.	CONTINENTAL OIL CO.
COMPLETED	12/23/79	12/18/78	NOT GIVEN
SAMPLED	03/25/80	04/07/79	05/30/51
FORMATION	MISS-CARTER	JURA-NORPHLET	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	4652	16050	13780
WELLHEAD PRESSURE,PSIG	1860	6800	2200
OPEN FLOW, MCFD	2700	5000	2760
COMPONENT, MOLE PCT			
METHANE	94.5	0.9	3.4
ETHANE	3.0	0.1	TRACE
PROPANE	0.2	TRACE	0.1
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	0.4	0.5
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	98.5	95.6
HELIUM	0.10	TRACE	0.24
HEATING VALUE*	1040	16	36
SPECIFIC GRAVITY	0.590	1.519	1.488

	INDEX 3067 SAMPLE 6493	INDEX 3068 SAMPLE 4080	INDEX 3069 SAMPLE 13039
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MARION	MARION	MARION
FIELD	BAXTERVILLE	HUB	HUB
WELL NAME	T. W. DAVIS NO. 2	A. EVANS NO. 1	W. E. WALKER NO. 4
LOCATION	SEC. 31, T2N, R16W	SEC. 15, T2N, R18W	SEC. 10, T1N, R18W
OWNER	TIDEWATER OIL CO.	HUMBLE OIL & REFINING CO.	CHEVRON OIL CO.
COMPLETED	01/--/49	03/03/45	03/12/71
SAMPLED	01/29/58	05/19/45	09/22/71
FORMATION	CRET-TUSCALOOSA	CRET-U	CRET-PALUXY
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	7800	9127	11704
WELLHEAD PRESSURE,PSIG	2450	2800	4124
OPEN FLOW, MCFD	5000	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	96.5	93.2	95.5
ETHANE	0.5	3.7	0.5
PROPANE	0.2	---	0.2
N-BUTANE	0.1	---	0.1
ISOBUTANE	0.1	---	0.1
N-PENTANE	0.1	---	0.1
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	1.4	1.9	1.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	1.1	2.3
HELIUM	TRACE	0.03	0.03
HEATING VALUE*	1013	1010	998
SPECIFIC GRAVITY	0.583	0.592	0.594

	INDEX 3070 SAMPLE 7669	INDEX 3071 SAMPLE 7670	INDEX 3072 SAMPLE 4838
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MARION	MARION	MARION
FIELD	KNOXO	KNOXO	SANDY HOOK
WELL NAME	BOARD OF SUPV. NO. 1-LT	BOARD OF SUPV. NO. 1-UT	PITTMAN NO. 2
LOCATION	SEC. 16, T2N, R12E	SEC. 16, T2N, R12E	SEC. 12, T1N, R18W
OWNER	TEXACO-SEABOARD, INC.	TEXACO-SEABOARD,INC.	UNION PRODUCING CO.
COMPLETED	06/07/60	06/07/60	01/02/49
SAMPLED	09/09/60	09/09/60	12/28/49
FORMATION	CRET-PALUXY U	CRET-WASHITA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	12532	12386	9006
WELLHEAD PRESSURE,PSIG	4722	4620	3340
OPEN FLOW, MCFD	80000	4600	32000
COMPONENT, MOLE PCT			
METHANE	96.3	97.6	88.1
ETHANE	0.1	0.0	1.0
PROPANE	0.0	0.0	0.6
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.2
NITROGEN	1.0	0.1	6.9
OXYGEN	0.0	0.0	1.3
ARGON	TRACE	0.0	0.1
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.3	2.2	1.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	978	989	959
SPECIFIC GRAVITY	0.580	0.576	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3073 SAMPLE 5757	INDEX 3074 SAMPLE 1781	INDEX 3075 SAMPLE 1825
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	ABERDEEN	AMORY	AMORY
WELL NAME	LEE HARRINGTON NO. 1	CARTER NO. 1	CARTER NO. 2
LOCATION	NOT GIVEN	SEC. 7, T13N, R17E	SEC. 7, T13N, R17E
OWNER	SHELL OIL CO.	AMORY PETROLEUM CO.	AMORY PETROLEUM CO.
COMPLETED	01/15/53	10/05/26	NOT GIVEN
SAMPLED	01/14/55	05/20/29	08/03/29
FORMATION	MISS-	MISS-HARTSELLE	MISS-HARTSELLE
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	3500	2412	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1442	700	NOT GIVEN
OPEN FLOW, MCFD	3000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	96.9	96.1
ETHANE	2.9	1.4	1.1
PROPANE	0.2	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	1.4	1.4	1.5
OXYGEN	0.0	0.1	0.5
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.2	0.8
HELIUM	0.10	0.12	0.16
HEATING VALUE*	1018	1007	993
SPECIFIC GRAVITY	0.579	0.570	0.577

	INDEX 3076 SAMPLE 15536	INDEX 3077 SAMPLE 14975	INDEX 3078 SAMPLE 7502
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	BUTTAHATCHIE RIVER	CORINNE	OKOLONA
WELL NAME	HARMON NO. 16	SELF NO. 12-1	MURPHREE NO. 1
LOCATION	SEC. 24, T15S, R18W	SEC. 12, T16S, R19W	SEC. 28, T12, R6E
OWNER	PRUET & HUGHES OPER. CO.	CLEARY PETROLEUM CO.	PURE OIL CO.
COMPLETED	10/25/78	NOT GIVEN	02/18/56
SAMPLED	12/08/78	04/13/77	04/14/60
FORMATION	MISS-CARTER	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4577	5010	2012
WELLHEAD PRESSURE,PSIG	1425	1150	845
OPEN FLOW, MCFD	2900	4000	5950
COMPONENT, MOLE PCT			
METHANE	94.5	88.0	97.0
ETHANE	3.0	6.3	0.1
PROPANE	0.3	2.2	0.1
N-BUTANE	0.1	0.7	0.0
ISOBUTANE	0.1	0.4	0.0
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	1.8	1.3	2.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.1
HELIUM	0.06	0.08	0.10
HEATING VALUE*	1039	1134	987
SPECIFIC GRAVITY	0.591	0.648	0.566

	INDEX 3079 SAMPLE 7231	INDEX 3080 SAMPLE 11714	INDEX 3081 SAMPLE 11715
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PIKE	RANKIN	RANKIN
FIELD	MCCOMB	PUCKETT	PUCKETT
WELL NAME	GILLIS-POPE UNIT NO. 1	G. U. PUCKETT NO. 2	PUCKETT G.U. NO. 1
LOCATION	SEC. 10, T7E, R3N	NOT GIVEN	SEC. 18, T3N, R6E
OWNER	SUN OIL CO. ET AL.	LARCO DRILLING CORP.	LARCO DRILLING CORP.
COMPLETED	07/29/59	02/--/67	01/15/67
SAMPLED	09/24/59	12/17/68	12/17/68
FORMATION	CRET-TUSCALOOSA	CRET-8630 GAS SAND	CRET-8630 GAS SAND
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	10468	8630	8630
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3100	3100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	42000
COMPONENT, MOLE PCT			
METHANE	70.0	92.0	91.7
ETHANE	11.3	0.4	0.4
PROPANE	9.2	TRACE	TRACE
N-BUTANE	2.5	0.2	0.2
ISOBUTANE	1.4	0.0	TRACE
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	1.5	0.0	0.0
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.8	0.6	0.7
NITROGEN	0.5	5.1	5.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.8	0.9
HELIUM	0.01	0.06	0.04
HEATING VALUE*	1411	1006	1003
SPECIFIC GRAVITY	0.842	0.615	0.623

	INDEX 3082 SAMPLE 11520	INDEX 3083 SAMPLE 10957	INDEX 3084 SAMPLE 13046
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	RANKIN	SCOTT	SIMPSON
FIELD	WILDCAT	NOT GIVEN	MERIT
WELL NAME	J. A. SPANN EST. NO. 1	WILLIE J. WADE NO. 1	COX H NO. 1
LOCATION	SEC. 19, T6N, R5E	SEC. 32, T4N, R7E	SEC. 8, T1N, R4E
OWNER	GENERAL CRUDE OIL CO.	TEXACO INC.	PHILLIPS PETROLEUM CO.
COMPLETED	DRILL STEM TEST NO. 5	NOT GIVEN	10/01/70
SAMPLED	05/--/68	05/09/67	09/28/71
FORMATION	JURA-SMACKOVER	NOT GIVEN	CRET-RODESSA U
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	NOT GIVEN	NOT GIVEN	13204
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	0.2	22.6	91.9
ETHANE	0.0	0.8	0.5
PROPANE	TRACE	TRACE	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.1	11.0	3.7
OXYGEN	0.1	TRACE	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.5	65.3	3.0
HELIUM	0.02	0.05	0.05
HEATING VALUE*	2	244	961
SPECIFIC GRAVITY	1.519	1.239	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3085 SAMPLE 13047	INDEX 3086 SAMPLE 15182	INDEX 3087 SAMPLE 7227
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	SIMPSON	SIMPSON	WALTHALL
FIELD	MERIT	OAK CREEK	DEXTER
WELL NAME	COX H NO. 1	WILLIAMSON NO. 1	M. B. HENGST NO. 1
LOCATION	SEC. 8, T1N, R4E	SEC. 15, T10N, R19W	SEC. 7, T1N, R13E
OWNER	PHILLIPS PETROLEUM CO.	R. L. BURNS OIL & GAS CORP.	SKELLY OIL CO.
COMPLETED	10/01/70	NOT GIVEN	07/--/59
SAMPLED	09/28/71	01/01/78	09/29/59
FORMATION	CRET-RODESSA L	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13276	13777	9596
WELLHEAD PRESSURE,PSIG	3600	3700	3498
OPEN FLOW, MCFD	1350	4758	2050
COMPONENT, MOLE PCT			
METHANE	92.5	81.6	95.7
ETHANE	0.4	0.3	0.4
PROPANE	0.2	0.1	0.1
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	3.7	5.5	1.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.1	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	11.3	1.8
HELIUM	0.05	0.03	0.02
HEATING VALUE*	974	874	1002
SPECIFIC GRAVITY	0.612	0.709	0.591

	INDEX 3088 SAMPLE 7230	INDEX 3089 SAMPLE 13380	INDEX 3090 SAMPLE 8405
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	WALTHALL	WALTHALL	WALTHALL
FIELD	DEXTER	KIRKLIN	KOKOMO
WELL NAME	JOE PITTMAN A NO. 1	LACY DAVIS NO. 1	J. O. MCDONALD NO. 1
LOCATION	SEC. 7, T1N, R13E	SEC. 11, T1N, R11E	SEC. 26, T3N, R11E
OWNER	SKELLY OIL CO.	SOUTHEASTERN EXPLORATION,LTD	SUN OIL CO.
COMPLETED	01/--/59	02/05/71	04/01/60
SAMPLED	09/29/59	09/12/72	02/07/62
FORMATION	CRET-L	CRET-PALUXY	CRET-PALUXY
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	11062	13257	12944
WELLHEAD PRESSURE,PSIG	4200	1500	4833
OPEN FLOW, MCFD	10000	2150	23500
COMPONENT, MOLE PCT			
METHANE	96.7	95.7	96.3
ETHANE	0.2	0.1	0.1
PROPANE	0.2	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.9	0.9	0.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	3.2	2.7
HELIUM	0.03	0.02	0.03
HEATING VALUE*	993	971	980
SPECIFIC GRAVITY	0.582	0.589	0.586

	INDEX 3091 SAMPLE 13970	INDEX 3092 SAMPLE 15035	INDEX 3093 SAMPLE 2169
STATE	MISSISSIPPI	MISSISSIPPI	MONTANA
COUNTY	WALTHALL	WALTHALL	BIG HORN
FIELD	KOKOMO-DURBAN	TYLERTOWN	HARDIN
WELL NAME	WILMER HAMMOND NO. 1	MITCHELL-LAIRD NO. 1	NO. 17
LOCATION	SEC. 6, T2N, R12E	SEC. 26, T2N, R11E	SEC. 21, T1S, R33E
OWNER	MOON & HINES	FLORIDA GAS EXPL. CO.	BIG HORN OIL & GAS DEV. CO.
COMPLETED	NOT GIVEN	03/28/77	08/11/30
SAMPLED	03/28/74	06/23/77	09/22/30
FORMATION	CRET-PALUXY	CRET-PALUXY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	210	210	515
DEPTH, FEET	12866	12698	670
WELLHEAD PRESSURE,PSIG	2600	3200	145
OPEN FLOW, MCFD	3500	NOT GIVEN	161
COMPONENT, MOLE PCT			
METHANE	95.9	95.8	98.1
ETHANE	0.1	0.2	0.0
PROPANE	TRACE	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.0	1.0	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.9	3.0	0.1
HELIUM	0.03	0.03	0.07
HEATING VALUE*	973	977	994
SPECIFIC GRAVITY	0.587	0.590	0.562

	INDEX 3094 SAMPLE 15993	INDEX 3095 SAMPLE 2179	INDEX 3096 SAMPLE 9155
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	BLACK COULEE	BOWES	BOWES
WELL NAME	STATE NO. 14-36	NO. 6	O. R. STEVENS NO. 1
LOCATION	SEC. 36, T32N, R18E	SEC. 9, T31N, R19E	SEC. 26, T32N, R19E
OWNER	MONTANA POWER CO.	MID-NORTHERN OIL CO.	TEXACO INC.
COMPLETED	12/26/79	09/26/29	07/08/57
SAMPLED	06/24/80	09/18/30	11/05/63
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1148	1060	735
WELLHEAD PRESSURE,PSIG	349	250	181
OPEN FLOW, MCFD	3215	17500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	89.0	94.0
ETHANE	0.5	0.2	0.3
PROPANE	0.1	---	0.1
N-BUTANE	TRACE	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	3.6	10.6	5.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.08	0.11	0.10
HEATING VALUE*	980	905	960
SPECIFIC GRAVITY	0.573	0.599	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3097 SAMPLE 2366	INDEX 3098 SAMPLE 1262	INDEX 3099 SAMPLE 14915
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	BOX ELDER	CHINOOK	LEROY
WELL NAME	PERKINS, STRANAHAN NO. 1	NO. 1	GEORGE ALEHA NO. 1
LOCATION	SEC. 14, T32N, R17E	SEC. 9, T31N, R19E	SEC. 11, T24N, R18E
OWNER	W. A. PERKINS	CALIFORNIA CO.	GUTHRIE OIL & GAS CO.
COMPLETED	06/17/31	--/--/24	10/07/76
SAMPLED	07/27/31	05/--/26	02/18/77
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1272	1026	1530
WELLHEAD PRESSURE,PSIG	425	245	406
OPEN FLOW, MCFD	7250	25000	2875
COMPONENT, MOLE PCT			
METHANE	93.7	95.7	94.7
ETHANE	1.7	0.3	0.3
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	4.3	3.1	4.8
OXYGEN	0.2	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.04	0.10	0.07
HEATING VALUE*	980	975	965
SPECIFIC GRAVITY	0.583	0.576	0.576

	INDEX 3100 SAMPLE 11966	INDEX 3101 SAMPLE 13183	INDEX 3102 SAMPLE 13184
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	TIGER RIDGE	WILDCAT	WILDCAT
WELL NAME	OEHLRON NO. 3-2	ROBINSON NO. 11-34	ROBINSON NO. 11-34
LOCATION	SEC. 3, T30N, R18E	SEC. 34, T26N, R19E	SEC. 34, T26N, R19E
OWNER	HIGH CREST OILS, INC.	WISE OIL CO.	WISE OIL CO.
COMPLETED	04/04/67	08/30/71	08/30/71
SAMPLED	07/11/69	04/07/72	04/07/72
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1204	1508	850
WELLHEAD PRESSURE,PSIG	307	521	210
OPEN FLOW, MCFD	NOT GIVEN	10088	444
COMPONENT, MOLE PCT			
METHANE	94.0	94.2	95.1
ETHANE	1.5	0.4	0.3
PROPANE	0.6	0.1	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	3.1	5.2	4.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.09	0.08	0.08
HEATING VALUE*	1011	964	969
SPECIFIC GRAVITY	0.586	0.578	0.573

	INDEX 3103 SAMPLE 13190	INDEX 3104 SAMPLE 13191	INDEX 3105 SAMPLE 13464
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MOORE NO. 33-14	ROBINSON NO. 11-13	WILLIAMSON NO. 68-9
LOCATION	SEC. 14, T27N, R18E	SEC. 13, T26N, R19E	SEC. 9, T26N, R19E
OWNER	WISE OIL CO.	WISE OIL CO.	WISE OIL CO.
COMPLETED	02/14/72	10/10/71	04/20/72
SAMPLED	04/11/72	04/11/72	11/05/72
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1450	400	1990
WELLHEAD PRESSURE,PSIG	480	100	NOT GIVEN
OPEN FLOW, MCFD	743	65	8900
COMPONENT, MOLE PCT			
METHANE	87.1	94.0	90.6
ETHANE	2.7	0.3	0.4
PROPANE	1.5	0.1	0.1
N-BUTANE	0.4	0.0	TRACE
ISOBUTANE	0.4	0.0	TRACE
N-PENTANE	0.4	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	7.1	5.5	8.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.08	0.08	0.12
HEATING VALUE*	1019	960	928
SPECIFIC GRAVITY	0.633	0.579	0.591

	INDEX 3106 SAMPLE 13465	INDEX 3107 SAMPLE 13466	INDEX 3108 SAMPLE 7489
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	CARBON
FIELD	WILDCAT	WILDCAT	BELFRY
WELL NAME	FEDERAL NO. 11-15	FEDERAL NO. 11-15	BELFRY UNIT NO. 1
LOCATION	SEC. 15, T25N, R18E	SEC. 15, T25N, R18E	SEC. 7, T9S, R22E
OWNER	WISE OIL CO.	WISE OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/24/71	09/28/71	03/22/58
SAMPLED	11/05/72	11/05/72	04/01/60
FORMATION	CRET-EAGLE	CRET-JUDITH RIVER	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	395	395	520
DEPTH, FEET	1558	805	9843
WELLHEAD PRESSURE,PSIG	500	200	2390
OPEN FLOW, MCFD	2400	40	4
COMPONENT, MOLE PCT			
METHANE	96.8	93.8	3.3
ETHANE	2.3	0.3	1.0
PROPANE	TRACE	0.1	0.4
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.7	5.5	93.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	1.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.07	0.09	0.01
HEATING VALUE*	966	958	68
SPECIFIC GRAVITY	0.574	0.580	0.965

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3109 SAMPLE 7635	INDEX 3110 SAMPLE 5039	INDEX 3111 SAMPLE 8961
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	BELFRY	CLARKS FORK	CLARKS FORK
WELL NAME	BELFRY UNIT NO. 1	MCCLELLAN-GOV. NO. 1	TEXACO-GOVERNMENT C-NO. 1
LOCATION	SEC. 7, T9S, R22E	SEC. 26NE, T9S, R22E	SEC. 27, T9S, R22E
OWNER	HUMBLE OIL & REFINING CO.	BRITISH-AMERICAN OIL PROD.	TEXACO INC.
COMPLETED	03/22/58	04/20/51	02/--/63
SAMPLED	08/03/60	05/10/51	05/17/63
FORMATION	CRET-L	CRET-DAKOTA	CRET-GREYBULL
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9844	7536	7920
WELLHEAD PRESSURE,PSIG	2390	1325	1878
OPEN FLOW, MCFD	4500	NOT GIVEN	316
COMPONENT, MOLE PCT			
METHANE	76.4	81.2	66.8
ETHANE	13.6	11.7	13.8
PROPANE	5.0	3.6	6.6
N-BUTANE	1.3	0.6	2.2
ISOBUTANE	0.6	0.4	1.0
N-PENTANE	0.2	0.1	0.7
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	0.2	0.1	0.8
NITROGEN	0.9	1.1	6.1
OXYGEN	TRACE	0.1	0.7
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.3	0.9	0.5
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1244	1173	1303
SPECIFIC GRAVITY	0.731	0.683	0.819

	INDEX 3112 SAMPLE 9555	INDEX 3113 SAMPLE 1771	INDEX 3114 SAMPLE 1772
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	CLARKS FORK	DRY CREEK	DRY CREEK
WELL NAME	GOVERNMENT C NO. 1	NO. 1	NO.1
LOCATION	SEC. 27, T9S, R22E	SEC. 11, T7S, R21E	SEC. 11, T7S, R21E
OWNER	TEXACO INC.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	03/23/63	NOT GIVEN	NOT GIVEN
SAMPLED	08/31/64	05/11/29	05/11/29
FORMATION	CRET-GREYBULL	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	7927	2350	4450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	960	1400
OPEN FLOW, MCFD	NOT GIVEN	2500	6500
COMPONENT, MOLE PCT			
METHANE	65.1	85.6	83.7
ETHANE	13.9	12.6	14.0
PROPANE	6.9	---	---
N-BUTANE	2.5	---	---
ISOBUTANE	1.3	---	---
N-PENTANE	0.7	---	---
ISOPENTANE	0.8	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	1.0	---	---
NITROGEN	6.4	0.6	0.9
OXYGEN	0.1	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	1.1	1.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1342	1093	1099
SPECIFIC GRAVITY	0.844	0.632	0.640

	INDEX 3115 SAMPLE 2178	INDEX 3116 SAMPLE 2199	INDEX 3117 SAMPLE 9136
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	DRY CREEK	DRY CREEK	DRY CREEK
WELL NAME	NORTHERN PACIFIC NO. 1	NORTHERN PACIFIC NO. 2	CHAPMAN NO. 24
LOCATION	SEC. 11, T7S, R21E	SEC. 11, T7S, R21E	SEC. 2, T7S, R21E
OWNER	OHIO OIL CO.	OHIO OIL CO.	MARATHON OIL CO.
COMPLETED	03/31/29	DRILL STEM TEST	04/--/54
SAMPLED	09/18/30	10/06/30	10/29/63
FORMATION	CRET-FRONTIER	CRET-LAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4410	5412	4062
WELLHEAD PRESSURE,PSIG	1310	NOT GIVEN	421
OPEN FLOW, MCFD	9000	NOT GIVEN	1800
COMPONENT, MOLE PCT			
METHANE	83.0	7.0	88.9
ETHANE	12.8	92.4	6.8
PROPANE	---	---	1.4
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	3.0	0.1	0.9
OXYGEN	0.1	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.1	0.5	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1070	1727	1122
SPECIFIC GRAVITY	0.641	1.018	0.635

	INDEX 3118 SAMPLE 14391	INDEX 3119 SAMPLE 9135	INDEX 3120 SAMPLE 11427
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARTER
FIELD	DRY CREEK	GOLDEN DOME	BELL CREEK
WELL NAME	ROBINSON NO. 15	J. KUCKINSKI NO. 1	ESPY NO. 6-1
LOCATION	SEC. 3, T7S, R21E	SEC. 14, T7S, R22E	SEC. 6, T8S, R55E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	SINCLAIR OIL & GAS CO.
COMPLETED	08/01/72	10/31/61	09/08/67
SAMPLED	04/09/75	10/24/63	04/03/68
FORMATION	CRET- JUDITH RIVER	CRET-MESAVERDE	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	395
DEPTH, FEET	1884	2633	4368
WELLHEAD PRESSURE,PSIG	375	495	1062
OPEN FLOW, MCFD	500000	400	14500
COMPONENT, MOLE PCT			
METHANE	87.2	86.7	94.4
ETHANE	7.1	5.4	0.3
PROPANE	2.3	2.1	0.1
N-BUTANE	0.4	0.9	0.2
ISOBUTANE	0.8	0.5	0.1
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.5	3.1	4.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	0.10	0.02
HEATING VALUE*	1142	1126	997
SPECIFIC GRAVITY	0.653	0.659	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3121 SAMPLE 11428	INDEX 3122 SAMPLE 2157	INDEX 3123 SAMPLE 2854
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARTER	CARTER	CASCADE
FIELD	BELL CREEK	WOLF CREEK	VAUGHN
WELL NAME	ESPY NO. 7-1	NO. 1	SHANNON-ROBERTS NO. 1
LOCATION	SEC. 7, T8S, R55E	SEC. 7, T8S, R57E	SEC. 12, T20N, R1E
OWNER	SINCLAIR OIL & GAS CO.	JOHN R. POSS	BUSHFORD PETROLEUM SYND.
COMPLETED	10/04/67	NOT GIVEN	NOT GIVEN
SAMPLED	04/03/68	09/26/30	01/15/41
FORMATION	CRET-MUDDY	NOT GIVEN	DEVO-
GEOLOGIC PROVINCE CODE	395	395	500
DEPTH, FEET	4478	NOT GIVEN	3168
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	50
OPEN FLOW, MCFD	2000	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	94.3	97.0	1.8
ETHANE	0.5	0.0	0.0
PROPANE	0.1	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	4.3	2.7	28.9
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	49.4
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	995	983	18
SPECIFIC GRAVITY	0.590	0.570	1.049

	INDEX 3124 SAMPLE 2305	INDEX 3125 SAMPLE 14328	INDEX 3126 SAMPLE 14943
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	CHOUTEAU	CHOUTEAU
FIELD	BARE PAW MOUNTAIN	BULLWACKER	BULLWACKER
WELL NAME	COOLEGE & COOLEGE	NORDEN NO. 3	HENDERSON NO. 5-27
LOCATION	SEC. 17, T25N, R17E	SEC. 29, T27N, R17E	SEC. 27, T27N, R17E
OWNER	COOLEGE & COOLEGE	ROLAND S. ROND	MONTANA POWER CO.
COMPLETED	01/01/22	09/23/74	09/03/76
SAMPLED	03/28/31	11/25/74	03/16/77
FORMATION	NOT GIVEN	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1700	2052	2365
WELLHEAD PRESSURE,PSIG	570	525	436
OPEN FLOW, MCFD	7000	2434	2000
COMPONENT, MOLE PCT			
METHANE	95.4	87.2	85.2
ETHANE	0.0	3.0	2.8
PROPANE	---	1.4	1.5
N-BUTANE	---	0.3	0.4
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.3	7.5	9.3
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.08	0.10
HEATING VALUE*	966	1007	994
SPECIFIC GRAVITY	0.575	0.630	0.640

	INDEX 3127 SAMPLE 15880	INDEX 3128 SAMPLE 2328	INDEX 3129 SAMPLE 13182
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	CHOUTEAU	CHOUTEAU
FIELD	CHIP CREEK	SAND CREEK	SHERARD
WELL NAME	STATE NO. 2-16	A. HUERSCHWERTEN NO. 1	FEDERAL NO. 10-29
LOCATION	SEC. 16, T26N, R17E	SEC. 17, T25N, R17E	SEC. 29, T26N, R17E
OWNER	CANADA OIL & GAS CO.	TEXAS PACIFIC COAL & OIL CO.	WISE OIL CO.
COMPLETED	08/29/79	04/05/23	10/04/71
SAMPLED	01/10/80	05/03/31	04/07/72
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1444	1748	1426
WELLHEAD PRESSURE,PSIG	389	570	360
OPEN FLOW, MCFD	2125	7000	163
COMPONENT, MOLE PCT			
METHANE	91.4	90.0	91.3
ETHANE	0.4	2.0	0.4
PROPANE	0.1	---	0.1
N-BUTANE	0.1	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	7.7	6.4	8.0
OXYGEN	TRACE	0.9	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.7	TRACE
HELIUM	0.13	0.05	0.11
HEATING VALUE*	939	948	935
SPECIFIC GRAVITY	0.591	0.603	0.589

	INDEX 3130 SAMPLE 13463	INDEX 3131 SAMPLE 9149	INDEX 3132 SAMPLE 746
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	DAWSON	FALLON
FIELD	WILDCAT	SAND CREEK	BAKER
WELL NAME	STATE NO. 24-16	M. N. GUFFE NO. 1	MONTANA PETROLEUM CO. NO. 1
LOCATION	SEC. 16, T25N, R17E	SEC. 4, T15N, R54E	SEC. 13, T7N, R59E
OWNER	WISE OIL CO.	TEXACO INC.	MONTANA PETROLEUM CO.
COMPLETED	06/12/72	03/08/39	--/--/17
SAMPLED	11/05/72	11/01/63	04/--/22
FORMATION	CRET-EAGLE	SILU-INTERLAKE	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	395	395
DEPTH, FEET	1706	8954	1440
WELLHEAD PRESSURE,PSIG	590	NOT GIVEN	150
OPEN FLOW, MCFD	11000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.6	23.0	99.5
ETHANE	0.3	21.6	0.0
PROPANE	TRACE	21.8	---
N-BUTANE	TRACE	11.3	---
ISOBUTANE	TRACE	2.1	---
N-PENTANE	TRACE	4.8	---
ISOPENTANE	TRACE	3.2	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	TRACE	0.7	---
NITROGEN	0.8	8.9	0.0
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	2.1	0.1
HELIUM	0.05	0.10	0.08
HEATING VALUE*	968	2023	1008
SPECIFIC GRAVITY	0.574	1.318	0.557

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3133 SAMPLE 2082	INDEX 3134 SAMPLE 5601	INDEX 3135 SAMPLE 2418
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	BAKER	CABIN CREEK	CEDAR CREEK
WELL NAME	MONARCH NO. 6	UNIT NO. 11-33	NO. 46
LOCATION	SEC. 12, T5N, R59E	SEC. 33, T10N, R58E	SEC. 36, T9N, R58E
OWNER	MONARCH GAS CORP.	SHELL OIL CO.	GAS DEVELOPMENT CO.
COMPLETED	DRILL STEM TEST	NOT GIVEN	08/01/29
SAMPLED	06/26/30	02/10/54	10/10/31
FORMATION	CRET-EAGLE	CAMB-	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1985	10086	718
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4360	210
OPEN FLOW, MCFD	15	60000	26500
COMPONENT, MOLE PCT			
METHANE	97.7	7.5	85.8
ETHANE	0.0	1.1	5.0
PROPANE	---	0.5	---
N-BUTANE	---	0.1	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.0	89.3	8.5
OXYGEN	0.2	0.0	0.6
ARGON	---	0.2	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.09	0.40	0.13
HEATING VALUE*	990	117	959
SPECIFIC GRAVITY	0.565	0.944	0.619

	INDEX 3136 SAMPLE 2419	INDEX 3137 SAMPLE 2420	INDEX 3138 SAMPLE 2424
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	NO. 7	NO. 11	NO. 106
LOCATION	SEC. 27, T10N, R58E	SEC. 36, T11N, R57E	SEC. 23, T8N, R59E
OWNER	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.
COMPLETED	10/04/26	07/07/27	07/13/31
SAMPLED	10/10/31	10/10/31	10/11/31
FORMATION	CRET-JUDITH RIVER	CRET-JUDITH RIVER	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	864	761	762
WELLHEAD PRESSURE,PSIG	210	200	193
OPEN FLOW, MCFD	8000	1000	5000
COMPONENT, MOLE PCT			
METHANE	92.6	94.4	91.9
ETHANE	1.9	0.0	2.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.2	5.5	5.5
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.14	0.12	0.11
HEATING VALUE*	972	956	976
SPECIFIC GRAVITY	0.588	0.578	0.591

	INDEX 3139 SAMPLE 2426	INDEX 3140 SAMPLE 2427	INDEX 3141 SAMPLE 2559
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	NO. 40	NO. 2	GAS DEVELOPMENT CO. NO. 93
LOCATION	SEC. 2, T5N, R60E	SEC. 28, T8N, R60E	SEC. 18, T7N, R60E
OWNER	GAS DEVELOPMENT CO.	H. W. MCDONALD	GAS DEVELOPMENT CO.
COMPLETED	08/12/29	09/01/31	12/--/16
SAMPLED	10/11/31	10/12/31	09/27/32
FORMATION	CRET-JUDITH RIVER	CRET-EAGLE	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	937	1662	799
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	135
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	92.4	93.9	95.9
ETHANE	1.6	1.6	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.9	4.1	3.9
OXYGEN	0.0	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.09	0.10	0.10
HEATING VALUE*	965	980	971
SPECIFIC GRAVITY	0.588	0.583	0.571

	INDEX 3142 SAMPLE 2561	INDEX 3143 SAMPLE 9122	INDEX 3144 SAMPLE 9123
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	GAS DEVELOPMENT CO. NO. 81	NO. 94	NO. 365
LOCATION	SEC. 2, T8N, R59E	SEC. 18, T7N, R60E	SEC. 29, T7N, R60E
OWNER	GAS DEVELOPMENT CO.	MONTANA DAKOTA UTILITIES CO.	MONTANA DAKOTA UTILITIES CO.
COMPLETED	07/12/29	--/--/18	10/04/49
SAMPLED	09/27/32	10/24/63	10/24/63
FORMATION	CRET-JUDITH RIVER	CRET-JUDITH RIVER	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1009	837	1315
WELLHEAD PRESSURE,PSIG	197	NOT GIVEN	322
OPEN FLOW, MCFD	1187	295	180
COMPONENT, MOLE PCT			
METHANE	96.0	95.4	95.3
ETHANE	0.0	0.2	0.4
PROPANE	---	0.1	0.2
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	3.6	4.1	3.9
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.12	0.10	0.10
HEATING VALUE*	972	973	978
SPECIFIC GRAVITY	0.571	0.574	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3145 SAMPLE 1667	INDEX 3146 SAMPLE 935	INDEX 3147 SAMPLE 2248
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FERGUS	FERGUS
FIELD	NOT GIVEN	ARNELLS	ARNELLS
WELL NAME	FINDLATER NO. 1	EDWARDS NO. 1	NO. 1
LOCATION	NEAR BAKER	SEC. 4, T17N, R20E	SEC. 4, T17N, R20E
OWNER	J. G. FINDLATER	CALIFORNIA CO.	G. LANDHEIM
COMPLETED	NOT GIVEN	NOT GIVEN	12/13/30
SAMPLED	08/03/28	08/08/24	12/16/30
FORMATION	NOT GIVEN	NOT GIVEN	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	395	510	510
DEPTH, FEET	NOT GIVEN	1470	1238
WELLHEAD PRESSURE,PSIG	NOT GIVEN	345	400
OPEN FLOW, MCFD	NOT GIVEN	2900	2590
COMPONENT, MOLE PCT			
METHANE	92.7	38.7	42.1
ETHANE	2.0	1.0	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.8	58.3	56.0
OXYGEN	0.5	0.8	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.5	0.1
HELIUM	0.18	0.60	0.64
HEATING VALUE*	975	410	448
SPECIFIC GRAVITY	0.590	0.806	0.790

	INDEX 3148 SAMPLE 670	INDEX 3149 SAMPLE 934	INDEX 3150 SAMPLE 1396
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FERGUS	FERGUS	GALLATIN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NOT GIVEN	ROMUNDSTAD NO. 1-A	SPRING
LOCATION	SEC. 6, T14N, R20E	SEC. 4, T17N, R20E	SEC. 8, T3N, R3E
OWNER	GAULT INVESTMENT CO.	CALIFORNIA CO.	W. L. STOCKTON
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/--/21	08/08/24	05/27/27
FORMATION	NOT GIVEN	CRET-KOOTENAI	NOT GIVEN
GEOLOGIC PROVINCE CODE	510	510	505
DEPTH, FEET	NOT GIVEN	1240	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	345	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	42.3	0.0
ETHANE	0.0	0.4	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	99.7	55.3	91.9
OXYGEN	0.2	0.9	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	4.6
HELIUM	0.08	0.60	0.76
HEATING VALUE*	0	436	34
SPECIFIC GRAVITY	0.967	0.789	0.989

	INDEX 3151 SAMPLE 4298	INDEX 3152 SAMPLE 7944	INDEX 3153 SAMPLE 7945
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	MCGUINNESS NO. 8	WARFIELD U 1	MCNAMER N 4
LOCATION	SEC. 6, T35N, R6W	SEC. 9, T35N, R5W	SEC. 14, T36N, R5W
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	01/21/47	05/20/36	04/21/59
SAMPLED	05/12/47	04/27/61	04/27/61
FORMATION	CRET-L	CRET-KOOTENAI	MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2804	2977	2825
WELLHEAD PRESSURE,PSIG	477	215	753
OPEN FLOW, MCFD	8600	940	5900
COMPONENT, MOLE PCT			
METHANE	76.4	77.4	81.7
ETHANE	17.4	7.0	6.3
PROPANE	---	3.2	2.3
N-BUTANE	---	1.0	0.6
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.1	5.0	4.9
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.7	5.0	3.0
HELIUM	0.15	0.20	0.20
HEATING VALUE*	1046	1064	1054
SPECIFIC GRAVITY	0.674	0.721	0.681

	INDEX 3154 SAMPLE 9142	INDEX 3155 SAMPLE 9146	INDEX 3156 SAMPLE 9150
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	ANTRIM NO. 3	THAYER NO. 2	ARONSON NO. 2
LOCATION	SEC. 34, T35N, R6W	SEC. 2, T35N, R6W	SEC. 21, T35N, R6W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	07/01/34	10/09/44	01/19/41
SAMPLED	11/03/63	11/04/63	11/04/63
FORMATION	CRET-CUT BANK	CRET-BLACK LEAF	ORDO-LANDER
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2918	1725	2953
WELLHEAD PRESSURE,PSIG	50	52	50
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.6	85.1	41.0
ETHANE	17.6	2.7	25.4
PROPANE	10.5	2.3	13.9
N-BUTANE	4.1	1.1	7.0
ISOBUTANE	1.3	0.4	2.0
N-PENTANE	0.8	0.2	1.7
ISOPENTANE	1.3	0.3	2.9
CYCLOPENTANE	0.2	0.1	0.4
HEXANES PLUS	0.6	0.1	1.8
NITROGEN	2.2	7.1	1.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.1	2.5
HELIUM	0.06	0.40	0.00
HEATING VALUE*	1492	1051	1839
SPECIFIC GRAVITY	0.923	0.657	1.126

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3157 SAMPLE 9163	INDEX 3158 SAMPLE 10830	INDEX 3159 SAMPLE 14453
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	DF STUFF NO. 3	ELMER NO. 1	CLAPPER NO U-1
LOCATION	SEC. 30, T36N, R5W	SEC. 3, T36N, R5W	SEC. 27, T35N, R5W
OWNER	TEXACO INC.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	01/06/48	NOT GIVEN	08/13/35
SAMPLED	11/04/63	01/03/67	05/05/75
FORMATION	MISS-MADISON	CRET-MOULTON	CRET-CUT BANK
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3221	2676	2625
WELLHEAD PRESSURE,PSIG	NOT GIVEN	715	710
OPEN FLOW, MCFD	NOT GIVEN	3000	15365
COMPONENT, MOLE PCT			
METHANE	77.8	82.0	75.8
ETHANE	8.5	6.4	7.9
PROPANE	4.1	2.3	4.0
N-BUTANE	1.4	0.5	1.3
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	0.3	0.0	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.6	6.9	5.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	1.1	4.0
HELIUM	0.10	0.25	0.14
HEATING VALUE*	1151	1041	1121
SPECIFIC GRAVITY	0.728	0.663	0.743

	INDEX 3160 SAMPLE 6735	INDEX 3161 SAMPLE 1842	INDEX 3162 SAMPLE 2154
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	DARLING AREA	HEADLIGHT BUTTE	HEADLIGHT BUTTE
WELL NAME	MOBERLY NO. 1	DRUMHILLER-YOUNG NO. 1	YUNCK NO. 1
LOCATION	SEC. 1, T37N, R5W	SEC. 1, T34N, R6W	SEC. 1, T34N, R6W
OWNER	FRARY ASSOCIATES	NOT GIVEN	JOSEPH DRUMHELLER
COMPLETED	01/14/58	NOT GIVEN	08/02/29
SAMPLED	07/15/58	08/28/29	09/26/30
FORMATION	CRET-CUT BANK	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2600	NOT GIVEN	2710
WELLHEAD PRESSURE,PSIG	829	NOT GIVEN	595
OPEN FLOW, MCFD	600	NOT GIVEN	6250
COMPONENT, MOLE PCT			
METHANE	92.3	86.2	80.6
ETHANE	2.1	9.1	13.5
PROPANE	0.8	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.9	3.8	4.2
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.7	0.1	1.5
HELIUM	0.05	0.55	0.18
HEATING VALUE*	1036	1036	1058
SPECIFIC GRAVITY	0.622	0.615	0.653

	INDEX 3163 SAMPLE 2155	INDEX 3164 SAMPLE 8543	INDEX 3165 SAMPLE 9154
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GOLDEN VALLEY
FIELD	HEADLIGHT BUTTE	NOT GIVEN	BIG COULEE
WELL NAME	MICHAEL NO. 1	TWO MEDICINE NO. 1	N. N. STATE 36
LOCATION	SEC. 28, T36N, R5W	SEC. 9, T31N, R11W	SEC. 36, T5N, R19E
OWNER	O"NEIL & HILL	MONTANA POWER CO.	NORTHERN NAT. GAS PROD. CO.
COMPLETED	08/10/30	--/--/61	10/16/59
SAMPLED	09/26/30	05/02/62	10/23/63
FORMATION	CRET-KOOTENAI	MISS-MADISON	CRET-CAT CREEK 3RD
GEOLOGIC PROVINCE CODE	500	500	515
DEPTH, FEET	2755	8895	1987
WELLHEAD PRESSURE,PSIG	760	2268	888
OPEN FLOW, MCFD	15000	800	12700
COMPONENT, MOLE PCT			
METHANE	78.6	78.6	90.3
ETHANE	13.1	7.5	0.4
PROPANE	---	2.6	0.2
N-BUTANE	---	0.6	0.0
ISOBUTANE	---	0.3	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	4.8	4.4	8.5
OXYGEN	0.1	TRACE	TRACE
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	3.2	5.4	0.2
HELIUM	0.15	0.05	0.30
HEATING VALUE*	1031	1051	927
SPECIFIC GRAVITY	0.670	0.712	0.595

	INDEX 3166 SAMPLE 9250	INDEX 3167 SAMPLE 16153	INDEX 3168 SAMPLE 11720
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GOLDEN VALLEY	HILL	HILL
FIELD	BIG COULEE	GILDFORD	HAVRE S
WELL NAME	N.N.N.P. B-1	ARONOW NO. 1-7	LUMPKIN NO. 23-1
LOCATION	SEC. 31, T5N, R20E	SEC. 7, T33N, R11E	SEC. 23, T32N, R15E
OWNER	UNION OIL OF CAL.	LARIO OIL AND GAS CO.	GOLDEN EAGLE EXPLORATION
COMPLETED	NOT GIVEN	12/16/80	10/10/68
SAMPLED	02/28/64	12/17/80	12/09/68
FORMATION	CRET-CAT CREEK 3RD	JURA-SAWTOOTH	CRET-EAGLE L
GEOLOGIC PROVINCE CODE	515	500	500
DEPTH, FEET	NOT GIVEN	3489	1071
WELLHEAD PRESSURE,PSIG	882	1594	450
OPEN FLOW, MCFD	NOT GIVEN	4855	4000
COMPONENT, MOLE PCT			
METHANE	89.8	96.6	90.0
ETHANE	0.3	0.1	0.3
PROPANE	0.3	0.1	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	8.6	1.2	8.1
OXYGEN	0.0	0.0	1.2
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	0.1
HELIUM	0.25	0.02	0.08
HEATING VALUE*	923	1008	917
SPECIFIC GRAVITY	0.601	0.586	0.597

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3169 SAMPLE 11721	INDEX 3170 SAMPLE 2308	INDEX 3171 SAMPLE 10368
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	HAVRE S	KREMLIN	NOT GIVEN
WELL NAME	SANDS NO. 15-1	ROEBUCK NO. 1	C. LINEWEAVER NO. 1
LOCATION	SEC. 15, T32N, R15E	SEC. 28, T33N, R12E	SEC. 4, T36N, R8E
OWNER	GOLDEN EAGLE EXPLORATION	JONES, RICE & PERKINS	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/--/68	NOT GIVEN	12/26/65
SAMPLED	12/09/68	03/29/31	12/20/65
FORMATION	CRET-EAGLE U	NOT GIVEN	JURA-FIREMOON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1010	610	3406
WELLHEAD PRESSURE,PSIG	435	175	1584
OPEN FLOW, MCFD	3800	200	4580
COMPONENT, MOLE PCT			
METHANE	96.4	82.4	95.4
ETHANE	0.3	0.0	0.1
PROPANE	TRACE	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	3.2	14.1	3.3
OXYGEN	0.0	3.4	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.1	1.2
HELIUM	0.09	0.05	0.04
HEATING VALUE*	982	835	968
SPECIFIC GRAVITY	0.569	0.632	0.580

	INDEX 3172 SAMPLE 13347	INDEX 3173 SAMPLE 14330	INDEX 3174 SAMPLE 14333
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	WALTER E. PAULSON NO. 1	CUNNINGHAM NO. 1	MILLER NO. 1
LOCATION	SEC. 32, T34N, R17E	SEC. 14, T34N, R16E	SEC. 29, T34N, R16E
OWNER	AMOCO PRODUCTION CO.	WAINOCO, INC.	WAINOCO, INC.
COMPLETED	07/14/72	01/05/75	01/09/75
SAMPLED	07/18/72	05/11/75	05/11/75
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-VIRGELLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1140	670	1489
WELLHEAD PRESSURE,PSIG	515	270	320
OPEN FLOW, MCFD	335	2150	3400
COMPONENT, MOLE PCT			
METHANE	96.2	97.0	96.3
ETHANE	0.4	0.3	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	3.2	2.6	3.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.09	0.08	0.09
HEATING VALUE*	982	988	981
SPECIFIC GRAVITY	0.569	0.566	0.568

	INDEX 3175 SAMPLE 14672	INDEX 3176 SAMPLE 14673	INDEX 3177 SAMPLE 6444
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	NOT GIVEN	NOT GIVEN	RUDYARD
WELL NAME	PAPILLO NO. 28-1	MILAM NO. 25-1	C. BRADBURY NO. 1
LOCATION	SEC. 28, T33N, R15E	SEC. 25, T33N, R14E	SEC. 10, T33N, R9E
OWNER	J. BURNS BROWN	J. BURNS BROWN	TEXAS CO.
COMPLETED	--/--/75	--/--/75	08/03/57
SAMPLED	05/12/76	05/03/76	11/13/57
FORMATION	CRET-EAGLE	CRET-EAGLE	JURA-SAWTOOTH
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1000	1000	3380
WELLHEAD PRESSURE,PSIG	450	450	1550
OPEN FLOW, MCFD	1400	1200	2980
COMPONENT, MOLE PCT			
METHANE	93.5	96.7	96.7
ETHANE	0.4	0.4	0.1
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	5.1	2.7	0.7
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	1.7
HELIUM	0.08	0.08	0.02
HEATING VALUE*	960	989	1007
SPECIFIC GRAVITY	0.593	0.568	0.585

	INDEX 3178 SAMPLE 7571	INDEX 3179 SAMPLE 7572	INDEX 3180 SAMPLE 14850
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	RUDYARD	RUDYARD	TIGER RIDGE
WELL NAME	R. E. BAIR NO. 1	R. E. BAIR NO. 1	LONG NO. 30-15
LOCATION	SEC. 28, T34N, R9E	SEC. 28, T34N, R9E	SEC. 30, T34N, R15E
OWNER	TEXACO INC.	TEXACO INC.	OIL RESOURCES INC.
COMPLETED	07/06/60	07/06/60	NOT GIVEN
SAMPLED	06/09/60	06/12/60	10/26/76
FORMATION	[illegible]-L	ORDO-	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	5068	5203	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2312	2130	410
OPEN FLOW, MCFD	1150	3060	16393
COMPONENT, MOLE PCT			
METHANE	4.5	0.9	96.8
ETHANE	0.2	TRACE	0.4
PROPANE	0.0	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	92.8	97.5	2.6
OXYGEN	0.1	0.0	0.0
ARGON	0.2	0.3	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.1
HELIUM	0.90	1.30	0.07
HEATING VALUE*	72	12	990
SPECIFIC GRAVITY	0.955	0.956	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3181 SAMPLE 10362	INDEX 3182 SAMPLE 13145	INDEX 3183 SAMPLE 13951
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	C. LINEWEAVER NO. 1	GRANT NO. 12-22	MUELLER NO. 18-13
LOCATION	NE SEC. 4, T36N, R8E	SEC. 22, T34N, R15E	SEC. 18, T37N, R8E
OWNER	PAN AMERICAN PETROLEUM CORP.	WAINOCO OIL LTD.	OIL RESOURCES INC.
COMPLETED	01/11/66	12/13/71	12/07/73
SAMPLED	01/11/66	02/07/72	03/12/74
FORMATION	JURA-BOWES	CRET-EAGLE	JURA-FIREMOON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3356	602	3578
WELLHEAD PRESSURE,PSIG	1571	186	1441
OPEN FLOW, MCFD	3180	4226	15500
COMPONENT, MOLE PCT			
METHANE	96.8	96.4	97.6
ETHANE	0.1	0.2	0.1
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.7	3.0	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	1.3
HELIUM	0.05	0.09	0.01
HEATING VALUE*	982	983	1002
SPECIFIC GRAVITY	0.576	0.569	0.575

	INDEX 3184 SAMPLE 1902	INDEX 3185 SAMPLE 12060	INDEX 3186 SAMPLE 9194
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	BEARS DEN	BLACK JACK	GRANDVIEW
WELL NAME	SUNBURST-RITTER NO. 1	N.P.-MCGREGOR NO.32-34	BLAIR NO. 1
LOCATION	SEC. 7, T36N, R6E	SEC. 32, T37N, R5E	SEC. 22, T34N, R4E
OWNER	SUNBURST OIL & REFINING CO.	NORTHERN PACIFIC RAILWAY CO.	MONTANA POWER CO.
COMPLETED	06/21/27	10/01/68	02/22/52
SAMPLED	12/09/29	09/30/69	12/02/63
FORMATION	CRET-KOOTENAI	CRET-SUNBURST	CRET-BOW ISLAND
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1783	2420	1745
WELLHEAD PRESSURE,PSIG	400	670	204
OPEN FLOW, MCFD	14000	2650	1520
COMPONENT, MOLE PCT			
METHANE	89.9	97.2	95.4
ETHANE	4.1	0.2	0.7
PROPANE	---	TRACE	0.0
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	5.2	1.5	3.7
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.9	0.1
HELIUM	0.07	0.05	0.10
HEATING VALUE*	984	989	979
SPECIFIC GRAVITY	0.603	0.569	0.574

	INDEX 3187 SAMPLE 4516	INDEX 3188 SAMPLE 4517	INDEX 3189 SAMPLE 6993
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	KEITH BLOCK	KEITH BLOCK	KEITH E
WELL NAME	GEORGE COLBRY NO. 1	C.B.-SORRELL-GOVERNMENT NO. 1	T. W. COLBRY NO. 1
LOCATION	SEC. 13, T36N, R6E	SEC. 29, T36N, R6E	SEC. 13, T36N, R6E
OWNER	TEXAS CO.	TEXAS CO.	MONTANA POWER CO.
COMPLETED	08/14/47	03/03/47	11/--/58
SAMPLED	05/05/48	05/05/48	03/06/59
FORMATION	MISS-L	JURA-U	JURA-ELLIS & MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3005	2814	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1215	750	1080
OPEN FLOW, MCFD	8980	998	25000
COMPONENT, MOLE PCT			
METHANE	97.4	97.3	96.3
ETHANE	1.1	0.8	0.0
PROPANE	---	---	0.3
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.5	0.8	1.4
OXYGEN	0.0	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.0	0.8	1.6
HELIUM	0.04	0.05	TRACE
HEATING VALUE*	1006	1000	1000
SPECIFIC GRAVITY	0.572	0.570	0.587

	INDEX 3190 SAMPLE 8812	INDEX 3191 SAMPLE 8813	INDEX 3192 SAMPLE 14887
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	KEITH E	KEITH E	KEITH E
WELL NAME	KOLHEI UNIT NO. 1	KOLHEI UNIT NO. 1	GUNDERSON NO. 13-34
LOCATION	SEC. 24, T36N, R6E	SEC. 24, T36N, R6E	SEC. 34, T37N, R6E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	08/07/62	08/07/62	NOT GIVEN
SAMPLED	12/18/62	12/18/62	01/22/77
FORMATION	JURA-SAWTOOTH	CRET-BOW ISLAND	JURA-SAWTOOTH
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2850	1792	3150
WELLHEAD PRESSURE,PSIG	818	595	1177
OPEN FLOW, MCFD	2420	9000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	95.5	97.3
ETHANE	0.2	0.3	0.2
PROPANE	0.2	TRACE	TRACE
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	7.9	4.7	1.3
OXYGEN	1.6	0.1	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	0.9
HELIUM	0.05	0.09	0.05
HEATING VALUE*	916	973	989
SPECIFIC GRAVITY	0.613	0.573	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3193 SAMPLE 9620	INDEX 3194 SAMPLE 15966	INDEX 3195 SAMPLE 4882
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	MOUNT LILLY	OBRIENS COULEE	UTOPIA
WELL NAME	SCHAFER NO. 1	STATE NO. 6-17	NICK LAAS NO. 2
LOCATION	SEC. 20, T27N, R5E	SEC. 17, T35N, R7E	SEC. 14, T33N, R4E
OWNER	CARDINAL PETROLEUM CO.,FT AL	MONTANA POWER CO.	TEXAS CO.
COMPLETED	09/06/63	05/19/80	09/24/46
SAMPLED	10/16/64	05/16/80	03/16/50
FORMATION	MISS-MADISON	CRET-WHITE SPECKS	DEVO-JEFFERSON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3020	1752	3540
WELLHEAD PRESSURE,PSIG	975	571	1360
OPEN FLOW, MCFD	6190	1630	4347
COMPONENT, MOLE PCT			
METHANE	96.0	91.2	14.3
ETHANE	0.4	0.4	2.1
PROPANE	0.3	0.1	1.2
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	1.8	8.1	78.8
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	0.1	1.4
HELIUM	0.06	0.16	0.87
HEATING VALUE*	1007	934	248
SPECIFIC GRAVITY	0.584	0.592	0.931

	INDEX 3196 SAMPLE 9180	INDEX 3197 SAMPLE 9193	INDEX 3198 SAMPLE 2173
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	UTOPIA	UTOPIA	WHITLASH
WELL NAME	LAAS NO. 1	LAAS NO. 2	TOWNSHEND NO. 2
LOCATION	SEC. 14, T33N, R4E	SEC. 14, T34N, R4E	SEC. 22, T37N, R4E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	WESTERN NATURAL GAS CO.
COMPLETED	09/11/44	09/24/46	08/05/29
SAMPLED	12/02/63	12/02/63	09/22/30
FORMATION	MISS-MADISON	JURA-SAWTOOTH	CRET-SHALE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2346	2315	1565
WELLHEAD PRESSURE,PSIG	651	595	280
OPEN FLOW, MCFD	5400	9200	5000
COMPONENT, MOLE PCT			
METHANE	96.2	96.6	95.0
ETHANE	0.1	0.1	2.3
PROPANE	0.5	0.6	---
N-BUTANE	0.3	0.1	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	1.0	0.9	2.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.5	1.5	0.1
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1011	1007	1004
SPECIFIC GRAVITY	0.588	0.584	0.579

	INDEX 3199 SAMPLE 2174	INDEX 3200 SAMPLE 2260	INDEX 3201 SAMPLE 2262
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	WHITLASH	WHITLASH	WHITLASH
WELL NAME	OOHR NO. 1	HAROLD BROWN NO. 1	ORR NO. 1
LOCATION	SEC. 17, T37N, R4E	SEC. 19, T37N, R4E	SEC. 22, T37N, R4E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	11/10/27	NOT GIVEN	01/01/29
SAMPLED	09/22/30	01/14/31	01/14/31
FORMATION	CRET-SHALE	CRET-BLACK LEAF	JURA-ELLIS
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1485	1730	2200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	400
OPEN FLOW, MCFD	1500	10000	3000
COMPONENT, MOLE PCT			
METHANE	99.3	94.7	91.6
ETHANE	0.0	1.7	4.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	3.3	3.8
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.09	0.07	0.07
HEATING VALUE*	1006	990	1005
SPECIFIC GRAVITY	0.558	0.579	0.594

	INDEX 3202 SAMPLE 2263	INDEX 3203 SAMPLE 2264	INDEX 3204 SAMPLE 2329
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	WHITLASH	WHITLASH	WHITLASH
WELL NAME	ELMER BROWN NO. 1	MAHONEY NO. 1	MAHONEY NO. 1
LOCATION	SEC. 19, T37N, R4E	SEC. 23, T37N, R4E	SEC. 23, T37N, R4E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	NOT GIVEN	11/01/30	12/22/30
SAMPLED	01/14/31	01/14/31	04/23/31
FORMATION	CRET-BLACK LEAF	CRET-SUNBURST	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1570	2066	2063
WELLHEAD PRESSURE,PSIG	350	700	600
OPEN FLOW, MCFD	8000	10700	9000
COMPONENT, MOLE PCT			
METHANE	95.0	86.1	87.1
ETHANE	1.5	8.9	8.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.1	4.5	3.6
OXYGEN	0.2	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.07	0.04	0.09
HEATING VALUE*	989	1032	1036
SPECIFIC GRAVITY	0.578	0.621	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3205 SAMPLE 9658	INDEX 3206 SAMPLE 7454	INDEX 3207 SAMPLE 7455
STATE	MONTANA	MONTANA	MONTANA
COUNTY	MCCONE	MUSSELSHELL	MUSSELSHELL
FIELD	NOT GIVEN	BIG WALL	BIG WALL
WELL NAME	FEDERAL MCCONE	MOFFETT NO. 3	ZOORB NO. 3
LOCATION	SEC. 22, T22N, R46E	SEC. 18, T10N, R27E	SEC. 18, T10N, R27E
OWNER	SINCLAIR OIL & GAS CO.	TEXACO INC.	TEXACO INC.
COMPLETED	11/--/64	NOT GIVEN	01/13/60
SAMPLED	11/30/64	03/21/60	03/21/60
FORMATION	MISS-KIBBEY	PENN-TYLER	PENN-TYLER
GEOLOGIC PROVINCE CODE	395	510	510
DEPTH, FEET	NOT GIVEN	2966	2963
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	215
OPEN FLOW, MCFD	NOT GIVEN	482	500
COMPONENT, MOLE PCT			
METHANE	13.2	29.2	22.7
ETHANE	3.6	2.6	2.2
PROPANE	6.2	2.0	2.0
N-BUTANE	5.5	0.8	1.0
ISOBUTANE	2.0	0.4	0.6
N-PENTANE	2.4	0.3	0.3
ISOPENTANE	1.7	0.2	0.3
CYCLOPENTANE	0.3	0.1	0.3
HEXANES PLUS	1.3	0.3	0.4
NITROGEN	39.8	63.4	69.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.1	0.1
HELIUM	1.38	0.50	0.60
HEATING VALUE*	865	475	433
SPECIFIC GRAVITY	0.928	0.886	0.922

	INDEX 3208 SAMPLE 4627	INDEX 3209 SAMPLE 1916	INDEX 3210 SAMPLE 2167
STATE	MONTANA	MONTANA	MONTANA
COUNTY	MUSSELSHELL	PHILLIPS	PHILLIPS
FIELD	HOWARD COULEE AREA	BOWDOIN	BOWDOIN
WELL NAME	NORTHERN PACIFIC C NO. 1	NO. 501	NO. 504
LOCATION	SEC. 13, T11N, R27E	SEC. 36, T32N, R32E	SEC. 36, T32N, R32E
OWNER	TEXAS CO.	MONTANA DAKOTA UTILITIES CO.	MONTANA DAKOTA UTILITIES CO.
COMPLETED	10/08/48	11/23/29	12/16/29
SAMPLED	NOT GIVEN	01/09/30	09/20/30
FORMATION	MISS-MADISON	CRET-BOWDOIN	CRET-COLORADO
GEOLOGIC PROVINCE CODE	510	395	395
DEPTH, FEET	5000	740	712
WELLHEAD PRESSURE,PSIG	NOT GIVEN	210	222
OPEN FLOW, MCFD	344	370	414
COMPONENT, MOLE PCT			
METHANE	3.0	95.1	92.4
ETHANE	4.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	68.0	4.3	7.4
OXYGEN	0.3	0.5	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	23.5	0.3	0.2
HELIUM	1.16	0.07	0.07
HEATING VALUE*	102	963	936
SPECIFIC GRAVITY	1.081	0.577	0.587

	INDEX 3211 SAMPLE 2181	INDEX 3212 SAMPLE 9182	INDEX 3213 SAMPLE 9183
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	BOWDOIN	BOWDOIN	BOWDOIN
WELL NAME	NELSON NO. 515	NO. 959	NO. 845
LOCATION	SEC. 8, T31N, R34E	SEC. 20, T31N, R35E	SEC. 19, T32N, R32E
OWNER	BOWDOIN UTILITIES CO.	FIDELITY GAS CO.	FIDELITY GAS CO.
COMPLETED	04/30/30	07/--/57	08/--/47
SAMPLED	09/20/30	12/02/63	12/02/63
FORMATION	-SHALE	CRET-BOWDOIN	CRET-PHILLIPS
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	668	701	1010
WELLHEAD PRESSURE,PSIG	205	160	465
OPEN FLOW, MCFD	1045	448	400
COMPONENT, MOLE PCT			
METHANE	95.2	93.2	93.0
ETHANE	0.0	0.2	0.2
PROPANE	---	TRACE	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	4.5	6.4	6.5
OXYGEN	0.1	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.07	0.10	0.10
HEATING VALUE*	964	948	948
SPECIFIC GRAVITY	0.576	0.582	0.582

	INDEX 3214 SAMPLE 14452	INDEX 3215 SAMPLE 2393	INDEX 3216 SAMPLE 15341
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	GUINN	GUINN DOME	NOT GIVEN
WELL NAME	NOT GIVEN	NO. 3	F. ANDERSON NO. 1
LOCATION	SEC. 20, T24N, R24E	SEC. 20, T24N, R24E	SEC. 1, T36N, R31E
OWNER	DOMESTIC RANCH USE	THORSEN & BULL CREEK DOME CO	JOSEPH J.C. PAINE & ASSOC.
COMPLETED	--/--/38	NOT GIVEN	08/18/77
SAMPLED	NOT GIVEN	09/10/31	08/06/78
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-COLORADO
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	NOT GIVEN	507	1355
WELLHEAD PRESSURE,PSIG	NOT GIVEN	190	575
OPEN FLOW, MCFD	NOT GIVEN	2000	2253
COMPONENT, MOLE PCT			
METHANE	36.8	58.8	91.6
ETHANE	0.5	2.3	0.3
PROPANE	TRACE	---	0.1
N-BUTANE	0.0	---	TRACE
ISOBUTANE	0.0	---	TRACE
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	TRACE
NITROGEN	61.0	38.8	7.6
OXYGEN	1.0	0.0	0.0
ARGON	0.5	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.02	0.06	0.09
HEATING VALUE*	382	637	937
SPECIFIC GRAVITY	0.819	0.727	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3217 SAMPLE 14583		INDEX 3218 SAMPLE 14584		INDEX 3219 SAMPLE 14617	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	PHILLIPS		PHILLIPS		PHILLIPS	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	2970 NO. 1		2061 NO. 1		FEDERAL 223631 NO. 1	
LOCATION	SEC. 29, T37N, R30E		SEC. 28, T36N, R31E		SEC. 22, T36N, R31E	
OWNER	MIDLANDS GAS CORP.		MIDLANDS GAS CORP.		ODESSA NATURAL CORP.	
COMPLETED	11/18/75		09/14/75		01/15/76	
SAMPLED	01/29/76		01/29/76		03/22/76	
FORMATION	CRET-BOWDOIN		CRET-PHILLIPS		CRET-BOWDOIN	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	1397		1461		1336	
WELLHEAD PRESSURE,PSIG	554		608		565	
OPEN FLOW, MCFD	225		450		2518	
COMPONENT, MOLE PCT						
METHANE	92.8		93.0		92.9	
ETHANE	0.3		0.3		0.3	
PROPANE	0.1		TRACE		0.1	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	6.4		6.3		6.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.1	
HELIUM	0.09		0.08		0.08	
HEATING VALUE*	948		947		949	
SPECIFIC GRAVITY	0.586		0.583		0.584	

	INDEX 3220 SAMPLE 2197		INDEX 3221 SAMPLE 11524		INDEX 3222 SAMPLE 14639	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	PONDERA		POWDER RIVER		POWDER RIVER	
FIELD	PONDERA		BELL CREEK		PUMPKIN CREEK	
WELL NAME	NO. 4		BIDDLE NO. 2-33		ALLEN NO. 1	
LOCATION	SEC. 16, T27N, R4W		SEC. 33, T8S, R54E		SEC. 24, T1S, R49E	
OWNER	MIDWEST REFINING CO.		CONSOLIDATED OIL & GAS, INC.		MCCULLOCH OIL CORP.	
COMPLETED	02/28/29		12/22/67		08/--/75	
SAMPLED	10/09/30		05/26/68		04/--/76	
FORMATION	MISS-MADISON		CRET-MUDDY		CRET-SHANNON	
GEOLOGIC PROVINCE CODE	500		515		515	
DEPTH, FEET	2029		4438		3058	
WELLHEAD PRESSURE,PSIG	10		880		706	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		42000	
COMPONENT, MOLE PCT						
METHANE	81.3		95.0		95.3	
ETHANE	13.9		0.3		0.3	
PROPANE	---		0.8		TRACE	
N-BUTANE	---		0.4		TRACE	
ISOBUTANE	---		0.4		0.1	
N-PENTANE	---		0.1		TRACE	
ISOPENTANE	---		0.3		0.1	
CYCLOPENTANE	---		0.1		TRACE	
HEXANES PLUS	---		0.2		0.1	
NITROGEN	2.8		2.3		3.9	
OXYGEN	0.1		0.0		0.0	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.1		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	1.7		TRACE		0.1	
HELIUM	0.31		0.01		0.04	
HEATING VALUE*	1073		1047		984	
SPECIFIC GRAVITY	0.651		0.600		0.578	

	INDEX 3223 SAMPLE 11228		INDEX 3224 SAMPLE 11229		INDEX 3225 SAMPLE 12630	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	RICHLAND		RICHLAND		RICHLAND	
FIELD	FAIRVIEW		FAIRVIEW		WILDCAT	
WELL NAME	VANDERHOOF A NO. 1		VANDERHOOF A NO. 1		FORT GILBERT NO. 1	
LOCATION	SEC. 13, T25N, R58E		SEC. 13, T25N, R58E		SEC. 32, T24N, R59E	
OWNER	SUPERIOR OIL CO.		SUPERIOR OIL CO.		CONSOLIDATED OIL & GAS, INC.	
COMPLETED	06/08/67		06/08/67		10/30/70	
SAMPLED	10/07/67		10/07/67		01/14/71	
FORMATION	DEVO-WINNIPEGOSIS		ORDO-RED RIVER		ORDO-RED RIVER	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	11814		12546		12502	
WELLHEAD PRESSURE,PSIG	1450		2250		1400	
OPEN FLOW, MCFD	200		340		1500	
COMPONENT, MOLE PCT						
METHANE	56.8		63.8		61.8	
ETHANE	19.9		18.9		18.3	
PROPANE	10.6		9.0		10.7	
N-BUTANE	3.2		2.7		3.7	
ISOBUTANE	1.3		0.8		0.9	
N-PENTANE	0.7		0.8		1.0	
ISOPENTANE	0.7		0.5		0.7	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.4		0.3		0.4	
NITROGEN	5.6		2.2		1.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.8		0.8	
HELIUM	0.02		0.06		0.04	
HEATING VALUE*	1383		1412		1484	
SPECIFIC GRAVITY	0.895		0.842		0.880	

	INDEX 3226 SAMPLE 12958		INDEX 3227 SAMPLE 3693		INDEX 3228 SAMPLE 9159	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	ROOSEVELT		ROSEBUD		STILLWATER	
FIELD	WILDCAT		INGOMAR		BIG COULEE	
WELL NAME	MCCABE NO. 1		HILLESON NO. 1		N.N.NP.D 182	
LOCATION	SEC. 1, T29N, R56E		SEC. 22, T9N, R35E		SEC. 7, T4N, R20E	
OWNER	CONSOLIDATED OIL & GAS INC.		NORTHERN ORDNANCE, INC.		NORTHERN NAT. GAS PROD. CO.	
COMPLETED	12/23/70		10/28/43		09/12/62	
SAMPLED	06/17/71		11/20/43		10/23/63	
FORMATION	ORDO-RED RIVER		PENN-AMSDEN		CRET-CAT CREEK&JURA-MORRISON	
GEOLOGIC PROVINCE CODE	395		515		510	
DEPTH, FEET	12058		3800		1955	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1000		904	
OPEN FLOW, MCFD	320		8200		10	
COMPONENT, MOLE PCT						
METHANE	62.8		12.6		90.4	
ETHANE	15.7		8.0		0.2	
PROPANE	9.7		---		0.2	
N-BUTANE	3.5		---		0.0	
ISOBUTANE	1.1		---		0.0	
N-PENTANE	1.1		---		0.0	
ISOPENTANE	0.3		---		0.0	
CYCLOPENTANE	TRACE		---		0.0	
HEXANES PLUS	0.3		---		0.0	
NITROGEN	4.4		79.2		8.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		---		0.1	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.0		0.2		0.4	
HELIUM	0.09		0.00		0.20	
HEATING VALUE*	1400		271		925	
SPECIFIC GRAVITY	0.861		0.923		0.596	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3229 SAMPLE 14392	INDEX 3230 SAMPLE 14149	INDEX 3231 SAMPLE 14150
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	BIG COULEE	BIG COULEE S	BIG COULEE S
WELL NAME	D-1	BRICKLEY NO. 1	BRICKLEY NO. 1
LOCATION	SEC. 7, T4N, R20E	SEC. 29, T4N, R20E	SEC. 29, T4N, R20E
OWNER	BURLINGTON NORTHERN INC.	CIG EXPLORATION, INC.	CIG EXPLORATION, INC.
COMPLETED	--/--/59	04/21/74	04/21/74
SAMPLED	04/15/75	09/13/74	09/13/74
FORMATION	CRET-THIRD CAT CREEK	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	1930	1715	2890
WELLHEAD PRESSURE,PSIG	432	650	1050
OPEN FLOW, MCFD	NOT GIVEN	930	1043
COMPONENT, MOLE PCT			
METHANE	89.8	88.9	89.1
ETHANE	0.3	0.2	0.2
PROPANE	TRACE	0.1	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	8.6	9.6	9.5
OXYGEN	0.0	0.1	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.6
HELIUM	0.23	0.25	0.24
HEATING VALUE*	915	907	906
SPECIFIC GRAVITY	0.600	0.603	0.601

	INDEX 3232 SAMPLE 1795	INDEX 3233 SAMPLE 969	INDEX 3234 SAMPLE 9324
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	BIG LAKE	BROADVIEW DOME	DEAN DOME
WELL NAME	C. D. MODURELL NO. 1	NOT GIVEN	ORR NO. 1
LOCATION	SEC. 26, T1N, R21E	SEC. 13, T3N, R22E	SEC. 18, T5S, R17E
OWNER	LINCO PETROLEUM CO.	SECURITY PRODUCING CO.	TYLER OIL CO.
COMPLETED	--/--/24	03/--/24	04/24/64
SAMPLED	06/13/29	01/17/25	04/25/64
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-GREYBULL
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	2995	1462	2060
WELLHEAD PRESSURE,PSIG	NOT GIVEN	600	575
OPEN FLOW, MCFD	NOT GIVEN	8000	10000
COMPONENT, MOLE PCT			
METHANE	78.1	93.9	95.5
ETHANE	18.2	2.6	0.2
PROPANE	---	---	0.4
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	3.0	2.2	3.3
OXYGEN	0.5	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.7	0.6
HELIUM	0.09	0.23	TRACE
HEATING VALUE*	1117	998	981
SPECIFIC GRAVITY	0.662	0.586	0.579

	INDEX 3235 SAMPLE 887	INDEX 3236 SAMPLE 2171	INDEX 3237 SAMPLE 2177
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	LAKE BASIN	LAKE BASIN	LAKE BASIN
WELL NAME	HEPP NO. 1	DIAMOND LEUTHOLD NO. 5	LUCE NO. 1
LOCATION	SEC. 26, T1N, R21E	SEC. 24, T1N, R21E	SEC. 35, T1N, R21E
OWNER	MID-NORTHERN OIL CO.	RECORD PETROLEUM CO.	RECORD PETROLEUM CO.
COMPLETED	NOT GIVEN	09/22/27	NOT GIVEN
SAMPLED	05/07/24	09/18/30	09/19/30
FORMATION	NOT GIVEN	CRET-FRONTIER	CRET-EAGLE
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	NOT GIVEN	3105	NOT GIVEN
WELLHEAD PRESSURE,PSIG	94	20	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	97.7	97.1
ETHANE	6.9	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	1.8	2.6
OXYGEN	0.3	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.05	0.04	0.13
HEATING VALUE*	1041	990	984
SPECIFIC GRAVITY	0.599	0.566	0.566

	INDEX 3238 SAMPLE 9160	INDEX 3239 SAMPLE 14017	INDEX 3240 SAMPLE 8178
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	NOT GIVEN	RAPELJE	WILDCAT
WELL NAME	NNNPO-2	STATE NO. 4-16	J. I. OSTRUM NO. 1
LOCATION	SEC. 7, T4N, R20E	SEC. 16, T2N, R20E	SEC. 9, T6S, R17E
OWNER	NATURAL GAS PROD. CO.	CONCEPT RESOURCES, INC.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/23/63	05/24/74	08/22/61
FORMATION	NOT GIVEN	CRET-EAGLE & VIRGELLE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	NOT GIVEN	1230	3133
WELLHEAD PRESSURE,PSIG	NOT GIVEN	539	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	26000	7
COMPONENT, MOLE PCT			
METHANE	90.5	93.3	95.0
ETHANE	0.3	1.7	0.4
PROPANE	0.2	1.1	TRACE
N-BUTANE	0.0	0.3	TRACE
ISOBUTANE	0.0	0.4	TRACE
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	8.0	2.8	4.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.7	0.0	0.2
HELIUM	0.24	0.09	0.10
HEATING VALUE*	927	1041	970
SPECIFIC GRAVITY	0.598	0.602	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3241 SAMPLE 6786	INDEX 3242 SAMPLE 7626	INDEX 3243 SAMPLE 7627
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TETON	TETON	TETON
FIELD	BLACKLEAF CANYON	WILDCAT	WILDCAT
WELL NAME	BLACKLEAF FEDERAL NO. A-1	CAMPBELL NO. 1	CAMPBELL NO. 2
LOCATION	SEC. 13, T26N, R9W	SEC. 4, T27N, R5W	SEC. 4, T27N, R5W
OWNER	NORTHERN NATURAL GAS CO.	CARDINAL PETROLEUM CO.	CARDINAL PETROLEUM CO.
COMPLETED	06/06/58	08/15/59	09/28/59
SAMPLED	--/--/58	07/25/60	07/25/60
FORMATION	MISS-	MISS-SUN RIVER	MISS-SUN RIVER
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3816	2489	2475
WELLHEAD PRESSURE,PSIG	710	200	540
OPEN FLOW, MCFD	6297	222	1300
COMPONENT, MOLE PCT			
METHANE	79.3	78.4	79.3
ETHANE	4.2	5.4	5.2
PROPANE	4.8	3.1	3.0
N-BUTANE	0.8	1.1	0.8
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	0.0	7.3	7.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.7	2.7	2.5
HELIUM	0.02	0.30	0.30
HEATING VALUE*	1047	1064	1035
SPECIFIC GRAVITY	0.749	0.857	0.691

	INDEX 3244 SAMPLE 8604	INDEX 3245 SAMPLE 8620	INDEX 3246 SAMPLE 2150
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TETON	TETON	TOOLE
FIELD	WILDCAT	WILDCAT	BORDER
WELL NAME	GOVT. PEARSON NO. 1	GOVT. PEARSON NO. 1	J. FARBO NO. 1
LOCATION	SEC. 26, T27N, R9W	SEC. 26, T27N, R9W	SEC. 1, T37N, R4W
OWNER	TEXACO INC.	TEXACO INC.	INLAND PETROLEUM CO. LTD.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	07/23/30
SAMPLED	06/29/62	07/13/62	09/29/30
FORMATION	MISS-SUN RIVER	MISS-	CRET-VANALTA
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1079	1759	2477
WELLHEAD PRESSURE,PSIG	NOT GIVEN	40	NOT GIVEN
OPEN FLOW, MCFD	220	525	4000
COMPONENT, MOLE PCT			
METHANE	89.1	46.3	76.2
ETHANE	2.0	2.5	14.2
PROPANE	1.2	0.9	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.5	42.3	1.0
OXYGEN	TRACE	3.3	0.1
ARGON	0.0	0.5	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.1	0.0	---
CARBON DIOXIDE	5.9	3.7	8.5
HELIUM	0.06	0.07	0.04
HEATING VALUE*	978	547	1026
SPECIFIC GRAVITY	0.644	0.812	0.712

	INDEX 3247 SAMPLE 2156	INDEX 3248 SAMPLE 7946	INDEX 3249 SAMPLE 14948
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	BORDER	CUT BANK	CUT BANK
WELL NAME	J. FARBO NO. 2	COBB NO. 2	YULE NO. 11-20-36-4
LOCATION	SEC. 2, T37N, R4W	SEC. 30, T37N, R4W	SEC. 20, T36N, R4W
OWNER	OHIO OIL CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	09/05/30	11/28/37	02/08/77
SAMPLED	09/26/30	04/27/61	03/18/77
FORMATION	CRET-VANALTA	CRET-KOOTENAI-MOULTON	CRET-CUT BANK
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2488	2596	2790
WELLHEAD PRESSURE,PSIG	NOT GIVEN	483	207
OPEN FLOW, MCFD	3000	21000	2050
COMPONENT, MOLE PCT			
METHANE	88.4	79.9	87.0
ETHANE	4.9	8.5	2.3
PROPANE	---	3.1	1.5
N-BUTANE	---	0.7	0.7
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.7	4.5	0.8
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.9	2.3	6.8
HELIUM	0.04	0.10	0.03
HEATING VALUE*	983	1093	1017
SPECIFIC GRAVITY	0.640	0.690	0.675

	INDEX 3250 SAMPLE 14394	INDEX 3251 SAMPLE 846	INDEX 3252 SAMPLE 949
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	DEVON	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	STATE NO. 33	MAYBELLE OIL CO. NO. 1	NOT GIVEN
LOCATION	SEC. 31, T32N, R2E	SEC. 34, T35, R2W	SEC. 21, T34, R1W
OWNER	MONTANA POWER CO.	MAYBELLE OIL CO.	POTLATCH OIL & REFINING CO.
COMPLETED	07/12/69	NOT GIVEN	NOT GIVEN
SAMPLED	06/06/75	NOT GIVEN	NOT GIVEN
FORMATION	CRET-ROW ISLAND	CRET-SUNBURST	CAMB-LIMESTONE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	850	1502	3250
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4600	5800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.8	90.3	3.2
ETHANE	1.2	4.6	6.5
PROPANE	0.2	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	6.4	2.8	79.0
OXYGEN	0.0	0.3	0.6
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	1.9	9.4
HELIUM	0.15	0.13	1.20
HEATING VALUE*	957	997	149
SPECIFIC GRAVITY	0.588	0.609	1.002

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3253 SAMPLE 1502	INDEX 3254 SAMPLE 1503	INDEX 3255 SAMPLE 1504
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	LARSON NO. 2	REIBE NO. 8	PEWTERS NO. 3B
LOCATION	SEC. 17, T34N, R1W	SEC. --, T35N, R2W	SEC. 23, T35N, R2W
OWNER	PONDERA VALLEY OIL CO.	HOMESTAKE EXPLORATION CO.	HOMESTAKE EXPLORATION CO.
COMPLETED	NOT GIVEN	05/--/27	04/--/27
SAMPLED	09/15/27	09/15/27	09/15/27
FORMATION	DEVO-IAN	CRET-SUNBURST	JURA-ELLIS
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3107	1540	1379
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	7.6	73.3	59.9
ETHANE	4.2	18.3	10.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.8	4.0	23.7
OXYGEN	0.1	0.4	4.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	82.3	4.1	2.1
HELIUM	0.04	0.01	0.11
HEATING VALUE*	152	1070	786
SPECIFIC GRAVITY	1.402	0.704	0.746

	INDEX 3256 SAMPLE 1666	INDEX 3257 SAMPLE 1815	INDEX 3258 SAMPLE 1901
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	NO. 1	KITCHEN NO. 1	NO. 1
LOCATION	SEC. 16, T34N, R1W	SEC. 2, T34N, R1W	SEC. 23, T33N, R3W
OWNER	KALISPELL-BAKER OIL CO.	ROXANA OIL & GAS CO.	ALOES BIG 5 O&G SYNDICATE
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/01/28	07/15/29	12/09/29
FORMATION	MISS-MADISON	CAMB-	CRET-COLORADO
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1380	4596	1000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	102
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.8	0.0	88.1
ETHANE	8.1	4.1	3.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.2	43.0	7.5
OXYGEN	0.5	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.5	52.7	0.2
HELIUM	0.20	0.18	0.35
HEATING VALUE*	1035	73	957
SPECIFIC GRAVITY	0.622	1.268	0.606

	INDEX 3259 SAMPLE 2152	INDEX 3260 SAMPLE 2153	INDEX 3261 SAMPLE 2193
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	O'HEARN NO. 1	EDWARDS NO. 1	KITCHEN NO. 1
LOCATION	SEC. 1, T32N, R2W	SEC. 30, T33N, R1W	SEC. 2, T34N, R1W
OWNER	NORTHERN NAT. GAS DEV. CO.	NORTHERN NAT. GAS DEV. CO.	ADVANCE OIL CO.
COMPLETED	08/21/27	08/28/27	NOT GIVEN
SAMPLED	09/27/30	09/27/30	10/03/30
FORMATION	CRET-SUNBURST	CRET-SUNBURST	CAMB-
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1430	1210	4596
WELLHEAD PRESSURE,PSIG	355	375	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	20000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	95.8	3.4
ETHANE	3.9	2.6	0.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.4	0.8	38.4
OXYGEN	0.1	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.7	56.8
HELIUM	0.08	0.05	0.73
HEATING VALUE*	1023	1017	743
SPECIFIC GRAVITY	0.585	0.578	1.267

	INDEX 3262 SAMPLE 2194	INDEX 3263 SAMPLE 2195	INDEX 3264 SAMPLE 10119
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	ADAMS NO. 1	STATE NO. 50	GOEDDERTZ-AGEN NO. 1
LOCATION	SEC. 20, T34N, R1W	SEC. 36, T35N, R2W	SEC. 16, T35N, R3W
OWNER	BETHAL OIL CO., LTD.	TEXAS & PACIFIC COAL & OIL	GRANNELL DRILLING CO.
COMPLETED	08/15/28	NOT GIVEN	DRILL STEM TEST
SAMPLED	10/02/30	10/02/30	09/09/65
FORMATION	MISS-MADISON	DEVO-JEFFERSON	DEVO-DUPEROW
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1438	3125	3685
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	77000	NOT GIVEN	3120
COMPONENT, MOLE PCT			
METHANE	98.5	0.0	2.4
ETHANE	0.7	0.0	0.7
PROPANE	---	---	0.5
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.5	4.4	4.0
OXYGEN	0.1	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	95.6	91.9
HELIUM	0.07	0.04	0.10
HEATING VALUE*	1010	0	6600
SPECIFIC GRAVITY	0.564	1.504	1.482

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3265 SAMPLE 14393		INDEX 3266 SAMPLE 14978		INDEX 3267 SAMPLE 16014	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	TOOLE		TOOLE		TOOLE	
FIELD	KEVIN SUNBURST		KEVIN SUNBURST		KEVIN SUNBURST	
WELL NAME	VASHTI-MARMONT		LEONARD BASHOR NO. 1		POTLATCH O&R NCT-NO. 1	
LOCATION	SEC. 28, T33N, R1W		SEC. 34, T35N, R1W		SEC. 29, T34N, R1W	
OWNER	MONTANA POWER CO.		ENERGY RESERVES GROUP		TEXACO INC.	
COMPLETED	NOT GIVEN		01/10/76		10/20/79	
SAMPLED	06/06/75		04/19/77		07/17/80	
FORMATION	CRET-SUNBURST		DEVO-NISKU		DEVO-DUPEROW	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	1122		2885		2959	
WELLHEAD PRESSURE,PSIG	93		979		730	
OPEN FLOW, MCFD	480		1600		10000	
COMPONENT, MOLE PCT						
METHANE	93.6		82.2		5.4	
ETHANE	1.3		6.3		0.5	
PROPANE	0.6		2.1		0.1	
N-BUTANE	0.2		0.8		0.0	
ISOBUTANE	0.3		0.1		0.0	
N-PENTANE	0.1		0.3		0.0	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.2		0.1		0.0	
NITROGEN	3.0		5.8		15.7	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		2.0		77.1	
HELIUM	0.06		0.14		0.87	
HEATING VALUE*	1027		1053		67	
SPECIFIC GRAVITY	0.606		0.673		1.370	

	INDEX 3268 SAMPLE 2151		INDEX 3269 SAMPLE 4336		INDEX 3270 SAMPLE 9786	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	TOOLE		TOOLE		TOOLE	
FIELD	KEVIN SUNBURST E		KICKING HORSE		MIDDLE BUTTE	
WELL NAME	SWENSON NO. 1		RANKIN NO. 1		AGNES LARSON NO. 23-1	
LOCATION	SEC. 12, T33N, R1E		SEC. 8, T36N, R1E		SEC. 23, T36N, R3E	
OWNER	F. & F. OIL & GAS CO.		HUSKY REFINING CO.		MONTANA POWER CO.	
COMPLETED	04/12/30		08/--/44		11/12/64	
SAMPLED	09/29/30		07/22/47		03/04/65	
FORMATION	-SHALE		CRET-U		CRET-BOW ISLAND	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	770		1325		1784	
WELLHEAD PRESSURE,PSIG	175		150		295	
OPEN FLOW, MCFD	800		600		310	
COMPONENT, MOLE PCT						
METHANE	96.2		93.8		95.6	
ETHANE	0.0		5.6		0.9	
PROPANE	---		---		0.2	
N-BUTANE	---		---		TRACE	
ISOBUTANE	---		---		TRACE	
N-PENTANE	---		---		TRACE	
ISOPENTANE	---		---		TRACE	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		TRACE	
NITROGEN	1.3		2.0		3.0	
OXYGEN	0.1		0.2		0.1	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3		0.3		TRACE	
HELIUM	0.13		0.09		0.06	
HEATING VALUE*	975		1015		9900	
SPECIFIC GRAVITY	0.571		0.584		0.573	

	INDEX 3271 SAMPLE 13101		INDEX 3272 SAMPLE 15041		INDEX 3273 SAMPLE 9978	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	TOOLE		TOOLE		TOOLE	
FIELD	TRAIL CREEK		WHITLASH		WHITLASH W	
WELL NAME	JOHNSON NO. 1		JOHNSON NO. 31-26		ALBERT FRY NO. 1-4	
LOCATION	SEC. 1, T36N, R3E		SEC. 26, T37N, R3E		SEC. 4, T37N, R3E	
OWNER	WHELESS DRILLING CO.		FULTON PRODUCING CO.		MESA PETROLEUM CO.	
COMPLETED	06/19/70		07/27/76		07/14/65	
SAMPLED	11/05/71		06/22/77		07/12/65	
FORMATION	CRET-SUNBURST		CRET-SUNBURST		CRET-SUNBURST	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	2353		2692		2847	
WELLHEAD PRESSURE,PSIG	741		826		600	
OPEN FLOW, MCFD	4100		3000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	93.1		81.1		94.2	
ETHANE	3.1		1.5		0.8	
PROPANE	1.0		0.6		0.4	
N-BUTANE	0.2		0.3		0.1	
ISOBUTANE	0.1		0.1		0.2	
N-PENTANE	0.0		0.1		TRACE	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	1.6		13.2		3.3	
OXYGEN	0.2		2.2		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.4		0.5	
HELIUM	0.06		0.06		0.10	
HEATING VALUE*	1048		891		1003	
SPECIFIC GRAVITY	0.602		0.651		0.591	

	INDEX 3274 SAMPLE 9979		INDEX 3275 SAMPLE 7610		INDEX 3276 SAMPLE 7611	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	TOOLE		TOOLE		TOOLE	
FIELD	WHITLASH W		WILDCAT		WILDCAT	
WELL NAME	ALBERT FRY NO. 1-9		MORRIS NO. 1		GORDON CHRISTIAN NO. 1	
LOCATION	SEC. 9, T37N, R3E		SEC. 13, T36N, R3E		SEC. 13, T35N, R2E	
OWNER	MESA PETROLEUM CO.		CARDINAL PETROLEUM CO.		CARDINAL PETROLEUM CO.	
COMPLETED	11/20/65		10/17/59		09/17/59	
SAMPLED	07/12/65		07/19/60		07/19/60	
FORMATION	CRET-SUNBURST		CRET-BOW ISLAND		JURA-SWIFT	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	2402		1582		2217	
WELLHEAD PRESSURE,PSIG	590		343		742	
OPEN FLOW, MCFD	13000		1200		8	
COMPONENT, MOLE PCT						
METHANE	94.6		93.6		94.0	
ETHANE	1.1		1.6		1.4	
PROPANE	0.4		0.4		0.5	
N-BUTANE	0.1		0.2		0.2	
ISOBUTANE	0.1		0.1		TRACE	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.4		0.1		0.1	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	TRACE		0.0		TRACE	
NITROGEN	2.7		3.4		3.2	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.2		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.2		0.3	
HELIUM	0.10		0.10		0.10	
HEATING VALUE*	1012		1002		997	
SPECIFIC GRAVITY	0.589		0.587		0.584	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3277 SAMPLE 8706	INDEX 3278 SAMPLE 2258	INDEX 3279 SAMPLE 9612
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	VALLEY	WHEATLAND
FIELD	WILDCAT	BOWDOIN	MUD CREEK
WELL NAME	THISTED NO. 1	HOHAN NO. 1	H. K. GRIFFITH NO. 1
LOCATION	SEC. 17, T36N, R1E	SEC. 10, T31N, R34E	SEC. 12, T6N, R17E
OWNER	TEXACO INC.	JONES OIL CO.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	03/07/63
SAMPLED	10/07/62	01/14/31	10/20/64
FORMATION	DEVO-SOURIS RIVER	CRET-EAGLE	PENN-AMSDEN
GEOLOGIC PROVINCE CODE	500	395	510
DEPTH, FEET	4230	755	2295
WELLHEAD PRESSURE,PSIG	NOT GIVEN	220	1118
OPEN FLOW, MCFD	1750	1000	2490
COMPONENT, MOLE PCT			
METHANE	5.2	91.2	96.8
ETHANE	0.8	1.7	0.5
PROPANE	0.6	---	0.1
N-BUTANE	0.3	---	0.0
ISOBUTANE	0.1	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	12.2	6.8	2.4
OXYGEN	0.1	0.0	0.0
ARGON	0.1	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	79.9	0.3	0.2
HELIUM	0.40	0.07	0.05
HEATING VALUE*	110	954	992
SPECIFIC GRAVITY	1.406	0.594	0.570

	INDEX 3280 SAMPLE 2421	INDEX 3281 SAMPLE 2422	INDEX 3282 SAMPLE 2423
STATE	MONTANA	MONTANA	MONTANA
COUNTY	WIBAUX	WIBAUX	WIBAUX
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	NO. 86	NO. 89	NO. 87
LOCATION	SEC. 15, T11N, R57E	SEC. 22, T11N, R57E	SEC. 9, T11N, R57E
OWNER	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.
COMPLETED	09/01/25	07/20/28	05/30/27
SAMPLED	10/10/31	10/10/31	10/10/31
FORMATION	CRET-JUDITH RIVER	CRET-JUDITH RIVER	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	935	806	876
WELLHEAD PRESSURE,PSIG	220	210	210
OPEN FLOW, MCFD	1500	2567	12000
COMPONENT, MOLE PCT			
METHANE	93.4	91.4	92.6
ETHANE	1.3	0.0	2.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.7	7.3	5.0
OXYGEN	0.3	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.12	0.14	0.12
HEATING VALUE*	969	926	974
SPECIFIC GRAVITY	0.585	0.594	0.588

	INDEX 3283 SAMPLE 13219	INDEX 3284 SAMPLE 4869	INDEX 3285 SAMPLE 10486
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	ENGELLAND W	HUNTSMAN	HUNTSMAN
WELL NAME	MARATHON-GOVERNMENT NO. 3	A. L. CRUISE NO. 1	SPARKS A-2
LOCATION	SEC. 36, T15N, R50W	SEC. 7, T14N, R49W	SEC. 12, T14N, R50W
OWNER	MARATHON OIL CO.	OHIO OIL CO.	MARATHON OIL CO.
COMPLETED	12/01/71	01/19/50	05/01/51
SAMPLED	05/25/72	03/22/50	03/29/66
FORMATION	CRET-DAKOTA D	CRET-DAKOTA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4684	4742	4692
WELLHEAD PRESSURE,PSIG	706	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	48
COMPONENT, MOLE PCT			
METHANE	78.1	77.2	65.4
ETHANE	4.6	7.1	5.8
PROPANE	5.3	5.0	7.8
N-BUTANE	1.7	1.7	3.7
ISOBUTANE	0.9	0.8	1.4
N-PENTANE	0.4	0.5	1.0
ISOPENTANE	0.5	0.1	1.3
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.2	0.4	0.7
NITROGEN	7.4	6.1	11.4
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	1.0	1.1
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1151	1166	1286
SPECIFIC GRAVITY	0.731	0.737	0.863

	INDEX 3286 SAMPLE 5288	INDEX 3287 SAMPLE 10485	INDEX 3288 SAMPLE 4997
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	NOT GIVEN	RIEMERA	SIDNEY W
WELL NAME	G. E. WOOD NO. 1	C. SCHERER NO. 1	STATE LAND NO. 1
LOCATION	SEC. 7, T13N, R49W	SEC. 23, T16N, R50W	SEC. 16, T13N, R50W
OWNER	CHICAGO CORP.	MARATHON OIL CO.	INDEPENDENT EXPLORATION CO.
COMPLETED	08/14/52	03/01/51	12/22/50
SAMPLED	10/08/52	03/29/66	01/24/51
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA 1ST
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4850	4820	4802
WELLHEAD PRESSURE,PSIG	1135	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6500	170	8800
COMPONENT, MOLE PCT			
METHANE	75.9	80.3	84.0
ETHANE	7.0	4.2	4.5
PROPANE	5.4	6.2	3.6
N-BUTANE	1.4	1.1	0.9
ISOBUTANE	0.8	0.9	0.3
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.9	5.2	5.3
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.0	1.0	0.8
HELIUM	0.09	0.06	0.10
HEATING VALUE*	1131	1161	1080
SPECIFIC GRAVITY	0.729	0.719	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3289 SAMPLE 5360	INDEX 3290 SAMPLE 5589	INDEX 3291 SAMPLE 10484
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	SIDNEY W	SIDNEY W	SIDNEY W
WELL NAME	SPICKNAL NO. 1	WESTMAN NO. 1	F. KURZ NO. 1
LOCATION	SEC. 10, T13N, R50W	SEC. 29, T13N, R50W	SEC. 4, T13N, R50W
OWNER	OHIO OIL CO.	OHIO OIL CO.	MARATHON OIL CO.
COMPLETED	11/12/52	11/06/53	09/01/53
SAMPLED	12/17/52	02/05/54	03/29/66
FORMATION	CRET-DAKOTA	CRET-DAKOTA 1ST	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4753	4822	4584
WELLHEAD PRESSURE,PSIG	1213	1120	485
OPEN FLOW, MCFD	NOT GIVEN	8250	6000
COMPONENT, MOLE PCT			
METHANE	79.7	78.8	77.6
ETHANE	6.5	5.0	4.8
PROPANE	4.6	5.5	4.5
N-BUTANE	1.1	1.9	1.5
ISOBUTANE	0.5	1.0	0.7
N-PENTANE	0.4	0.6	0.6
ISOPENTANE	0.0	0.4	0.6
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.1	0.3	1.0
NITROGEN	5.9	5.3	6.8
OXYGEN	0.1	TRACE	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.9
HELIUM	0.09	0.09	0.10
HEATING VALUE*	1123	1190	1184
SPECIFIC GRAVITY	0.704	0.736	0.752

	INDEX 3292 SAMPLE 10487	INDEX 3293 SAMPLE 4995	INDEX 3294 SAMPLE 5161
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	DEUEL
FIELD	SIDNEY W	SUNOL	BIG SPRINGS
WELL NAME	WESTMAN NO. 1	FENDER NO. 1	TROESTRUP NO. E-1
LOCATION	SEC. 29, T13N, R50W	SEC. 2, T14N, R48W	SEC. 3, T12N, R43W
OWNER	MARATHON OIL CO.	OHIO OIL CO.	CHARLES D. EDMONSON
COMPLETED	10/01/53	12/22/50	NOT GIVEN
SAMPLED	03/29/66	01/24/51	01/30/52
FORMATION	CRET-DAKOTA D	CRET-DAKOTA 1ST	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4424	4350	3208
WELLHEAD PRESSURE,PSIG	570	1014	NOT GIVEN
OPEN FLOW, MCFD	4500	5800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.5	64.4	90.3
ETHANE	4.9	4.3	0.4
PROPANE	5.3	6.0	0.1
N-BUTANE	1.8	1.0	0.1
ISOBUTANE	0.8	0.7	0.0
N-PENTANE	0.6	0.2	0.0
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	TRACE
NITROGEN	5.4	21.8	8.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	1.0	0.6
HELIUM	0.09	0.17	0.10
HEATING VALUE*	1176	965	929
SPECIFIC GRAVITY	0.728	0.773	0.601

	INDEX 3295 SAMPLE 5802	INDEX 3296 SAMPLE 5803	INDEX 3297 SAMPLE 5808
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	DEUEL	DEUEL	DEUEL
FIELD	BIG SPRINGS	BIG SPRINGS	BIG SPRINGS
WELL NAME	MENTER NO. 1	F. ZIMMERMAN NO. 1	TROELSTRUP NO. C-1
LOCATION	SEC. 17, T13N, R42W	SEC. 12, T13N, R43W	SEC. 2, T12N, R43W
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	10/01/54	10/10/54	11/29/54
SAMPLED	04/07/55	04/13/55	04/21/55
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	3271	3316	3164
WELLHEAD PRESSURE,PSIG	638	637	628
OPEN FLOW, MCFD	3972	3876	2828
COMPONENT, MOLE PCT			
METHANE	92.0	91.4	91.1
ETHANE	0.3	0.3	0.3
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	6.8	7.2	7.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.6
HELIUM	0.10	0.11	0.11
HEATING VALUE*	937	932	929
SPECIFIC GRAVITY	0.588	0.592	0.592

	INDEX 3298 SAMPLE 6520	INDEX 3299 SAMPLE 6987	INDEX 3300 SAMPLE 8533
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	GARDEN	HITCHCOCK	KIMBALL
FIELD	WILDCAT	BURR OAK	BUKIN STATE
WELL NAME	OLSON NO. 1	M. H. LEWIS NO. 1	FURST NO. 1
LOCATION	SEC. 11, T16N, R44W	SEC. 26, T1N, R32W	SEC. 12, T12N, R54W
OWNER	J. M. HUBER CORP.	SKELLY OIL CO.	CHANDLER & SIMPSON
COMPLETED	05/29/57	12/30/58	02/02/62
SAMPLED	03/13/58	02/25/59	04/19/62
FORMATION	CRET-DAKOTA D	PENN-LANSING	CRET-
GEOLOGIC PROVINCE CODE	540	390	540
DEPTH, FEET	3039	3862	5706
WELLHEAD PRESSURE,PSIG	692	NOT GIVEN	990
OPEN FLOW, MCFD	4300	3	14400
COMPONENT, MOLE PCT			
METHANE	61.7	8.7	77.3
ETHANE	0.3	0.0	5.3
PROPANE	0.7	0.3	7.5
N-BUTANE	0.2	0.6	2.0
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.6	TRACE
HEXANES PLUS	0.1	0.6	TRACE
NITROGEN	32.6	75.5	5.2
OXYGEN	TRACE	0.1	0.3
ARGON	0.1	0.5	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	9.6	1.5
HELIUM	0.30	2.50	0.08
HEATING VALUE*	718	201	1175
SPECIFIC GRAVITY	0.717	1.007	0.740

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3301 SAMPLE 5457	INDEX 3302 SAMPLE 5462	INDEX 3303 SAMPLE 16072
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	KIMBALL	KIMBALL	LINCOLN
FIELD	POTTER SW	POTTER SW	WILDCAT
WELL NAME	E. LIPKI NO. 2	KENNEDY JR. NO. 6	BROWN NO. 2
LOCATION	SEC. 10, T13N, R53W	SEC. 3, T13N, R53W	SEC. 14, T16N, R33W
OWNER	SHELL OIL CO.	SHELL OIL CO.	MARSHALL R. YOUNG OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/10/79
SAMPLED	04/20/53	04/20/53	09/11/80
FORMATION	CRET-MUDDY	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	390
DEPTH, FEET	5560	5651	1938
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	52.2	72.8	63.6
ETHANE	4.1	5.1	0.3
PROPANE	13.9	6.8	TRACE
N-BUTANE	8.3	2.7	TRACE
ISOBUTANE	4.8	2.2	TRACE
N-PENTANE	5.0	0.9	TRACE
ISOPENTANE	0.9	0.8	0.0
CYCLOPENTANE	0.7	0.5	TRACE
HEXANES PLUS	5.8	0.9	0.1
NITROGEN	3.2	3.7	35.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.5	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.6	0.1
HELIUM	0.03	0.03	0.31
HEATING VALUE*	1982	1360	655
SPECIFIC GRAVITY	1.196	0.837	0.704

	INDEX 3304 SAMPLE 16073	INDEX 3305 SAMPLE 7948	INDEX 3306 SAMPLE 4192
STATE	NEBRASKA	NEBRASKA	NEVADA
COUNTY	LINCOLN	RED WILLOW	CHURCHILL
FIELD	WILDCAT	SLEEPY HOLLOW	NOT GIVEN
WELL NAME	BROWN NO. 2	HAYES LEASE	NOT GIVEN
LOCATION	SEC. 14, T16N, R33W	SEC. 2, T2N, R27W	SEC. 1, T19N, R30E
OWNER	MARSHALL R. YOUNG OIL CO.	PUBCO PETROLEUM CORP.	ELMER WEISHAUPT
COMPLETED	10/10/79	NOT GIVEN	--/--/26
SAMPLED	09/11/80	05/--/61	11/27/46
FORMATION	CRET-NIOBRARA	CAMB-REAGAN	PLEI-LAKE LAHONTAN BEDS
GEOLOGIC PROVINCE CODE	390	390	625
DEPTH, FEET	1272	3500	200
WELLHEAD PRESSURE,PSIG	400	18	NOT GIVEN
OPEN FLOW, MCFD	174	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	2.6	61.8
ETHANE	0.6	1.4	1.4
PROPANE	0.1	3.0	---
N-BUTANE	TRACE	2.3	---
ISOBUTANE	TRACE	1.7	---
N-PENTANE	TRACE	1.0	---
ISOPENTANE	TRACE	0.6	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	TRACE	0.7	---
NITROGEN	35.1	83.7	35.4
OXYGEN	0.0	0.7	0.6
ARGON	0.1	0.4	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.4	0.8
HELIUM	0.15	1.20	0.03
HEATING VALUE*	660	376	651
SPECIFIC GRAVITY	0.703	1.055	0.719

	INDEX 3307 SAMPLE 1056	INDEX 3308 SAMPLE 15375	INDEX 3309 SAMPLE 15761
STATE	NEVADA	NEVADA	NEVADA
COUNTY	ESMERALDA	WASHOE	WASHOE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NOT GIVEN	SPRING	GAS SEEP
LOCATION	NOT GIVEN	SEC. 16, T23N, R23E	MARBLE BLUFF DAM
OWNER	COALSDALE MERGER OIL CO.	PYRAMID LAKE INDIAN RES.	INDIAN RESERVATION
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	09/07/78	09/19/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	625	620	620
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	84.0	0.5
ETHANE	---	TRACE	0.0
PROPANE	---	TRACE	0.0
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	---	5.8	97.3
OXYGEN	0.7	TRACE	0.0
ARGON	---	0.1	1.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.3	0.0
CARBON DIOXIDE	0.5	9.7	1.2
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1000	853	5
SPECIFIC GRAVITY	0.563	0.675	0.976

	INDEX 3310 SAMPLE 15121	INDEX 3311 SAMPLE 15127	INDEX 3312 SAMPLE 12168
STATE	NEVADA	NEVADA	NEVADA
COUNTY	WASHOE	WASHOE	WHITE PINE
FIELD	PYRAMID LAKE	PYRAMID LAKE	MONTE CRISTO
WELL NAME	GAS SEEP	AUGER HOLE	DDH NO. 27
LOCATION	NW OF TRUKEE R DELTA	SEC. 22, T23N, R23E	NOT GIVEN
OWNER	BUREAU OF RECLAMATION	BUREAU OF RECLAMATION	W. R. GRACE & CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/17/77	10/19/77	NOT GIVEN
FORMATION	NOT GIVEN	QUAT-	CAMB-ELDORADO
GEOLOGIC PROVINCE CODE	620	620	625
DEPTH, FEET	NOT GIVEN	45	1476
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	20
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	95.6	0.3
ETHANE	0.0	0.0	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.2	3.2	95.1
OXYGEN	0.0	0.1	1.1
ARGON	0.1	0.1	1.4
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	1.8
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	981	968	5
SPECIFIC GRAVITY	0.573	0.579	0.982

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3313 SAMPLE 15967	INDEX 3314 SAMPLE 9410	INDEX 3315 SAMPLE 1209
STATE	NEW JERSEY	NEW MEXICO	NEW MEXICO
COUNTY	OFFSHORE	BERNALILLO	CHAVES
FIELD	MID ATLANTIC	NOT GIVEN	ARTESIA
WELL NAME	FEDERAL WATERS N.J. 18-3	WATER WELL	NO. 1
LOCATION	BLK. 598, OCS-A-0028	SEC. 36, T11N., R6E	SEC. 15, T15S, R29E
OWNER	TEXACO INC.	JIM CROSBY & USGS	SOUTHERN PET. EXPL., INC.
COMPLETED	05/14/80	--/--/64	NOT GIVEN
SAMPLED	05/14/80	06/19/64	01/10/26
FORMATION	NOT GIVEN	PENN-MADERA	-SALT & ANHYDRITE
GEOLOGIC PROVINCE CODE	120	460	430
DEPTH, FEET	12974	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	10	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.1	0.1	0.0
ETHANE	2.0	TRACE	14.2
PROPANE	0.8	0.0	---
N-BUTANE	0.1	0.0	---
ISOBUTANE	TRACE	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	1.1	2.1	83.7
OXYGEN	0.0	0.0	1.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	18.9	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.7	78.7	0.3
HELIUM	0.02	0.13	0.49
HEATING VALUE*	1010	60	254
SPECIFIC GRAVITY	0.596	1.237	0.978

	INDEX 3316 SAMPLE 9125	INDEX 3317 SAMPLE 4580	INDEX 3318 SAMPLE 4582
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	BUFFALO VALLEY	CAPROCK	CAPROCK
WELL NAME	RADTZ NO. 1	OHIO STATE NO. 1	MALCO STATE H NO. 1
LOCATION	SEC. 35, T14S, R27E	SEC. 11, T13S, R31E	SEC. 36, T12S, R31E
OWNER	CARPER DRILLING CO., INC.	COOPERATIVE PRODUCING ASSOC.	COOPERATIVE PRODUCING ASSOC.
COMPLETED	12/17/62	09/02/45	07/26/44
SAMPLED	10/25/63	03/27/48	03/27/48
FORMATION	PENN-	PERM-QUEEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8182	3022	3015
WELLHEAD PRESSURE,PSIG	1790	400	629
OPEN FLOW, MCFD	3600	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	99.4	43.0
ETHANE	6.6	0.0	0.0
PROPANE	2.2	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.4	0.0	52.7
OXYGEN	0.0	0.4	4.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.04	0.02	0.02
HEATING VALUE*	1135	1007	436
SPECIFIC GRAVITY	0.639	0.559	0.796

	INDEX 3319 SAMPLE 7671	INDEX 3320 SAMPLE 13339	INDEX 3321 SAMPLE 14818
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	CAPROCK	CAPROCK	DOUBLE L
WELL NAME	NEW MEXICO H NO. 1	R. & J. FEDERAL NO. 1	FEDERAL 17 NO. 1
LOCATION	SEC. 19, T15S, R31E	SEC. 20, T12S, R31E	SEC. 17, T15S, R30E
OWNER	SOCONY MOBIL OIL CO., INC.	READING & BATES, INC.	MCCLELLAN OIL CORP.
COMPLETED	07/01/55	12/30/70	03/25/75
SAMPLED	08/23/60	07/27/72	10/27/76
FORMATION	PERM-QUEEN	PERM-QUEEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3098	2597	2018
WELLHEAD PRESSURE,PSIG	180	860	350
OPEN FLOW, MCFD	700	3400	3973
COMPONENT, MOLE PCT			
METHANE	33.3	18.5	25.6
ETHANE	8.0	5.5	6.6
PROPANE	4.1	2.5	3.0
N-BUTANE	1.2	0.5	0.8
ISOBUTANE	0.7	0.3	0.3
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	51.6	72.2	63.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.07	0.07
HEATING VALUE*	691	387	515
SPECIFIC GRAVITY	0.897	0.921	0.906

	INDEX 3322 SAMPLE 5835	INDEX 3323 SAMPLE 13300	INDEX 3324 SAMPLE 8890
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	DRICKEY S	HAYSTACK	LAKE ARTHUR
WELL NAME	LION NO. 4	HAYSTACK "A" FEDERAL NO. 1	MOOTS FEE NO. 1
LOCATION	SEC. 5, T15S, R31E	SEC. 28, T6S, R27E	SEC. 31, T15S, R27E
OWNER	LION OIL CO.	FOREST OIL CORP.	RALPH LOWE
COMPLETED	03/01/55	07/19/71	NOT GIVEN
SAMPLED	05/11/55	07/14/72	03/18/63
FORMATION	PERM-QUEEN	PENN-CISCO	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3000	5832	NOT GIVEN
WELLHEAD PRESSURE,PSIG	900	1600	NOT GIVEN
OPEN FLOW, MCFD	5000	29500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	22.8	83.2	70.7
ETHANE	7.2	5.4	5.2
PROPANE	5.3	2.6	1.7
N-BUTANE	2.8	0.8	0.6
ISOBUTANE	1.5	0.5	0.2
N-PENTANE	1.2	0.2	0.2
ISOPENTANE	1.0	0.2	TRACE
CYCLOPENTANE	0.3	TRACE	0.3
HEXANES PLUS	1.0	0.2	0.5
NITROGEN	54.9	5.9	16.4
OXYGEN	TRACE	0.4	3.8
ARGON	2.0	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.08	0.34	0.10
HEATING VALUE*	795	1078	920
SPECIFIC GRAVITY	1.015	0.668	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3325 SAMPLE 8350	INDEX 3326 SAMPLE 1586	INDEX 3327 SAMPLE 9203
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	LOCO HILLS	NOT GIVEN	NOT GIVEN
WELL NAME	KIMES NO. 1	ARENA	STATE 15-1
LOCATION	SEC. 28, T15S, R29E	SEC. 19, T13S, R31E	SEC. 15, T15S, R29E
OWNER	E. J. MCCUROY JR. OIL ASSOC.	MANHATTAN OIL CO.	SHELL OIL CO.
COMPLETED	--/--/46	NOT GIVEN	11/13/63
SAMPLED	12/29/61	03/07/28	12/16/63
FORMATION	PERM-QUEEN	NOT GIVEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1735	2461	1844
WELLHEAD PRESSURE,PSIG	650	NOT GIVEN	588
OPEN FLOW, MCFD	NOT GIVEN	500	940
COMPONENT, MOLE PCT			
METHANE	22.1	11.8	25.6
ETHANE	5.6	17.3	6.4
PROPANE	2.5	---	2.4
N-BUTANE	0.6	---	0.7
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.3	---	0.4
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.1
NITROGEN	65.1	70.6	63.7
OXYGEN	3.1	0.2	0.0
ARGON	0.2	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.06	0.06	0.10
HEATING VALUE*	436	430	499
SPECIFIC GRAVITY	0.917	0.935	0.902

	INDEX 3328 SAMPLE 11265	INDEX 3329 SAMPLE 11266	INDEX 3330 SAMPLE 13455
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	LISA FEDERAL	PATRICK FEDERAL NO. 1	OCCIDENTAL FEDERAL NO. 1
LOCATION	SEC. 12, T15S, R29E	SEC. 13, T15S, R29E	SEC. 22, T14S, R30E
OWNER	JACK L. MCCLELLAN	JACK L. MCCLELLAN	COCKRELL CORP.
COMPLETED	04/07/66	09/20/67	10/16/72
SAMPLED	01/30/68	01/30/68	10/22/72
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2000	2000	10674
WELLHEAD PRESSURE,PSIG	650	650	NOT GIVEN
OPEN FLOW, MCFD	5000	6717	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	26.0	25.8	81.5
ETHANE	6.5	6.4	9.7
PROPANE	2.5	2.5	4.7
N-BUTANE	0.6	0.5	1.4
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	63.5	63.6	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.08	0.08	0.03
HEATING VALUE*	489	481	1215
SPECIFIC GRAVITY	0.894	0.891	0.700

	INDEX 3331 SAMPLE 15365	INDEX 3332 SAMPLE 7943	INDEX 3333 SAMPLE 9605
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	NOT GIVEN	T V	WILDCAT
WELL NAME	BEALL FEDERAL NO. 1	MANRY ELLIOT NO. 1	FEDERAL A NO. 1
LOCATION	SEC. 17, T11S, R30E	SEC. 22, T11S, R31E	SEC. 10, T14S, R28E
OWNER	DEPCO, INC.	ROBINSON BROS. OIL PRODUCERS	MIDWEST OIL CORP.
COMPLETED	06/03/77	03/01/60	08/06/63
SAMPLED	08/28/78	04/28/61	10/19/64
FORMATION	PENN-ATOKA	PENN-ATOKA & MORROW	PERM-PREMIER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9096	10870	1683
WELLHEAD PRESSURE,PSIG	1780	3100	707
OPEN FLOW, MCFD	4741	10000	1000
COMPONENT, MOLE PCT			
METHANE	79.9	83.4	67.0
ETHANE	5.5	8.5	5.6
PROPANE	2.3	3.5	1.8
N-BUTANE	0.7	1.1	0.4
ISOBUTANE	0.5	0.9	0.3
N-PENTANE	0.2	0.5	TRACE
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.1
NITROGEN	7.9	0.8	24.4
OXYGEN	1.6	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.1
HELIUM	0.07	0.05	0.06
HEATING VALUE*	1048	1206	859
SPECIFIC GRAVITY	0.688	0.694	0.716

	INDEX 3334 SAMPLE 9970	INDEX 3335 SAMPLE 10209	INDEX 3336 SAMPLE 12951
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	OBRIEN NO. 2-C	B. OBRIEN NO. 2	TERRA-FEDERAL NO. 1
LOCATION	SEC. 23, T8S, R28E	SEC. 3, T8S, R29E	SEC. 17, T12S, R31E
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	READING & BATES, INC.
COMPLETED	NOT GIVEN	10/15/65	08/30/70
SAMPLED	07/08/65	10/13/65	08/13/71
FORMATION	PERM-YATES	PERM-SAN ANDRES	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	875	3056	2675
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	11000
COMPONENT, MOLE PCT			
METHANE	0.1	69.2	17.9
ETHANE	0.0	7.0	3.9
PROPANE	0.0	5.2	1.4
N-BUTANE	0.0	1.1	0.3
ISOBUTANE	0.0	0.7	0.1
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	99.4	11.9	75.6
OXYGEN	0.0	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.4	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	3.8	0.3
HELIUM	0.03	0.11	0.07
HEATING VALUE*	2000	1067	311
SPECIFIC GRAVITY	0.964	0.775	0.913

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3337 SAMPLE 13870	INDEX 3338 SAMPLE 14440	INDEX 3339 SAMPLE 15049
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	PLAINS RADIO NO. 36-1	MIDWEST FEDERAL NO. 1	UNION FEDERAL NO. 1
LOCATION	SEC. 36, T9S, R28E	SEC. 23, T10S, R29E	SEC. 1, T8S, R31E
OWNER	ROY WHITTENBURG	DEPCO, INC.	HOLLY ENERGY, INC.
COMPLETED	01/01/76	09/09/74	11/01/75
SAMPLED	01/19/76	08/18/75	07/06/77
FORMATION	PERM-QUEEN	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	9277	9542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2200	2750
OPEN FLOW, MCFD	NOT GIVEN	2290	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.9	84.6	68.9
ETHANE	7.2	6.1	13.1
PROPANE	3.4	2.9	8.0
N-BUTANE	0.9	0.8	2.9
ISOBUTANE	0.5	0.8	1.8
N-PENTANE	0.2	0.2	0.6
ISOPENTANE	0.2	0.5	1.6
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.2	0.4	0.6
NITROGEN	56.2	2.2	1.8
OXYGEN	1.0	0.5	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.0	0.5
HELIUM	0.12	0.05	0.05
HEATING VALUE*	549	1153	1431
SPECIFIC GRAVITY	0.903	0.685	0.844

	INDEX 3340 SAMPLE 15533	INDEX 3341 SAMPLE 13509	INDEX 3342 SAMPLE 2763
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	COLFAX	DONA ANA
FIELD	WILDCAT	WILDCAT	NOT GIVEN
WELL NAME	O'BRIEN NO. 1	ROBERTS TEST NO. 1	GAS SEEPAGE
LOCATION	SEC. 11, T9S, R29E	SEC. 25, T29N, R24E	NEAR LAS CRUCES
OWNER	TEXAS OIL & GAS CORP.	W. C. ROBERTS	NOT GIVEN
COMPLETED	06/02/77	NOT GIVEN	NOT GIVEN
SAMPLED	12/01/78	NOT GIVEN	08/27/37
FORMATION	PENN-STRAWN	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	455	465
DEPTH, FEET	8708	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2035	40	NOT GIVEN
OPEN FLOW, MCFD	4256	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.9	99.2	79.6
ETHANE	5.3	TRACE	0.0
PROPANE	1.9	TRACE	---
N-BUTANE	0.4	0.0	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.3	0.0	---
CYCLOPENTANE	0.2	0.0	---
HEXANES PLUS	0.3	0.0	---
NITROGEN	5.6	0.6	6.5
OXYGEN	1.1	0.1	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.3	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	13.0
HELIUM	0.07	TRACE	0.00
HEATING VALUE*	1062	1005	806
SPECIFIC GRAVITY	0.658	0.558	0.713

	INDEX 3343 SAMPLE 13280	INDEX 3344 SAMPLE 14809	INDEX 3345 SAMPLE 989
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	AID	ANGELL RANCH	ARTESIA
WELL NAME	AID-STATE COM. NO. 1	WRIGHT-FEDERAL NO. 1	NO. 2
LOCATION	SEC. 24, T17S, R28E	SEC. 6, T20S, R28E	SEC. 25, T18S, R28E
OWNER	PENNZOIL CO.	PENROC OIL CORP.	ILLINOIS OIL CO.
COMPLETED	03/30/71	08/22/75	06/01/24
SAMPLED	06/22/72	10/15/76	02/24/25
FORMATION	PENN-MORROW	PENN-MORROW	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10608	10828	1824
WELLHEAD PRESSURE,PSIG	1490	3385	NOT GIVEN
OPEN FLOW, MCFD	2500	3439	500
COMPONENT, MOLE PCT			
METHANE	84.2	91.4	65.7
ETHANE	9.0	4.9	22.1
PROPANE	3.8	1.6	---
N-BUTANE	0.8	0.4	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.8	0.4	11.2
OXYGEN	TRACE	0.0	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.6	0.4
HELIUM	0.03	0.02	0.10
HEATING VALUE*	1175	1102	1062
SPECIFIC GRAVITY	0.670	0.624	0.718

	INDEX 3346 SAMPLE 1060	INDEX 3347 SAMPLE 1793	INDEX 3348 SAMPLE 1937
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	RARROUP	BURCH NO. 2	STATE NO. 1
LOCATION	SEC. 19, T20S, R30E	SEC. 19, T17S, R30E	SEC. 21, T17S, R29E
OWNER	MR. WELLS	GRAYBURG OIL CO.	FORREST LEVERS
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	01/23/30
SAMPLED	05/23/25	06/11/29	02/17/30
FORMATION	NOT GIVEN	NOT GIVEN	PERM-ARTESIA PAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	730	2465	2280
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	100	NOT GIVEN	3600
COMPONENT, MOLE PCT			
METHANE	---	39.4	53.2
ETHANE	0.6	17.1	15.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	98.7	41.8	26.8
OXYGEN	0.6	2.1	4.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.00	0.07	0.09
HEATING VALUE*	79	756	810
SPECIFIC GRAVITY	0.974	0.825	0.769

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3349 SAMPLE 2543	INDEX 3350 SAMPLE 2644	INDEX 3351 SAMPLE 2653
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	MANN NO. 4	STATE NO. 2	NO. 56
LOCATION	SEC. 4, T18S, R27E	SEC. 25, T18S, R27E	SEC. 6, T19S, R28E
OWNER	R. D. COMPTON	FLYNN, WELCH & YATES, INC.	FLYNN, WELCH & YATES, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	03/10/29
SAMPLED	08/26/32	09/01/33	11/02/33
FORMATION	-UPPER GAS	PERM-QUEEN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1850	1824	690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	440	203
OPEN FLOW, MCFD	2000	2000	90
COMPONENT, MOLE PCT			
METHANE	64.5	51.4	42.1
ETHANE	24.5	36.5	18.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.0	11.7	39.3
OXYGEN	1.2	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.0	0.1
HELIUM	0.01	0.11	0.22
HEATING VALUE*	1092	1175	754
SPECIFIC GRAVITY	0.727	0.785	0.807

	INDEX 3352 SAMPLE 2697	INDEX 3353 SAMPLE 2734	INDEX 3354 SAMPLE 2735
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	VANDAGRIFF NO. 10	STATE NO. 1	ANDREWS-STATE NO. 1
LOCATION	SEC. 8, T17S, R28E	SEC. 15, T17S, R28E	SEC. 2, T17S, R28E
OWNER	PECOS VALLEY GAS CO.	HAMMOND ET AL.	PECOS VALLEY GAS CO.
COMPLETED	12/29/34	NOT GIVEN	NOT GIVEN
SAMPLED	01/08/35	10/20/36	10/20/36
FORMATION	PERM-	-STRAY	-STRAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1337	1457	1660
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1450	1000	175
COMPONENT, MOLE PCT			
METHANE	47.6	48.7	48.2
ETHANE	19.4	18.0	15.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	32.8	32.7	35.2
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.09	0.09	0.07
HEATING VALUE*	830	816	773
SPECIFIC GRAVITY	0.786	0.782	0.783

	INDEX 3355 SAMPLE 2777	INDEX 3356 SAMPLE 1377	INDEX 3357 SAMPLE 8184
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA E	ATOKA
WELL NAME	NO. 2-B	RAMAGE NO. 2	W. E. FLINT NO. 1
LOCATION	SEC. 10, T17S, R28E	SEC. 31, T17S, R29E	SEC. 22, T18S, R26E
OWNER	TIGNER, ETZ & KEYES	WESTERN DRILLING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	09/13/37	10/13/25	01/20/59
SAMPLED	01/08/38	04/07/27	08/24/61
FORMATION	NOT GIVEN	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1362	2715	9094
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	2707
OPEN FLOW, MCFD	2080	NOT GIVEN	42000
COMPONENT, MOLE PCT			
METHANE	47.6	31.8	89.9
ETHANE	18.8	59.5	5.5
PROPANE	---	---	1.7
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	33.1	8.0	0.5
OXYGEN	0.2	0.6	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.07	0.04	0.03
HEATING VALUE*	819	1388	1124
SPECIFIC GRAVITY	0.787	0.888	0.638

	INDEX 3358 SAMPLE 14437	INDEX 3359 SAMPLE 14431	INDEX 3360 SAMPLE 14531
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ATOKA	AVALON	AVALON
WELL NAME	POKER LAKE UNIT NO. 42	OCOTILLO HILLS NO. 1	FASHEN-FEDERAL NO. 2
LOCATION	SEC. 10, T25S, R30E	SEC. 31, T21S, R26E	SEC. 5, T21S, R26E
OWNER	PERRY R. BASS, INC.	HANAGAN PETROLEUM CORP.	MONSANTO CO.
COMPLETED	09/16/74	12/--/74	08/13/74
SAMPLED	08/13/75	08/11/75	11/14/75
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13732	10978	10734
WELLHEAD PRESSURE,PSIG	6000	3105	3567
OPEN FLOW, MCFD	NOT GIVEN	5000	17100
COMPONENT, MOLE PCT			
METHANE	91.9	96.1	96.0
ETHANE	4.6	2.0	2.2
PROPANE	1.1	0.4	0.4
N-BUTANE	0.2	TRACE	0.1
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	TRACE	TRACE
NITROGEN	0.9	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.7
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1091	1023	1029
SPECIFIC GRAVITY	0.617	0.578	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3361 SAMPLE 2544	INDEX 3362 SAMPLE 2642	INDEX 3363 SAMPLE 13670
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	BEESON	BEESON AREA	BURTON FLAT
WELL NAME	MCINTYRE NO. 1	ROOT NO. 1-A	BURTON FLAT DEEP UNIT NO. 1
LOCATION	SEC. 21, T17S, R30E	SEC. 7, T17S, R30E	SEC. 3, T21S, R27E
OWNER	LOCKHART & CO.	C. H. LOCKHART ET AL.	MONSANTO CO.
COMPLETED	NOT GIVEN	NOT GIVEN	11/04/72
SAMPLED	08/29/32	08/28/33	08/09/73
FORMATION	NOT GIVEN	PERM-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1812	1244	11308
WELLHEAD PRESSURE,PSIG	785	NOT GIVEN	3683
OPEN FLOW, MCFD	1000	150	30000
COMPONENT, MOLE PCT			
METHANE	19.8	37.2	94.6
ETHANE	14.7	34.9	3.1
PROPANE	---	---	0.7
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	65.5	24.7	0.4
OXYGEN	0.0	2.8	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.3	0.9
HELIUM	0.05	0.07	0.02
HEATING VALUE*	464	1102	1044
SPECIFIC GRAVITY	0.898	0.847	0.593

	INDEX 3364 SAMPLE 14044	INDEX 3365 SAMPLE 14451	INDEX 3366 SAMPLE 14205
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	BURTON FLAT	CABIN LAKE	CARLSBAD AREA E
WELL NAME	FEDERAL QQ NO. 1	JAMES E NO. 1	NIX-YATES NO. 1
LOCATION	SEC. 8, T21S, R27E	SEC. 11, T22S, R30E	SEC. 2, T22S, R27E
OWNER	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	09/15/73	05/01/74	07/26/74
SAMPLED	07/10/74	09/12/75	10/--/74
FORMATION	PENN-MORROW	PENN-MORROW	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11234	13323	9714
WELLHEAD PRESSURE,PSIG	3611	4679	2400
OPEN FLOW, MCFD	7337	3275	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.8	96.0	95.1
ETHANE	3.4	2.1	2.2
PROPANE	0.9	0.4	0.6
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.5	TRACE	0.1
NITROGEN	0.6	0.4	0.3
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1080	1027	1045
SPECIFIC GRAVITY	0.618	0.582	0.594

	INDEX 3367 SAMPLE 12483	INDEX 3368 SAMPLE 12484	INDEX 3369 SAMPLE 13681
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CARLSBAD S	CARLSBAD S	CARLSBAD S
WELL NAME	MOBIL FEDERAL NO. 1-12	MOBIL FEDERAL NO. 1-12	DRAG "BH" NO. 1
LOCATION	SEC. 12, T23S, R26E	SEC. 12, T23S, R26E	SEC. 18, T23S, R27E
OWNER	PENNZOIL UNITED, INC.	PENNZOIL UNITED, INC.	PHILLIPS PETROLEUM CO.
COMPLETED	12/07/68	12/06/68	08/07/72
SAMPLED	10/26/70	10/26/70	08/17/73
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11453	10842	11468
WELLHEAD PRESSURE,PSIG	3909	4038	4251
OPEN FLOW, MCFD	3310	5900	21325
COMPONENT, MOLE PCT			
METHANE	96.7	87.4	96.7
ETHANE	1.7	1.6	1.2
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	8.4	0.7
OXYGEN	0.0	1.8	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1018	920	1061
SPECIFIC GRAVITY	0.576	0.613	0.578

	INDEX 3370 SAMPLE 13682	INDEX 3371 SAMPLE 14007	INDEX 3372 SAMPLE 14252
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CARLSBAD S	CARLSBAD S	CORRAL DRAW
WELL NAME	DRAG "B" NO. 1	SUN STATE NO. 1	CORRAL DRAW UNIT NO. 1
LOCATION	SEC. 18, T23S, R27E	SEC. 22, T21S, R27E	SEC. 14, T25S, R29E
OWNER	PHILLIPS PETROLEUM CO.	TIPCO	MOBIL OIL CORP.
COMPLETED	08/07/72	07/30/73	07/15/74
SAMPLED	08/17/73	05/13/74	01/07/75
FORMATION	PENN-CANYON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10280	11350	13621
WELLHEAD PRESSURE,PSIG	3474	3450	5135
OPEN FLOW, MCFD	8411	2210	13694
COMPONENT, MOLE PCT			
METHANE	84.1	94.5	97.6
ETHANE	9.2	3.1	0.6
PROPANE	3.1	0.7	0.1
N-BUTANE	1.8	0.1	0.0
ISOBUTANE	0.7	0.1	0.0
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	0.9	0.4	0.8
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.8
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1192	1043	1002
SPECIFIC GRAVITY	0.679	0.592	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3373 SAMPLE 7822	INDEX 3374 SAMPLE 14711	INDEX 3375 SAMPLE 15254
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CRAWFORD	CROW FLATS	DAGGER DRAW
WELL NAME	CRAWFORD NO. 2-27	AMOCO FED. NO. 1	C.C. TANK UNIT NO. 1
LOCATION	SEC. 27, T24S, R26E	SEC. 19, T16S, R28E	SEC. 28, T19S, R24E
OWNER	UNION OIL CO. OF CALIFORNIA	SAMEDAN OIL CORP.	YATES PETROLEUM CORP.
COMPLETED	08/07/60	--/--/74	06/18/76
SAMPLED	12/28/60	06/27/76	04/06/78
FORMATION	PENN-	PENN-MORROW	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11188	NOT GIVEN	8107
WELLHEAD PRESSURE,PSIG	3751	1255	706
OPEN FLOW, MCFD	7200	500	1464
COMPONENT, MOLE PCT			
METHANE	93.8	87.4	83.6
ETHANE	0.4	6.9	8.7
PROPANE	0.1	3.1	3.6
N-BUTANE	TRACE	0.8	1.0
ISOBUTANE	TRACE	0.3	0.5
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	4.1	0.5	1.4
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.3	0.3
HELIUM	0.02	0.02	0.09
HEATING VALUE*	960	1153	1186
SPECIFIC GRAVITY	0.587	0.653	0.683

	INDEX 3376 SAMPLE 1210	INDEX 3377 SAMPLE 13793	INDEX 3378 SAMPLE 15255
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	DIAMOND DOME	EAGLE CREEK	EAGLE CREEK
WELL NAME	ERWIN NO. 1	ARTESIA AIRPORT CF NO. 1	CASKEY "EV" NO. 1
LOCATION	SEC. 8, T16S, R2E	SEC. 11, T17S, R25E	SEC. 30, T17S, R26E
OWNER	COLORADO DRILLING CO.	YATES PETROLEUM CORP.	YATES PETROLEUM CORP.
COMPLETED	12/--/25	12/27/71	01/14/76
SAMPLED	02/01/26	11/02/73	04/06/78
FORMATION	PERM-	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	825	7860	8166
WELLHEAD PRESSURE,PSIG	NOT GIVEN	800	1340
OPEN FLOW, MCFD	2000	200	4400
COMPONENT, MOLE PCT			
METHANE	0.0	89.3	89.9
ETHANE	2.3	5.9	5.4
PROPANE	---	2.6	1.8
N-BUTANE	---	0.1	0.6
ISOBUTANE	---	0.8	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	97.1	0.6	1.2
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.03	0.06
HEATING VALUE*	41	1127	1116
SPECIFIC GRAVITY	0.971	0.636	0.633

	INDEX 3379 SAMPLE 11761	INDEX 3380 SAMPLE 15334	INDEX 3381 SAMPLE 14441
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	EMPIRE	EMPIRE S	FORTY NINER RIDGE
WELL NAME	TRIGG FEDERAL NO. 1	TRAVIS DEEP UNIT NO. 1	FORTY NINER RIDGE NO. 2
LOCATION	SEC. 34, T17S, R27E	SEC. 18, T18S, R29E	SEC. 21, T23S, R30E
OWNER	PAN AMERICAN PETROLEUM CORP.	HEYCO	SKELLY OIL CO.
COMPLETED	10/31/68	03/22/77	12/04/74
SAMPLED	02/10/69	08/03/78	08/19/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9626	10844	13805
WELLHEAD PRESSURE,PSIG	2950	1107	2800
OPEN FLOW, MCFD	7000	1246	2492
COMPONENT, MOLE PCT			
METHANE	73.4	87.5	96.5
ETHANE	5.9	6.3	1.4
PROPANE	4.1	2.9	0.3
N-BUTANE	2.0	0.7	TRACE
ISOBUTANE	1.1	0.4	0.1
N-PENTANE	0.8	0.2	TRACE
ISOPENTANE	0.9	0.3	0.0
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.0	0.2	0.1
NITROGEN	8.3	0.9	0.9
OXYGEN	1.7	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.6
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	1195	1147	1023
SPECIFIC GRAVITY	0.783	0.653	0.580

	INDEX 3382 SAMPLE 1411	INDEX 3383 SAMPLE 11034	INDEX 3384 SAMPLE 14675
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	GETTY	GOLDEN EAGLE	GOLDEN LANE
WELL NAME	GETTY OIL CO. NO.1	PURE FEDERAL NO. 1	HARRIS "6" NO. 1
LOCATION	SEC. 14, T20S, R29E	SEC. 11, T21S, R25E	SEC. 6, T21S, R29E
OWNER	GETTY OIL CO.	ATLANTIC RICHFIELD CO.	MEADCO PROPERTIES
COMPLETED	04/--/27	12/27/65	02/19/75
SAMPLED	07/12/27	07/20/67	05/--/76
FORMATION	PERM-	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1040	9995	11438
WELLHEAD PRESSURE,PSIG	200	3003	3707
OPEN FLOW, MCFD	10	3708	5094
COMPONENT, MOLE PCT			
METHANE	56.9	95.2	81.8
ETHANE	4.5	2.4	10.2
PROPANE	---	0.5	3.8
N-BUTANE	---	0.2	1.1
ISOBUTANE	---	TRACE	0.6
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	37.8	0.6	1.5
OXYGEN	0.6	0.1	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.2
HELIUM	0.20	0.02	0.02
HEATING VALUE*	657	1042	1207
SPECIFIC GRAVITY	0.738	0.591	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3385 SAMPLE 2004		INDEX 3386 SAMPLE 2465		INDEX 3387 SAMPLE 2607	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	GRAYBURG JACKSON		GRAYBURG JACKSON		GRAYBURG JACKSON	
WELL NAME	STATE NO. 2		GREEN WELL NO. 1		MARY ODDD NO. 1	
LOCATION	SEC. 21, T17S, R29E		SEC. 29, T17S, R29E		SEC. 22, T17S, R29E	
OWNER	LEONARD & LEVERS		WESTERN DRILLING CO.		BARNSDALL OIL CORP.	
COMPLETED	04/03/30		NOT GIVEN		NOT GIVEN	
SAMPLED	06/05/30		01/15/32		02/20/33	
FORMATION	PERM-QUEEN		PERM-GRAYBURG		PERM-QUEEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	2284		2176		2280	
WELLHEAD PRESSURE,PSIG	710		700		750	
OPEN FLOW, MCFD	600		3500		6742	
COMPONENT, MOLE PCT						
METHANE	71.4		68.5		70.2	
ETHANE	13.9		19.2		18.1	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	14.2		11.7		11.0	
OXYGEN	0.2		0.3		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	0.14		0.16		0.11	
HEATING VALUE*	972		1038		1035	
SPECIFIC GRAVITY	0.685		0.699		0.694	

	INDEX 3388 SAMPLE 5166		INDEX 3389 SAMPLE 3985		INDEX 3390 SAMPLE 9638	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	GRAYBURG JACKSON		GRAYBURG-JACKSON		HOPE S	
WELL NAME	NO. 1-13-95		BEASON NO. 1		NEW MEXICO STATE A.H. NO. 1	
LOCATION	SEC. 21, T17S, R29E		SEC. 29, T17S, R30E		SEC. 30, T18S, R23E	
OWNER	LEONARD OIL CO.		NOT GIVEN		SUNRAY DX OIL CO.	
COMPLETED	10/10/51		NOT GIVEN		01/17/63	
SAMPLED	02/26/52		10/20/44		11/16/64	
FORMATION	PERM-QUEEN		PERM-SEVEN RIVERS		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	2310		1685		7326	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		2120	
OPEN FLOW, MCFD	500		500		20116	
COMPONENT, MOLE PCT						
METHANE	75.0		20.5		92.0	
ETHANE	8.8		22.1		4.9	
PROPANE	3.1		---		1.2	
N-BUTANE	0.4		---		0.3	
ISOBUTANE	0.2		---		0.3	
N-PENTANE	0.1		---		0.1	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	0.0		---		TRACE	
HEXANES PLUS	0.0		---		0.1	
NITROGEN	12.0		56.6		0.4	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.7		0.4	
HELIUM	0.10		0.07		0.06	
HEATING VALUE*	1027		604		1085	
SPECIFIC GRAVITY	0.694		0.904		0.611	

	INDEX 3391 SAMPLE 9274		INDEX 3392 SAMPLE 15256		INDEX 3393 SAMPLE 13953	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	INDIAN BASIN		INDIAN BASIN W		JAMES RANCH	
WELL NAME	NO. 1		HILLARD "BE" NO. 1		JAMES RANCH NO. 3	
LOCATION	SEC. 10, T21S, R23E		SEC. 14, T21S, R22E		SEC. 1, T23S, R30E	
OWNER	MARATHON OIL CO.		YATES PETROLEUM CORP.		BELCO PETROLEUM CO.	
COMPLETED	08/10/63		11/19/76		12/08/72	
SAMPLED	04/02/64		04/06/78		03/15/74	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	9118		8790		12731	
WELLHEAD PRESSURE,PSIG	2728		2495		6287	
OPEN FLOW, MCFD	6880		7812		18000	
COMPONENT, MOLE PCT						
METHANE	90.3		92.1		86.6	
ETHANE	4.8		4.2		6.0	
PROPANE	1.7		1.5		2.2	
N-BUTANE	0.7		0.4		1.0	
ISOBUTANE	0.2		0.2		0.7	
N-PENTANE	0.3		0.1		0.7	
ISOPENTANE	0.4		0.2		0.5	
CYCLOPENTANE	0.2		0.1		0.2	
HEXANES PLUS	0.6		0.2		0.9	
NITROGEN	0.0		0.4		0.7	
OXYGEN	0.0		0.0		0.1	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.5		0.4	
HELIUM	0.02		0.03		0.02	
HEATING VALUE*	1145		1094		1204	
SPECIFIC GRAVITY	0.649		0.618		0.688	

	INDEX 3394 SAMPLE 14449		INDEX 3395 SAMPLE 14450		INDEX 3396 SAMPLE 14719	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	LA HUERTA		LA HUERTA		LA HUERTA	
WELL NAME	TRACY A NO. 1		TRACY A NO. 1		IVES "A" NO. 1	
LOCATION	SEC. 33, T21S, R27E		SEC. 33, T21S, R27E		SEC. 30, T21S, R27E	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	04/15/74		04/15/74		10/24/74	
SAMPLED	09/09/75		09/09/75		07/15/76	
FORMATION	PENN-STRAWN		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	9950		10947		11186	
WELLHEAD PRESSURE,PSIG	1797		1750		1550	
OPEN FLOW, MCFD	11252		10085		36207	
COMPONENT, MOLE PCT						
METHANE	94.9		94.8		93.7	
ETHANE	2.8		2.9		3.5	
PROPANE	0.6		0.6		0.9	
N-BUTANE	0.1		0.1		0.2	
ISOBUTANE	0.1		0.1		0.2	
N-PENTANE	TRACE		TRACE		0.0	
ISOPENTANE	0.1		TRACE		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	1.5		0.5		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.9		0.9	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1043		1040		1058	
SPECIFIC GRAVITY	0.592		0.591		0.602	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3397 SAMPLE 2657	INDEX 3398 SAMPLE 14469	INDEX 3399 SAMPLE 8640
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	LEONARD & LEVERS	LOGAN DRAW	MALAGA
WELL NAME	STATE NO. 9	ARCO B, FEDERAL GAS NO. 1	U.S.G.S. - 8
LOCATION	SEC. 22, T17S, R29E	SEC. 25, T17S, R27E	SEC. 16, T24S, R29E
OWNER	HARRY LEONARD	AMOCO PRODUCTION CO.	U.S. GEOLOGICAL SURVEY
COMPLETED	NOT GIVEN	03/03/74	05/--/39
SAMPLED	11/19/33	08/29/75	08/01/62
FORMATION	-STRAY	PERM-WOLFCAMP	PERM-RUSTLER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2851	6756	199
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1953	NOT GIVEN
OPEN FLOW, MCFD	200	34950	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.8	75.8	0.1
ETHANE	27.2	11.8	TRACE
PROPANE	---	5.6	0.0
N-BUTANE	---	1.4	TRACE
ISOBUTANE	---	0.7	0.0
N-PENTANE	---	0.3	0.0
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	5.4	3.7	97.8
OXYGEN	0.5	0.0	TRACE
ARGON	---	TRACE	1.2
HYDROGEN	---	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.0	0.1	0.7
HELIUM	0.07	0.08	TRACE
HEATING VALUE*	1144	1239	2
SPECIFIC GRAVITY	0.733	0.738	0.974

	INDEX 3400 SAMPLE 9806	INDEX 3401 SAMPLE 2007	INDEX 3402 SAMPLE 2008
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MALCO AREA	MALJAMAR	MALJAMAR
WELL NAME	FEDERAL CASS RANCH UNIT NO.1	RUSSELL NO. 5	LYNCH NO. 1
LOCATION	SEC. 3, T20S, R24E	SEC. 18, T17S, R31E	SEC. 22, T17S, R31E
OWNER	STANDARD OIL CO. OF TEXAS	PUEBLO OIL CO.	SKELLY OIL CO.
COMPLETED	05/24/63	DRILL STEM TEST	07/15/27
SAMPLED	03/15/65	06/05/30	06/03/30
FORMATION	PENN-	PERM-MALJAMAR	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7648	2885	3750
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1560	1000	200
COMPONENT, MOLE PCT			
METHANE	92.7	68.5	52.1
ETHANE	4.2	16.0	39.6
PROPANE	1.1	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.8	14.9	6.7
OXYGEN	TRACE	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	1.3
HELIUM	0.04	0.07	0.07
HEATING VALUE*	1084	981	1237
SPECIFIC GRAVITY	0.611	0.700	0.792

	INDEX 3403 SAMPLE 2009	INDEX 3404 SAMPLE 13284	INDEX 3405 SAMPLE 14042
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MALJAMAR	MAROON CLIFFS	MORROW
WELL NAME	ROBINSON NO. 1	BIG EDDY UNIT NO. 7	FORTY NINER RIDGE NO. 1
LOCATION	SEC. 25, T16S, R31E	SEC. 19, T20S, R31E	SEC. 16, T23S, R30E
OWNER	TEXAS PRODUCTION CO.	PERRY R. BASS, INC.	SKELLY OIL CO.
COMPLETED	07/16/27	05/03/71	12/06/73
SAMPLED	06/04/30	06/28/72	07/10/74
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3884	12656	13914
WELLHEAD PRESSURE,PSIG	900	2050	5112
OPEN FLOW, MCFD	11700	3800	3703
COMPONENT, MOLE PCT			
METHANE	69.9	89.1	95.8
ETHANE	17.4	6.0	2.0
PROPANE	---	2.0	0.3
N-BUTANE	---	0.5	0.1
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.4	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	12.1	0.8	0.3
OXYGEN	0.3	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.7	1.2
HELIUM	0.17	0.02	0.02
HEATING VALUE*	1020	1111	1026
SPECIFIC GRAVITY	0.692	0.636	0.585

	INDEX 3406 SAMPLE 1231	INDEX 3407 SAMPLE 1360	INDEX 3408 SAMPLE 1368
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	ROSE PRINT	VANDEGRIFF	RUSSELL NO. 18
LOCATION	SEC. 31, T24S, R27E	SEC. 5, T17S, R28E	SEC. 24, T17S, R27E
OWNER	EMPIRE GAS & FUEL CO.	DECEM DEVELOPMENT CO.	NOT GIVEN
COMPLETED	02/--/26	NOT GIVEN	NOT GIVEN
SAMPLED	03/01/26	03/08/27	03/18/27
FORMATION	PERM-	PERM-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2300	1350	940
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	70	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	45.6	0.0
ETHANE	10.1	19.1	2.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.8	34.2	96.9
OXYGEN	1.0	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.07	0.04	0.09
HEATING VALUE*	1037	804	45
SPECIFIC GRAVITY	0.632	0.797	0.972

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3409 SAMPLE 1505	INDEX 3410 SAMPLE 1548	INDEX 3411 SAMPLE 1633
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	GOV. POTASH TEST NO. 3	U. S. GOVT. - POTASH TEST	GYPSY NO. 4
LOCATION	SEC. 34, T22S, R30E	SEC. 34, T22S, R30E	SEC. 8, T22S, R30E
OWNER	GOVERNMENT PERMIT	NOT GIVEN	ROGERS-GYPSY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	DRILL STEM TEST
SAMPLED	09/16/27	11/25/27	04/13/28
FORMATION	PERM-SALT	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	782	NOT GIVEN	429
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	2.8	2.0	1.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	96.7	97.5	98.0
OXYGEN	0.1	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	50	36	25
SPECIFIC GRAVITY	0.972	0.970	0.971

	INDEX 3412 SAMPLE 1915	INDEX 3413 SAMPLE 2812	INDEX 3414 SAMPLE 5266
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	POTASH TEST NO. 6	SAMPLE OF MINE GAS	GERTRUDE W. DUFFIELD NO. 1
LOCATION	SEC. 34, T21S, R28E	NOT GIVEN	SEC. 21, T16S, R27E
OWNER	NOT GIVEN	UNION POTASH CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	04/27/52
SAMPLED	12/23/29	01/25/39	07/07/52
FORMATION	PERM-SALT	PERM-	PENN-M
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	606	NOT GIVEN	8700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2943
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3800
COMPONENT, MOLE PCT			
METHANE	0.0	2.8	89.7
ETHANE	0.0	2.3	5.5
PROPANE	---	---	2.0
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	99.2	94.6	1.3
OXYGEN	0.0	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.0	0.3
HELIUM	0.05	0.03	0.05
HEATING VALUE*	0	70	1100
SPECIFIC GRAVITY	0.969	0.958	0.629

	INDEX 3415 SAMPLE 5563	INDEX 3416 SAMPLE 6859	INDEX 3417 SAMPLE 7173
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	STATE AB NO. 1	FEDERAL D NO. 2	JAMES RANCH NO. 1
LOCATION	SEC. 29, T17S, R28E	SEC. 12, T24S, R26E	SEC. 36, T22S, R30E
OWNER	STANOLIND OIL & GAS CO.	JOSEPH I. ONEILL, JR.	SHELL OIL CO.
COMPLETED	08/14/53	09/17/58	03/01/58
SAMPLED	11/04/53	11/05/58	08/03/59
FORMATION	PENN-	PENN-MORROW	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10102	11566	12920
WELLHEAD PRESSURE,PSIG	4066	3700	6600
OPEN FLOW, MCFD	30000	3600	9000
COMPONENT, MOLE PCT			
METHANE	90.0	97.0	70.9
ETHANE	6.8	1.1	3.3
PROPANE	2.0	0.1	1.4
N-BUTANE	0.3	TRACE	0.2
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.2	0.8	16.9
OXYGEN	TRACE	TRACE	4.4
ARGON	0.0	0.0	0.2
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.3
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1109	1010	833
SPECIFIC GRAVITY	0.622	0.574	0.700

	INDEX 3418 SAMPLE 7901	INDEX 3419 SAMPLE 8870	INDEX 3420 SAMPLE 10823
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MCKITTRICK CANYON NO. 1	BIG EDDY UNIT NO. 1	HACKBERRY HILLS UNIT NO. 1
LOCATION	SEC. 25, T22S, R25E	SEC. 3, T20S, R31E	SEC. 22, T22S, R26E
OWNER	HONOLULU GAS CO. LTD.	PAN AMERICAN PETROLEUM CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	NOT GIVEN	06/05/62	07/16/66
SAMPLED	03/16/61	02/22/63	12/17/66
FORMATION	PENN-MORROW	PERM-WOLFCAMP	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11245	10690	10061
WELLHEAD PRESSURE,PSIG	3541	2205	NOT GIVEN
OPEN FLOW, MCFD	753	10400	13574
COMPONENT, MOLE PCT			
METHANE	98.4	84.2	79.7
ETHANE	3.5	9.8	10.9
PROPANE	0.6	3.1	3.9
N-BUTANE	0.1	1.0	1.2
ISOBUTANE	0.1	0.4	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.4	0.8	2.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1052	1183	1201
SPECIFIC GRAVITY	0.598	0.673	0.709

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3421 SAMPLE 13815	INDEX 3422 SAMPLE 13816	INDEX 3423 SAMPLE 14038
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MCMINN-STATE NO. 1	MCMINN-STATE NO. 1	MALAGA "A" NO. 1
LOCATION	SEC. 18, T21S, R26E	SEC. 18, T21S, R26E	SEC. 2, T24S, R28E
OWNER	INEXCO OIL CO.	INEXCO OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/01/72	08/01/72	03/18/74
SAMPLED	11/--/73	11/--/73	NOT GIVEN
FORMATION	PENN-MORROW	PENN-STRAWN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10536	9868	12310
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1500
OPEN FLOW, MCFD	7300	11700	350
COMPONENT, MOLE PCT			
METHANE	95.7	92.0	96.5
ETHANE	2.3	4.5	1.2
PROPANE	0.5	1.2	0.1
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	0.1	0.3	0.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.3	1.1	1.0
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.9
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1035	1083	1010
SPECIFIC GRAVITY	0.587	0.615	0.579

	INDEX 3424 SAMPLE 14122	INDEX 3425 SAMPLE 14124	INDEX 3426 SAMPLE 14311
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	PARKWAY WEST UNIT NO. 1	PARKWAY WEST UNIT NO. 1	FANNING NO. 1
LOCATION	SEC. 28, T19S, R29E	SEC. 28, T19S, R29E	SEC. 4, T19S, R26E
OWNER	PETROLEUM CORP.	PETROLEUM CORP.	SAMEDAN OIL CORP.
COMPLETED	03/26/74	08/05/74	11/09/73
SAMPLED	08/05/74	08/05/74	03/31/75
FORMATION	PENN-STRAWN	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10246	10578	9207
WELLHEAD PRESSURE,PSIG	2740	3860	2800
OPEN FLOW, MCFD	2014	2770	2900
COMPONENT, MOLE PCT			
METHANE	78.6	85.3	91.4
ETHANE	12.9	7.4	4.3
PROPANE	4.8	3.1	1.4
N-BUTANE	1.0	0.8	0.3
ISOBUTANE	0.5	0.6	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.5	1.8	1.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1225	1160	1086
SPECIFIC GRAVITY	0.707	0.669	0.622

	INDEX 3427 SAMPLE 14321	INDEX 3428 SAMPLE 14528	INDEX 3429 SAMPLE 14608
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	G. CONLEY FEDERAL NO. 1	FLINT NO. 1	ALLIED B NO. 1
LOCATION	SEC. 33, T20S, R27E	SEC. 25, T17S, R25E	SEC. 27, T20S, R27E
OWNER	ATLANTIC RICHFIELD CO.	WESTERN OIL PRODUCERS, INC.	PENROC OIL CORP.
COMPLETED	05/23/74	04/18/74	NOT GIVEN
SAMPLED	04/--/75	11/12/75	03/10/76
FORMATION	PENN-MORROW	PENN-CISCO	PERM-BONE SPRING
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10672	6300	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3647	1375	NOT GIVEN
OPEN FLOW, MCFD	3948	4000	128
COMPONENT, MOLE PCT			
METHANE	93.7	86.5	84.8
ETHANE	3.6	7.3	6.5
PROPANE	0.9	3.2	2.6
N-BUTANE	0.1	0.8	1.2
ISOBUTANE	0.2	0.5	0.6
N-PENTANE	TRACE	0.2	0.4
ISOPENTANE	0.1	0.2	1.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	0.5	1.0	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	1.0
HELIUM	0.02	0.05	0.02
HEATING VALUE*	1057	1160	1201
SPECIFIC GRAVITY	0.600	0.659	0.699

	INDEX 3430 SAMPLE 14720	INDEX 3431 SAMPLE 14788	INDEX 3432 SAMPLE 11573
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	PADUCA
WELL NAME	LITTLE BOX CANYON NO. 1	GULF FEDERAL NO. 1	COTTON DRAW UNIT NO. 65
LOCATION	SEC. 7, T21S, R22E	SEC. 35, T19S, R25E	SEC. 2, T25S, R31E
OWNER	CITIES SERVICE OIL CO.	HILLIARD OIL & GAS, INC.	TEXACO INC.
COMPLETED	09/05/75	04/11/74	06/03/67
SAMPLED	07/15/76	09/28/76	07/12/68
FORMATION	PENN-MORROW	PENN-MORROW	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7986	9325	12851
WELLHEAD PRESSURE,PSIG	1500	3020	2418
OPEN FLOW, MCFD	2426	2639	9592
COMPONENT, MOLE PCT			
METHANE	93.1	95.5	87.7
ETHANE	3.8	2.5	7.4
PROPANE	0.9	0.4	2.2
N-BUTANE	0.2	0.1	0.6
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	TRACE	0.0	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	1.2	0.3	0.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.2
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1053	1034	1145
SPECIFIC GRAVITY	0.597	0.584	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3433 SAMPLE 11574	INDEX 3434 SAMPLE 2606	INDEX 3435 SAMPLE 14683
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	PADUCA	PECOS VALLEY	PHANTOM DRAW
WELL NAME	COTTON DRAW UNIT NO. 65	VANDAGRIFF NO. 7	PHANTOM DRAW FED. UNIT NO. 1
LOCATION	SEC. 2, T25S, R31E	SEC. 5, T17S, R28E	SEC. 20, T26S, R31E
OWNER	TEXACO INC.	PECOS VALLEY GAS CO.	TEXAS PACIFIC OIL CO., ET AL
COMPLETED	06/03/67	NOT GIVEN	09/01/75
SAMPLED	07/12/68	02/06/33	05/28/76
FORMATION	PENN-MORROW	-STRAY PAY	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14867	1340	12670
WELLHEAD PRESSURE,PSIG	5474	NOT GIVEN	7000
OPEN FLOW, MCFD	21230	1450	19789
COMPONENT, MOLE PCT			
METHANE	97.4	47.5	88.8
ETHANE	0.7	18.5	6.7
PROPANE	0.1	---	1.9
N-BUTANE	0.0	---	0.6
ISOBUTANE	0.0	---	0.4
N-PENTANE	0.0	---	0.2
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	0.8	33.1	0.7
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.0	0.2	0.3
HELIUM	0.01	0.07	0.01
HEATING VALUE*	1002	813	1134
SPECIFIC GRAVITY	0.576	0.787	0.643

	INDEX 3436 SAMPLE 14435	INDEX 3437 SAMPLE 9935	INDEX 3438 SAMPLE 11835
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	QUAHADA	RIVERSIDE	ROCK TANK
WELL NAME	BIG EDDY UNIT NO. 38	JEAN M. NO. 1	ROCK TANK UNIT NO. 1
LOCATION	SEC. 34, T21S, R29E	SEC. 31, T16S, R27E	SEC. 7, T23S, R25E
OWNER	PERRY R. BASS, INC.	JAHN A. YATES, ET AL.	MONSANTO CO.
COMPLETED	03/06/74	12/19/63	01/21/68
SAMPLED	08/13/75	06/22/65	04/24/69
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13068	8357	9965
WELLHEAD PRESSURE,PSIG	950	NOT GIVEN	3117
OPEN FLOW, MCFD	8337	2100	6698
COMPONENT, MOLE PCT			
METHANE	95.5	91.0	95.1
ETHANE	2.3	5.1	2.7
PROPANE	0.5	1.5	0.4
N-BUTANE	0.1	0.4	0.2
ISOBUTANE	0.1	0.3	0.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	0.8	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.4	0.7
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1028	1089	1043
SPECIFIC GRAVITY	0.585	0.619	0.589

	INDEX 3439 SAMPLE 11836	INDEX 3440 SAMPLE 11837	INDEX 3441 SAMPLE 13603
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ROCK TANK	ROCK TANK	ROCKY ARROYO
WELL NAME	ROCK TANK UNIT NO. 1	ROCK TANK UNIT NO. 2	REESE CLEVELAND NO. 1-Y
LOCATION	SEC. 7, T23S, R25E	SEC. 6, T23S, R25E	SEC. 33, T21S, R22E
OWNER	MONSANTO CO.	MONSANTO CO.	GREAT WESTERN DRILLING CO.
COMPLETED	01/21/68	07/17/68	12/27/72
SAMPLED	04/24/69	04/24/69	06/01/73
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10290	10405	9126
WELLHEAD PRESSURE,PSIG	3385	3381	2700
OPEN FLOW, MCFD	52351	24566	5195
COMPONENT, MOLE PCT			
METHANE	95.7	93.9	93.4
ETHANE	2.3	2.2	3.6
PROPANE	0.3	0.2	1.1
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.3	1.8	0.3
OXYGEN	0.1	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.6
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1045	1025	1074
SPECIFIC GRAVITY	0.590	0.596	0.606

	INDEX 3442 SAMPLE 1349	INDEX 3443 SAMPLE 12293	INDEX 3444 SAMPLE 15364
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	RUSSELL	SAND DUNES	SHUGART N
WELL NAME	RUSSELL NO. 1A	TODD-FEDERAL 26 NO. 1	LITTLEFIELD EM FED. NO. 1
LOCATION	SEC. 35, T17S, R27E	SEC. 26, T23S, R31E	SEC. 20, T18S, R31E
OWNER	EMPIRE GAS & FUEL CO.	TEXAS AMERICAN OIL CORP.	GULF OIL EXPL. & PROD. CO.
COMPLETED	NOT GIVEN	12/12/69	04/04/77
SAMPLED	02/23/27	06/10/70	09/06/76
FORMATION	PERM-	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1392	13679	11102
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7871	2630
OPEN FLOW, MCFD	NOT GIVEN	75000	3310
COMPONENT, MOLE PCT			
METHANE	29.8	94.1	81.7
ETHANE	61.3	3.2	9.1
PROPANE	---	0.6	4.1
N-BUTANE	---	0.1	1.0
ISOBUTANE	---	0.0	0.5
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	8.1	1.4	2.5
OXYGEN	1.0	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.2
HELIUM	0.02	0.02	0.04
HEATING VALUE*	1196	1038	1183
SPECIFIC GRAVITY	0.899	0.591	0.691

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3445 SAMPLE 15366	INDEX 3446 SAMPLE 10981	INDEX 3447 SAMPLE 11883
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	SHUGART N	SPRING	SPRING
WELL NAME	LITTLEFIELD EM FED NO 1	SPRINGS UNIT NO. 1	LEVERS-FEDERAL NO. 1
LOCATION	SEC. 20, T18S, R31E	SEC. 34, T20S, R26E	SEC. 2, T21S, R25E
OWNER	GULF OIL EXPL. & PROD. CO.	GULF OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	03/28/77	12/13/66	12/19/68
SAMPLED	09/06/78	05/31/67	05/15/69
FORMATION	PENN-MORROW	PENN-	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11567	8004	8088
WELLHEAD PRESSURE,PSIG	2329	2580	2500
OPEN FLOW, MCFD	14900	12292	20455
COMPONENT, MOLE PCT			
METHANE	86.2	86.4	88.0
ETHANE	7.6	6.3	6.2
PROPANE	3.0	2.8	2.6
N-BUTANE	0.7	1.0	0.9
ISOBUTANE	0.4	0.7	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.5	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	0.7	0.8	0.7
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1160	1166	1148
SPECIFIC GRAVITY	0.662	0.676	0.654

	INDEX 3448 SAMPLE 13712	INDEX 3449 SAMPLE 2003	INDEX 3450 SAMPLE 2784
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	SQUARE LAKE	STYRDIS	STYRDIS
WELL NAME	ANDERSON-FEDERAL NO. 1	BURKETT NO. 5	SAPPENFIELD NO. 1
LOCATION	SEC. 7, T17S, R30E	SEC. 5, T17S, R28E	SEC. 4, T16S, R28E
OWNER	DORCHESTER EXPLORATION, INC.	PECOS VALLEY GAS CO.	PECOS VALLEY GAS CO.
COMPLETED	07/26/72	03/28/30	NOT GIVEN
SAMPLED	09/11/73	06/05/30	03/22/38
FORMATION	PENN-MORROW	PERM-	PERM-ARTESIA PAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10844	1330	1770
WELLHEAD PRESSURE,PSIG	2350	NOT GIVEN	500
OPEN FLOW, MCFD	2111	1200	333
COMPONENT, MOLE PCT			
METHANE	86.2	52.7	5.7
ETHANE	7.7	14.3	2.9
PROPANE	3.0	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.1	32.5	90.7
OXYGEN	0.0	0.3	0.5
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.04	0.09	0.10
HEATING VALUE*	1144	790	110
SPECIFIC GRAVITY	0.655	0.763	0.948

	INDEX 3451 SAMPLE 15797	INDEX 3452 SAMPLE 16064	INDEX 3453 SAMPLE 1208
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	TELEDYNE AREA	TURKEY TRACK	VANDERGRIFF KEYES
WELL NAME	PARDUE FARMS NO. 1	STATE HL11 NO. 1	NO. 1
LOCATION	SEC. 26, T23S, R28E	SEC. 11, T19S, R29E	SEC. 27, T16S, R28E
OWNER	AMOCO PRODUCTION CO.	TENNECO OIL CO.	LANE & HOLLAND
COMPLETED	06/28/78	11/09/79	08/23/25
SAMPLED	09/29/79	08/28/80	01/10/26
FORMATION	PENN-STRAWN	PENN-ATOKA	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11484	10800	2210
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3500	NOT GIVEN
OPEN FLOW, MCFD	3250	4836	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.3	88.1	75.0
ETHANE	15.8	6.5	0.0
PROPANE	9.2	2.3	---
N-BUTANE	3.1	0.5	---
ISOBUTANE	3.3	0.4	---
N-PENTANE	1.1	0.1	---
ISOPENTANE	1.4	0.3	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	1.6	0.2	---
NITROGEN	0.5	1.2	22.4
OXYGEN	0.1	TRACE	1.3
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	1.3
HELIUM	TRACE	0.03	0.10
HEATING VALUE*	1575	1130	760
SPECIFIC GRAVITY	0.918	0.646	0.667

	INDEX 3454 SAMPLE 2752	INDEX 3455 SAMPLE 12482	INDEX 3456 SAMPLE 2006
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	VANDERGRIFF KEYES	WHITE CITY AREA	WILDCAT
WELL NAME	NO. 1	ALLIED FEDERAL NO. 1-21	WOOLLEY NO. 1
LOCATION	SEC. 9, T17S, R28E	SEC. 21, T24S, R36E	SEC. 1, T17S, R30E
OWNER	F. GRANT KEYES	PENNZOIL UNITED, INC.	LOCKHART & CO.
COMPLETED	06/19/37	03/04/69	03/27/27
SAMPLED	06/22/37	10/26/70	06/03/30
FORMATION	PERM-QUEEN	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1697	11085	1812
WELLHEAD PRESSURE,PSIG	740	3846	775
OPEN FLOW, MCFD	2500	2700	1000
COMPONENT, MOLE PCT			
METHANE	70.2	97.2	24.4
ETHANE	15.7	1.3	13.1
PROPANE	---	0.2	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	13.4	0.4	62.4
OXYGEN	0.6	0.0	0.1
ARGON	---	0.0	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.8	0.1
HELIUM	0.10	0.02	0.12
HEATING VALUE*	992	1013	482
SPECIFIC GRAVITY	0.690	0.572	0.879

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3457 SAMPLE 6186	INDEX 3458 SAMPLE 8863	INDEX 3459 SAMPLE 9022
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	WELCH UNIT NO. 1-X	NO. 1	HUAPACHE NO. 10
LOCATION	SEC. 21, T26S, R27E	SEC. 14, T21S, R23E	SEC. 10, T23S, R22E
OWNER	EL PASO NATURAL GAS CO.	RALPH LOWE	HUMBLE OIL & REFINING CO.
COMPLETED	10/15/56	NOT GIVEN	05/21/63
SAMPLED	11/20/56	02/15/63	06/25/63
FORMATION	PENN-ATOKA	PENN-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12502	8926	9572
WELLHEAD PRESSURE,PSIG	3313	NOT GIVEN	3000
OPEN FLOW, MCFD	27000	750	E
COMPONENT, MOLE PCT			
METHANE	97.7	87.5	96.3
ETHANE	0.5	4.0	2.1
PROPANE	0.0	2.7	0.3
N-BUTANE	0.0	0.6	0.2
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.4	0.2
NITROGEN	0.3	3.8	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	0.5
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1004	1089	1046
SPECIFIC GRAVITY	0.571	0.648	0.584

	INDEX 3460 SAMPLE 9252	INDEX 3461 SAMPLE 13201	INDEX 3462 SAMPLE 13491
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FEDERAL DOOLEY NO. 1	ROCK ARROYA NO. 1	CEDAR CANYON NO. 1
LOCATION	SEC. 24, T20S, R29E	SEC. 8, T22S, R22E	SEC. 9, T24S, R29E
OWNER	ODESSA NAT. GASOLINE CO.	EL PASO NATURAL GAS CO.	SKELLY OIL CO.
COMPLETED	10/03/63	11/10/71	08/08/72
SAMPLED	03/09/64	05/07/72	12/26/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12102	8956	13026
WELLHEAD PRESSURE,PSIG	3779	2723	4717
OPEN FLOW, MCFD	16700	2008	32800
COMPONENT, MOLE PCT			
METHANE	93.6	95.0	96.8
ETHANE	3.5	3.1	1.4
PROPANE	1.1	0.7	0.1
N-BUTANE	0.3	0.1	TRACE
ISOBUTANE	0.1	0.2	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	0.1	0.3	0.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	1.2
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1076	1051	1008
SPECIFIC GRAVITY	0.607	0.590	0.574

	INDEX 3463 SAMPLE 13645	INDEX 3464 SAMPLE 13963	INDEX 3465 SAMPLE 14043
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ROCKY ARROYO NO. 1	LOWE STATE NO. 1	STATE CK NO. 1
LOCATION	SEC. 8, T22S, R22E	SEC. 16, T24S, R24E	SEC. 4, T17S, R26E
OWNER	EL PASO NATURAL GAS CO.	C & K PETROLEUM, INC.	YATES PETROLEUM CORP.
COMPLETED	11/10/71	10/03/73	07/11/73
SAMPLED	07/12/73	03/13/74	07/12/74
FORMATION	PERM-WOLFCAMP	PERM-WOLFCAMP	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6563	8361	7963
WELLHEAD PRESSURE,PSIG	1873	2687	2577
OPEN FLOW, MCFD	20508	46824	22856
COMPONENT, MOLE PCT			
METHANE	82.9	91.3	89.7
ETHANE	10.7	6.0	5.8
PROPANE	3.4	1.2	2.1
N-BUTANE	0.6	0.2	0.5
ISOBUTANE	0.5	0.2	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.4	0.7	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.05	0.02	0.03
HEATING VALUE*	1174	1086	1128
SPECIFIC GRAVITY	0.678	0.610	0.637

	INDEX 3466 SAMPLE 14053	INDEX 3467 SAMPLE 14174	INDEX 3468 SAMPLE 14290
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HINKLE-FEDERAL NO. 1	SHELBY FEDERAL NO. 2	SANDY UNIT NO. 1
LOCATION	SEC. 9, T16S, R29E	SEC. 12, T22S, R34E	SEC. 24, T23S, R30E
OWNER	MCCLELLAN OIL CORP.	SOUTHERN UNION PROD. CO.	PHILLIPS PETROLEUM CO.
COMPLETED	03/12/73	05/11/74	07/19/74
SAMPLED	07/18/74	10/14/74	03/12/75
FORMATION	PERM-PREMIER	PENN-CISCO	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2362	7970	14494
WELLHEAD PRESSURE,PSIG	450	2110	4700
OPEN FLOW, MCFD	2207	10430	4000
COMPONENT, MOLE PCT			
METHANE	50.7	91.6	96.8
ETHANE	4.8	4.5	1.9
PROPANE	1.6	1.3	0.2
N-BUTANE	0.3	0.4	TRACE
ISOBUTANE	0.2	0.4	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	TRACE
NITROGEN	42.1	1.0	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	1.2
HELIUM	0.14	0.02	0.02
HEATING VALUE*	662	1094	1009
SPECIFIC GRAVITY	0.777	0.621	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3469 SAMPLE 14428	INDEX 3470 SAMPLE 14436	INDEX 3471 SAMPLE 14448
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HAY HOLLOW NO. 1	BIG EDDY UNIT NO. 39	GOVERNMENT R NO. 1
LOCATION	SEC. 11, T26S, R27E	SEC. 29, T21S, R28E	SEC. 14, T20S, R28E
OWNER	GREAT WESTERN DRILLING CO.	PERRY R. BASS, INC.	CITIES SERVICE OIL CO.
COMPLETED	04/01/75	01/15/74	09/11/73
SAMPLED	07/07/75	08/13/75	09/09/75
FORMATION	PENN-STRAWN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11611	11762	11331
WELLHEAD PRESSURE,PSIG	5650	4025	3630
OPEN FLOW, MCFD	10866	3715	11217
COMPONENT, MOLE PCT			
METHANE	94.2	94.0	94.5
ETHANE	3.4	3.4	3.3
PROPANE	0.6	0.7	0.7
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.8	0.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.9	0.8
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1047	1047	1046
SPECIFIC GRAVITY	0.591	0.597	0.592

	INDEX 3472 SAMPLE 14508	INDEX 3473 SAMPLE 14509	INDEX 3474 SAMPLE 14510
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ALLIED-COMM. NO. 1	ALLIED-COMM. NO. 1	ALLIED-COMM. NO. 1-B
LOCATION	SEC. 27, T20S, R27E	SEC. 27, T20S, R27E	SEC. 27, T20S, R27E
OWNER	PENROC OIL CORP.	PENROC OIL CORP.	PENROC OIL CORP.
COMPLETED	05/28/74	05/08/74	NOT GIVEN
SAMPLED	10/24/75	10/24/75	10/24/75
FORMATION	PERM-WOLFCAMP	PENN-MORROW	PERM- BONE SPRING
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8540	10622	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2167	3203	NOT GIVEN
OPEN FLOW, MCFD	3368	2538	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.8	90.8	95.4
ETHANE	12.5	4.6	2.5
PROPANE	5.1	1.2	0.5
N-BUTANE	1.2	0.3	0.1
ISOBUTANE	0.6	0.3	0.1
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	2.0	1.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.7
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1236	1067	1031
SPECIFIC GRAVITY	0.718	0.620	0.583

	INDEX 3475 SAMPLE 14802	INDEX 3476 SAMPLE 15282	INDEX 3477 SAMPLE 15557
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ROSS FEDERAL "EG" NO. 1	PENN-FEDERAL NO. 1	POLK "A" NO. 1
LOCATION	SEC. 20, T19S, R25E	SEC. 31, T20S, R30E	SEC. 17, T23S, R28E
OWNER	YATES PETROLEUM CORP.	PENNZOIL CO.	CITIES SERVICE CO.
COMPLETED	06/07/75	06/02/76	08/25/78
SAMPLED	10/12/76	11/18/77	01/26/79
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9128	11738	11152
WELLHEAD PRESSURE,PSIG	325	4357	5630
OPEN FLOW, MCFD	2025	2046	2221
COMPONENT, MOLE PCT			
METHANE	93.3	91.8	93.7
ETHANE	3.1	4.4	3.3
PROPANE	0.7	1.3	0.7
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	1.4	0.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.2	0.8
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1052	1073	1051
SPECIFIC GRAVITY	0.611	0.610	0.598

	INDEX 3478 SAMPLE 15558	INDEX 3479 SAMPLE 15716	INDEX 3480 SAMPLE 15787
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	POLK "A" NO. 1	LITTLE SQUAW NO. 1	MCCAW NO. 1-G
LOCATION	SEC. 17, T23S, R28E	SEC. 27, T22S, R28E	SEC. 8, T17S, R24E
OWNER	CITIES SERVICE CO.	J. C. BARNES OIL CO.	BEARD OIL CO.
COMPLETED	08/25/78	07/30/79	10/--/78
SAMPLED	01/26/79	07/30/79	09/26/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12076	12198	7032
WELLHEAD PRESSURE,PSIG	4135	NOT GIVEN	800
OPEN FLOW, MCFD	7498	NOT GIVEN	3733
COMPONENT, MOLE PCT			
METHANE	95.3	96.9	91.1
ETHANE	2.4	1.3	4.4
PROPANE	0.4	0.1	1.6
N-BUTANE	0.1	0.1	0.4
ISOBUTANE	TRACE	0.0	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.4	0.3	1.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.2	0.4
HELIUM	0.02	0.02	0.07
HEATING VALUE*	1028	1016	1093
SPECIFIC GRAVITY	0.587	0.579	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3481 SAMPLE 15796		INDEX 3482 SAMPLE 15047		INDEX 3483 SAMPLE 2326	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		HARDING	
FIELD	WILDCAT		WILLOW LAKE		BACA	
WELL NAME	TELEDYNE 17 NO. 1		WILLOW LAKE UNIT NO. 1		KERLIN NO. 1	
LOCATION	SEC. 17, T23S, R29E		SEC. 22, T24N, R28E		SEC. 34, T21N, R30E	
OWNER	AMOCO PRODUCTION CO.		AMINOIL U.S.A., INC.		KUMMRACA OIL & GAS CO.	
COMPLETED	09/12/78		01/16/76		DRILL STEM TEST	
SAMPLED	09/29/78		07/07/77		05/20/31	
FORMATION	PENN-ATOKA		PENN-ATOKA		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		445	
DEPTH, FEET	12028		11680		940	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		4200		NOT GIVEN	
OPEN FLOW, MCFD	3670		34997		2654	
COMPONENT, MOLE PCT						
METHANE	92.9		95.2		0.0	
ETHANE	2.1		2.8		0.0	
PROPANE	0.4		0.5		---	
N-BUTANE	0.1		0.2		---	
ISOBUTANE	0.1		TRACE		---	
N-PENTANE	0.1		0.1		---	
ISOPENTANE	TRACE		0.1		---	
CYCLOPENTANE	0.1		TRACE		---	
HEXANES PLUS	0.2		0.1		---	
NITROGEN	3.0		0.7		1.4	
OXYGEN	0.6		0.0		0.4	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.5		0.4		98.2	
HELIUM	0.02		0.01		0.00	
HEATING VALUE*	1014		1048		0	
SPECIFIC GRAVITY	0.602		0.590		1.519	

	INDEX 3484 SAMPLE 2717		INDEX 3485 SAMPLE 5807		INDEX 3486 SAMPLE 7212	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	HARDING		HARDING		HARDING	
FIELD	BACA		BUEYEROS		NOT GIVEN	
WELL NAME	BACA NO. 1		POWERS-MARSHELL NO. 1		NO. 1	
LOCATION	SEC. 19, T20N, R31E		SEC. 34, T21N, R30E		SEC. 24, T20N, R26E	
OWNER	WADDELL & MCFANN ET AL.		POWERS-MARSHALL CO.		LULA GAMBREL	
COMPLETED	08/01/36		06/03/54		NOT GIVEN	
SAMPLED	08/02/36		04/02/55		09/15/59	
FORMATION	-LAVENDAR LIMES		-LIMESTONE		TRIA-CHINLE	
GEOLOGIC PROVINCE CODE	445		445		445	
DEPTH, FEET	1706		1900		1137	
WELLHEAD PRESSURE,PSIG	400		520		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		1000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	0.0		0.0		0.1	
ETHANE	0.0		0.0		0.1	
PROPANE	---		0.0		0.0	
N-BUTANE	---		0.0		0.0	
ISOBUTANE	---		0.0		0.0	
N-PENTANE	---		0.0		0.0	
ISOPENTANE	---		0.0		0.0	
CYCLOPENTANE	---		0.0		0.0	
HEXANES PLUS	---		0.0		0.0	
NITROGEN	0.6		0.2		77.7	
OXYGEN	0.0		TRACE		0.1	
ARGON	---		TRACE		1.2	
HYDROGEN	---		TRACE		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	99.4		99.7		18.8	
HELIUM	0.00		0.01		1.80	
HEATING VALUE*	0		0		3	
SPECIFIC GRAVITY	1.526		1.526		1.061	

	INDEX 3487 SAMPLE 9584		INDEX 3488 SAMPLE 13655		INDEX 3489 SAMPLE 12242	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	ANTELOPE RIDGE		ANTELOPE RIDGE		ARENA ROJA	
WELL NAME	HARRIS FEDERAL NO. 1		STATE 1 NO.1		MEXICO-FEDERAL NO. 1-P	
LOCATION	SEC. 27, T23S, R34E		SEC. 2, T24S, R34E		SEC. 21, T26S, R35E	
OWNER	SHELL OIL CO.		TEXAS WEST OIL & GAS CORP.		SKELLY OIL CO.	
COMPLETED	08/09/62		03/12/73		01/10/69	
SAMPLED	10/06/64		07/21/73		NOT GIVEN	
FORMATION	DEVO-		PENN-ATOKA		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	14655		12288		15565	
WELLHEAD PRESSURE,PSIG	4509		6600		1905	
OPEN FLOW, MCFD	41000		21500		2823	
COMPONENT, MOLE PCT						
METHANE	85.4		75.0		93.2	
ETHANE	7.6		7.3		3.3	
PROPANE	2.5		2.9		1.0	
N-BUTANE	0.8		0.7		0.1	
ISOBUTANE	0.3		0.5		0.4	
N-PENTANE	0.2		0.1		0.0	
ISOPENTANE	0.2		0.4		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	1.2		10.2		1.0	
OXYGEN	TRACE		2.2		TRACE	
ARGON	TRACE		0.1		0.0	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.2		0.6	
HELIUM	0.06		0.01		0.01	
HEATING VALUE*	1134		1042		1061	
SPECIFIC GRAVITY	0.666		0.711		0.605	

	INDEX 3490 SAMPLE 4658		INDEX 3491 SAMPLE 4718		INDEX 3492 SAMPLE 4818	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	ARROWHEAD		BAGLEY		BAGLEY	
WELL NAME	METER NO. 1		STATE BTA NO. 1		STATE BTC NO. 1	
LOCATION	SEC. 23, T22S, R36E		SEC. 2, T12S, R33E		SEC. 35, T11S, R33E	
OWNER	CONTINENTAL OIL CO.		AMERADA PETROLEUM CORP.		AMERADA PETROLEUM CORP.	
COMPLETED	11/05/48		07/16/49		10/30/49	
SAMPLED	02/06/49		08/07/49		02/13/50	
FORMATION	PERM-		DEVO-		SILU-DEVO	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	3175		10950		10770	
WELLHEAD PRESSURE,PSIG	1311		4260		600	
OPEN FLOW, MCFD	16500		28		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	84.9		70.0		72.1	
ETHANE	7.3		3.3		2.9	
PROPANE	2.8		1.7		1.3	
N-BUTANE	0.8		0.7		0.5	
ISOBUTANE	0.3		0.4		0.2	
N-PENTANE	0.3		0.4		0.2	
ISOPENTANE	0.0		0.0		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.3		0.5		0.3	
NITROGEN	2.9		6.9		7.4	
OXYGEN	0.1		0.1		0.1	
ARGON	0.0		0.1		0.1	
HYDROGEN	0.1		0.1		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.0		15.3		14.6	
HELIUM	0.04		0.27		0.29	
HEATING VALUE*	1134		900		865	
SPECIFIC GRAVITY	0.642		0.803		0.779	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3493 SAMPLE 4942	INDEX 3494 SAMPLE 5725	INDEX 3495 SAMPLE 14129
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BAGLEY	BELL LAKE	BELL LAKE
WELL NAME	N. M. STATE NO. 1-B	BELL LAKE UNIT NO. 2	BELL LAKE UNIT 1 WELL 4
LOCATION	SEC. 2, T12S, R33E	SEC. 30, T23S, R34E	SEC. 6, T24S, R34E
OWNER	TEXAS PACIFIC COAL & OIL CO.	CONTINENTAL OIL CO., ET AL.	CONTINENTAL OIL CO, ET AL.
COMPLETED	NOT GIVEN	10/28/54	07/06/73
SAMPLED	03/31/50	10/28/54	08/13/74
FORMATION	DEVO-	PENN-	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10720	12635	12430
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4455	6906
OPEN FLOW, MCFD	NOT GIVEN	13100	69000
COMPONENT, MOLE PCT			
METHANE	69.0	83.6	96.3
ETHANE	3.8	9.6	1.9
PROPANE	2.1	3.2	0.4
N-BUTANE	0.9	0.5	0.1
ISOBUTANE	0.4	0.5	0.1
N-PENTANE	0.4	0.1	TRACE
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	6.2	1.5	0.5
OXYGEN	0.1	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	16.0	0.2	0.4
HELIUM	0.23	0.01	0.02
HEATING VALUE*	920	1159	1032
SPECIFIC GRAVITY	0.820	0.668	0.578

	INDEX 3496 SAMPLE 14498	INDEX 3497 SAMPLE 16145	INDEX 3498 SAMPLE 7588
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BELL LAKE	BELL LAKE M	BELL LAKE,N
WELL NAME	BELL LAKE UNIT 4 NO. 15	BELL LAKE NO. 1	BELL LAKE UNIT NO. 6
LOCATION	SEC. 8, T23S, R34E	SEC. 18, T23S, R34E	SEC. 6, T23S, R34E
OWNER	CONTINENTAL OIL CO.	BTA OIL PRODUCERS	CONTINENTAL OIL CO.
COMPLETED	03/06/75	05/20/80	06/23/60
SAMPLED	10/21/75	12/08/80	06/23/60
FORMATION	PENN-MORROW	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13278	14660	14568
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	5015
OPEN FLOW, MCFD	4700	4819	30500
COMPONENT, MOLE PCT			
METHANE	88.6	92.7	91.9
ETHANE	5.2	2.8	2.9
PROPANE	1.8	0.6	0.8
N-BUTANE	0.3	TRACE	0.2
ISOBUTANE	0.4	0.1	TRACE
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	1.9	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	1.9	1.4	2.2
HELIUM	0.02	0.07	0.10
HEATING VALUE*	1075	1022	1024
SPECIFIC GRAVITY	0.640	0.604	0.613

	INDEX 3499 SAMPLE 4722	INDEX 3500 SAMPLE 7511	INDEX 3501 SAMPLE 15918
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BLINEBRY	BLINEBRY	BLINEBRY
WELL NAME	S. J. SARKEYS NO. 1	J. L. MUNCY NO. 3	OLLIE J. BOYD NO. 2
LOCATION	SEC. 23, T21S, R37E	SEC. 24, T22S, R37E	SEC. 23, T22S, R37E
OWNER	SINCLAIR OIL & GAS CO.	OHIO CO.	ARCO OIL & GAS CO.
COMPLETED	04/12/49	01/03/49	07/26/77
SAMPLED	07/21/49	04/22/60	03/14/80
FORMATION	PERM-BLINEBRY	PERM-BLINEBRY	PERM-BLINEBRY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5760	5419	5368
WELLHEAD PRESSURE,PSIG	1930	1560	571
OPEN FLOW, MCFD	7400	6000	2609
COMPONENT, MOLE PCT			
METHANE	81.7	81.8	81.0
ETHANE	8.7	9.4	9.8
PROPANE	4.1	3.9	4.6
N-BUTANE	1.1	1.3	1.3
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	2.9	1.7	1.8
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.11	0.03	0.03
HEATING VALUE*	1174	1207	1215
SPECIFIC GRAVITY	0.695	0.698	0.701

	INDEX 3502 SAMPLE 15923	INDEX 3503 SAMPLE 9929	INDEX 3504 SAMPLE 2694
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BLINEBRY OIL	BOUGH	COOPER
WELL NAME	S. J. SARKEY NO. 1	FEDERAL A NO. 1	ADA E. THOMAS NO. 1
LOCATION	SEC. 26, T16S, R37E	SEC. 13, T9S, R35E	SEC. 23, T24S, R36E
OWNER	ARCO OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	04/12/49	01/18/64	11/07/34
SAMPLED	03/21/80	06/18/65	NOT GIVEN
FORMATION	PERM-BLINEBRY	PERM-SAN ANDRES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5746	4746	NOT GIVEN
WELLHEAD PRESSURE,PSIG	325	1213	NOT GIVEN
OPEN FLOW, MCFD	60	2247	7500
COMPONENT, MOLE PCT			
METHANE	79.9	68.3	82.6
ETHANE	9.9	6.2	14.1
PROPANE	4.6	4.2	---
N-BUTANE	1.2	0.8	---
ISOBUTANE	0.7	TRACE	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.7	0.1	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	0.7	0.1	---
NITROGEN	1.7	9.3	1.0
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.1	---
CARBON DIOXIDE	0.0	10.6	2.1
HELIUM	0.02	0.11	TRACE
HEATING VALUE*	1255	9570	1089
SPECIFIC GRAVITY	0.725	0.789	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3505 SAMPLE 4435	INDEX 3506 SAMPLE 4546	INDEX 3507 SAMPLE 4714
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	COOPER	COOPER	COOPER
WELL NAME	STEVENS B-12 NO. 1	COOPER NO. 1	VAN ZANDT NO. 1
LOCATION	SEC. 12, T23S, R36E	SEC. 11, T24S, R36E	SEC. 25, T24S, R36E
OWNER	CONTINENTAL OIL CO., ET AL.	W. OLSEN OIL CO.	H. OLSEN OIL CO.
COMPLETED	10/27/47	03/25/48	01/--/49
SAMPLED	01/28/48	07/16/48	04/01/49
FORMATION	PERM-YATES	PERM-YATES	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3140	3127	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1373	1250	1300
OPEN FLOW, MCFD	27900	7120	10000
COMPONENT, MOLE PCT			
METHANE	80.9	82.7	86.8
ETHANE	16.3	14.0	5.5
PROPANE	---	---	2.4
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	2.4	1.2	3.3
OXYGEN	0.2	0.1	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	2.0	0.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1112	1089	1091
SPECIFIC GRAVITY	0.648	0.649	0.649

	INDEX 3508 SAMPLE 4725	INDEX 3509 SAMPLE 13467	INDEX 3510 SAMPLE 4798
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	COOPER	CROSBY	DENTON
WELL NAME	NEW MEXICO STATE A NO. 27	CROSBY DEEP NO. 1	J. M. DENTON A-1
LOCATION	SEC. 23, T23S, R36E	SEC. 28, T25S, R37E	SEC. 11, T15S, R37E
OWNER	TEXAS PACIFIC COAL & OIL CO.	UNION TEXAS PETROLEUM CO.	MCALESTER FUEL CO.
COMPLETED	03/1A/49	03/10/72	09/25/49
SAMPLED	06/01/49	11/08/72	10/30/49
FORMATION	PERM-YATES	SILU-FUSSELMAN	DEVO-LIME
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2965	8652	11250
WELLHEAD PRESSURE,PSIG	1195	2400	4800
OPEN FLOW, MCFD	58500	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	73.7	66.6
ETHANE	6.2	14.3	10.7
PROPANE	2.6	5.9	10.0
N-BUTANE	0.7	1.8	3.6
ISOBUTANE	0.4	0.8	1.2
N-PENTANE	0.2	0.5	0.6
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	3.0	0.0	3.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.8	---
CARBON DIOXIDE	0.1	1.5	2.6
HELIUM	0.05	TRACE	0.06
HEATING VALUE*	1116	1298	1357
SPECIFIC GRAVITY	0.655	0.766	0.851

	INDEX 3511 SAMPLE 4054	INDEX 3512 SAMPLE 4547	INDEX 3513 SAMPLE 2012
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	DRINKARD	DRINKARD	EUNICE
WELL NAME	A. H. BLINEBRY	BOYD NO. 2	STATE NO. 1
LOCATION	SEC. 19, T22S, R38E	SEC. 23, T22S, R37E	SEC. 34, T21S, R36E
OWNER	TEXAS CO.	R. OLSEN OIL CO.	GYPSY OIL CO.
COMPLETED	NOT GIVEN	12/19/47	01/17/29
SAMPLED	08/18/45	07/16/48	06/06/30
FORMATION	NOT GIVEN	PERM-BLINEBRY	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	5410	3542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1930	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6150	15000
COMPONENT, MOLE PCT			
METHANE	47.2	72.5	83.0
ETHANE	52.8	24.1	14.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	2.9	2.0
OXYGEN	0.1	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.02	0.03	0.05
HEATING VALUE*	1417	1166	1102
SPECIFIC GRAVITY	0.816	0.690	0.640

	INDEX 3514 SAMPLE 2013	INDEX 3515 SAMPLE 2797	INDEX 3516 SAMPLE 7177
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE	EUNICE	EUNICE
WELL NAME	HILL MEYERS NO. 1	MYERS B-4 NO. 11 &OIL WELLS	TURNER NO. 13
LOCATION	SEC. 28, T22S, R36E	SEC. 4, T21S, R36E	SEC. 22, T21S, R37E
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	SHELL OIL CO.
COMPLETED	DRILL STEM TEST	08/14/36	10/03/52
SAMPLED	06/04/30	06/14/37	08/12/59
FORMATION	NOT GIVEN	NOT GIVEN	PERM-BLINEBRY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3227	3A2[illegible]	5510
WELLHEAD PRESSURE,PSIG	NOT GIVEN	109[illegible]	1725
OPEN FLOW, MCFD	16800	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	82.6	85.6	70.1
ETHANE	12.1	9.4	7.A
PROPANE	---	---	3.2
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	2.2	0.0	14.1
OXYGEN	0.6	0.5	2.9
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.9	4.5	0.1
HELIUM	0.05	0.00	0.03
HEATING VALUE*	1058	1036	996
SPECIFIC GRAVITY	0.651	0.648	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3517 SAMPLE 7178	INDEX 3518 SAMPLE 2618	INDEX 3519 SAMPLE 13678
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE	EUNICE N	EUNICE N
WELL NAME	TAYLOR GLENN NO. 2	LOCKHART NO. 1-A	ALVES A NO. 2
LOCATION	SEC. 3, T21S, R37E	SEC. 18, T21S, R36E	SEC. 8, T21S, R37E
OWNER	SHELL OIL CO.	CONTINENTAL OIL CO.	SOHIO PETROLEUM CO.
COMPLETED	09/12/58	04/09/33	04/27/73
SAMPLED	08/12/59	05/26/33	08/14/73
FORMATION	PERM-TUBB	NOT GIVEN	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6324	2985	4043
WELLHEAD PRESSURE,PSIG	1925	NOT GIVEN	1050
OPEN FLOW, MCFD	2200	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	83.3	71.7	86.3
ETHANE	8.1	21.6	3.1
PROPANE	3.5	---	2.3
N-BUTANE	1.0	---	0.7
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.5	---	0.4
CYCLOPENTANE	0.1	---	0.2
HEXANES PLUS	0.2	---	0.4
NITROGEN	2.6	3.6	0.5
OXYGEN	0.0	0.7	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.4
CARBON DIOXIDE	0.1	2.4	5.0
HELIUM	0.04	0.03	TRACE
HEATING VALUE*	1170	1113	1085
SPECIFIC GRAVITY	0.682	0.703	0.689

	INDEX 3520 SAMPLE 4451	INDEX 3521 SAMPLE 4628	INDEX 3522 SAMPLE 14549
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE S	EUNICE S	FOUR LAKES N
WELL NAME	HARRINGTON NO. 1	H. S. RECORD UNIT NO. 1	SUN STATE NO. 1
LOCATION	SEC. 10, T22S, R36E	SEC. 22, T22S, R36E	SEC. 23, T11S, R34E
OWNER	WESTERN NATURAL GAS CO.	SUN OIL CO.	APCO OIL CORP.
COMPLETED	08/17/47	08/22/48	04/17/75
SAMPLED	03/13/48	11/16/48	12/16/75
FORMATION	NOT GIVEN	PERM-YATES	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3135	3335	11518
WELLHEAD PRESSURE,PSIG	1205	NOT GIVEN	3400
OPEN FLOW, MCFD	24000	1475	2281
COMPONENT, MOLE PCT			
METHANE	78.7	76.3	81.0
ETHANE	19.1	20.6	9.4
PROPANE	---	---	5.1
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.9
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.6	2.8	1.6
OXYGEN	0.2	0.2	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.05	0.05	0.02
HEATING VALUE*	1140	1142	1207
SPECIFIC GRAVITY	0.659	0.670	0.701

	INDEX 3523 SAMPLE 4550	INDEX 3524 SAMPLE 4800	INDEX 3525 SAMPLE 4756
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HARDY	HARE	HIGHTOWER
WELL NAME	TAYLOR-GLENN I	W. M. TURNER NO. 3	STATE BTB NO. 1
LOCATION	NOT GIVEN	SEC. 29, T21S, R37E	SEC. 26, T12S, R33E
OWNER	SHELL OIL CO.	OHIO OIL CO.	AMERADA PETROLEUM CORP.
COMPLETED	03/01/48	10/01/49	08/30/49
SAMPLED	06/07/48	11/08/49	10/30/49
FORMATION	NOT GIVEN	-LOW	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6720	7825	10155
WELLHEAD PRESSURE,PSIG	2100	NOT GIVEN	850
OPEN FLOW, MCFD	12000	NOT GIVEN	76000
COMPONENT, MOLE PCT			
METHANE	61.6	74.5	39.7
ETHANE	34.7	8.7	12.7
PROPANE	---	4.5	24.2
N-BUTANE	---	0.9	8.3
ISOBUTANE	---	0.7	5.7
N-PENTANE	---	0.3	1.2
ISOPENTANE	---	0.3	2.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.0	0.6
NITROGEN	3.3	9.3	1.7
OXYGEN	0.1	0.4	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	3.6
HELIUM	0.04	0.09	0.06
HEATING VALUE*	1246	1108	1901
SPECIFIC GRAVITY	0.743	0.720	1.193

	INDEX 3526 SAMPLE 4854	INDEX 3527 SAMPLE 4870	INDEX 3528 SAMPLE 2010
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HIGHTOWER	HIGHTOWER	HOBBS
WELL NAME	WMI STATE NO. 1	B. C. ROACH NO. 1	NORTHRUP NO. 1
LOCATION	SEC. 22, T12S, R33E	SEC. 26, T12S, R33E	SEC. 32, T18S, R38E
OWNER	GULF OIL CORP.	AMERADA PETROLEUM CORP.	OHIO OIL CO.
COMPLETED	01/11/50	12/31/49	DRILL STEM TEST
SAMPLED	04/05/50	04/19/50	06/06/30
FORMATION	PENN-	PENN-LIME	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8470	8660	2830
WELLHEAD PRESSURE,PSIG	2120	3146	NOT GIVEN
OPEN FLOW, MCFD	6000	8300	2000
COMPONENT, MOLE PCT			
METHANE	82.3	81.9	59.4
ETHANE	7.3	7.8	21.5
PROPANE	3.5	3.9	---
N-BUTANE	1.1	1.2	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.4	0.4	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	3.6	3.2	18.6
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.11	0.10	0.11
HEATING VALUE*	1150	1165	987
SPECIFIC GRAVITY	0.689	0.692	0.740

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3529 SAMPLE 2099		INDEX 3530 SAMPLE 2134		INDEX 3531 SAMPLE 2435	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	HOBBS		HOBBS		HOBBS	
WELL NAME	BOWERS A-2A		STATE A-1		MIDWEST BYERS NO. 8	
LOCATION	SEC. 30, T18S, R38E		SEC. 29, T18S, R38E		SEC. 4, T19S, R38E	
OWNER	HUMBLE OIL & REFINING CO.		CALIFORNIA CO.		MIDWEST REFINING CO.	
COMPLETED	DRILL STEM TEST		NOT GIVEN		NOT GIVEN	
SAMPLED	08/30/30		09/17/30		11/20/31	
FORMATION	-GAS PAY		NOT GIVEN		PERM-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	3610		2340		2505	
WELLHEAD PRESSURE,PSIG	1200		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	58.5		---		1.0	
ETHANE	21.0		3.4		3.9	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	20.4		94.6		94.4	
OXYGEN	0.1		0.1		0.7	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.0		0.0	
HELIUM	0.04		0.08		TRACE	
HEATING VALUE*	969		61		80	
SPECIFIC GRAVITY	0.745		0.952		0.967	

	INDEX 3532 SAMPLE 2438		INDEX 3533 SAMPLE 2466		INDEX 3534 SAMPLE 2467	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	HOBBS		HOBBS		HOBBS	
WELL NAME	EAST GRIMES NO. 1		STATE A-33 NO. 4		STATE A-33 NO. 5	
LOCATION	SEC. 33, T18S, R38E		SEC. 33, T18S, R38E		SEC. 33, T18S, R38E	
OWNER	GYPSY OIL CO.		CONTINENTAL OIL CO.		CONTINENTAL OIL CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	11/01/31		01/27/32		01/27/32	
FORMATION	PERM-		PERM-		PERM-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	2300		2393		2395	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	0.0		72.8		72.4	
ETHANE	6.4		18.8		20.5	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	92.3		4.9		3.2	
OXYGEN	0.9		0.3		0.1	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.4		3.2		3.8	
HELIUM	TRACE		0.02		0.02	
HEATING VALUE*	115		1074		1101	
SPECIFIC GRAVITY	0.976		0.701		0.707	

	INDEX 3535 SAMPLE 2557		INDEX 3536 SAMPLE 2579		INDEX 3537 SAMPLE 2795	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	HOBBS		HOBBS		HOBBS	
WELL NAME	STATE WELL NO. 2		STATE NO. 7		BYERS 33 NE4	
LOCATION	SEC. 30, T18S, R38E		SEC. 33, T18S, R38E		SEC. 4, T19S, R38E	
OWNER	OHIO OIL CO.		CONTINENTAL OIL CO.		STANOLIND OIL & GAS CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		08/07/30	
SAMPLED	NOT GIVEN		12/23/32		06/20/38	
FORMATION	PERM-HOBBS PAY		PERM-BOWERS		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	4022		3160		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NO1 GIVEN		998	
OPEN FLOW, MCFD	4000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	55.0		46.1		78.4	
ETHANE	22.8		28.4		15.3	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	20.4		25.2		0.8	
OXYGEN	1.7		0.1		0.4	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.0		0.1		5.1	
HELIUM	0.05		0.05		0.02	
HEATING VALUE*	966		976		1068	
SPECIFIC GRAVITY	0.760		0.800		0.685	

	INDEX 3538 SAMPLE 2796		INDEX 3539 SAMPLE 4568		INDEX 3540 SAMPLE 1752	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	LEA		LEA		LEA	
FIELD	HOBBS		HOBBS		JAL	
WELL NAME	GRIMES NO. 3		WEST GRIMES NO. 4		C. FARNSWORTH NO. 13	
LOCATION	SEC. 28, T18S, R38E		SEC. 32, T18S, R38E		SEC. 13, T26E, R36S	
OWNER	CONTINENTAL OIL CO.		GULF OIL CORP.		MIDWEST REFINING CO.	
COMPLETED	05/?/35		04/20/40		NOT GIVEN	
SAMPLED	06/18/38		10/04/48		04/22/29	
FORMATION	NOT GIVEN		PERM-BYERS		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	4119		3604		2710	
WELLHEAD PRESSURE,PSIG	1083		580		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		880		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	76.2		69.2		82.6	
ETHANE	17.1		23.8		14.5	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	1.8		6.4		2.0	
OXYGEN	0.8		0.3		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	3.9		0.2		0.6	
HELIUM	0.03		0.05		0.04	
HEATING VALUE*	1078		1128		1097	
SPECIFIC GRAVITY	0.695		0.702		0.642	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3541 SAMPLE 2014	INDEX 3542 SAMPLE 2015	INDEX 3543 SAMPLE 2016
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JAL	JAL	JAL
WELL NAME	LYNN NO. 1	CUSHING NO. 1	CAGLE NO. 1
LOCATION	SEC. 26, T23S, R36E	SEC. 23, T24S, R36E	SEC. 9, T26S, R37E
OWNER	CONTINENTAL OIL CO.	CRANFILL & REYNOLDS	TEXAS PRODUCTION CO.
COMPLETED	01/31/29	NOT GIVEN	01/08/29
SAMPLED	06/06/30	06/06/30	06/04/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3219	3200	3145
WELLHEAD PRESSURE,PSIG	800	1400	1400
OPEN FLOW, MCFD	30000	40000	55000
COMPONENT, MOLE PCT			
METHANE	82.7	77.1	85.5
ETHANE	14.4	17.0	13.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.2	1.5	0.5
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	4.1	0.3
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	1096	1086	1106
SPECIFIC GRAVITY	0.641	0.686	0.627

	INDEX 3544 SAMPLE 2017	INDEX 3545 SAMPLE 2018	INDEX 3546 SAMPLE 13639
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JAL	EAVES NO. 1	JAL W
WELL NAME	RHODES NO. 1	SEC. 19, T26S, R37E	WESTERN JAL UNIT NO. 1
LOCATION	SEC. 22, T26S, R37E	CONTINENTAL OIL CO.	SEC. 20, T27S, R36E
OWNER	TEXAS PRODUCTION CO.	07/06/28	SKELLY OIL CO.
COMPLETED	11/10/27	06/04/30	12/22/72
SAMPLED	06/04/30	PERM-YATES	07/11/73
FORMATION	NOT GIVEN	430	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	2895	430
DEPTH, FEET	3180	1750	16449
WELLHEAD PRESSURE,PSIG	840	42000	4815
OPEN FLOW, MCFD	23000		16500
COMPONENT, MOLE PCT			
METHANE	88.0	83.2	94.8
ETHANE	10.1	11.5	2.2
PROPANE	---	---	0.4
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	1.0	4.1	0.8
OXYGEN	0.3	0.8	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.3
CARBON DIOXIDE	0.6	0.5	1.2
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1072	1049	1019
SPECIFIC GRAVITY	0.616	0.638	0.589

	INDEX 3547 SAMPLE 9572	INDEX 3548 SAMPLE 14677	INDEX 3549 SAMPLE 4740
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JENKINS	KEMNITZ	KNOWLES
WELL NAME	S. E. ANDERSON A NO. 1	STATE NO. 13-1	W. W. HAMILTON NO. 1
LOCATION	SEC. 19, T9S, R35E	SEC. 13, T16S, R33E	SEC. 35, T16S, R38E
OWNER	AMERADA PETROLEUM CORP.	GREAT WESTERN DRILLING CO.	AMERADA PETROLEUM CORP.
COMPLETED	08/21/63	11/12/75	05/03/49
SAMPLED	10/02/64	05/24/76	05/20/49
FORMATION	PENN-ATOKA	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11477	12660	12518
WELLHEAD PRESSURE,PSIG	1940	4200	5159
OPEN FLOW, MCFD	4600	2436	51
COMPONENT, MOLE PCT			
METHANE	81.7	83.3	61.3
ETHANE	7.5	7.9	9.4
PROPANE	2.7	2.7	11.4
N-BUTANE	0.8	0.7	5.7
ISOBUTANE	0.4	0.4	3.0
N-PENTANE	0.2	0.2	1.2
ISOPENTANE	0.1	0.2	1.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.6
NITROGEN	5.8	3.8	2.7
OXYGEN	TRACE	0.5	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	3.2
HELIUM	0.09	0.05	0.10
HEATING VALUE*	1104	1115	1516
SPECIFIC GRAVITY	0.678	0.669	0.955

	INDEX 3550 SAMPLE 13133	INDEX 3551 SAMPLE 15730	INDEX 3552 SAMPLE 15707
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LA RICA	LAGUNA	LANGLEY
WELL NAME	PIPELINE FEDERAL NO. 1	LAGUNA DEEP FEDERAL NO. 1	LANGLEY DEEP NO. 1
LOCATION	SEC. 4, T19S, R34E	SEC. 35, T19S, R33E	SEC. 28, T22S, R36E
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	ARCO OIL & GAS CO.
COMPLETED	08/07/70	02/03/79	04/07/78
SAMPLED	01/05/72	08/24/79	07/25/79
FORMATION	PENN-MORROW	PENN-MORROW	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13431	13365	15320
WELLHEAD PRESSURE,PSIG	4200	4250	1550
OPEN FLOW, MCFD	26400	2088	1700
COMPONENT, MOLE PCT			
METHANE	85.1	84.8	83.4
ETHANE	8.7	7.8	8.8
PROPANE	3.4	3.3	3.6
N-BUTANE	0.8	0.8	1.1
ISOBUTANE	0.5	0.7	0.5
N-PENTANE	0.1	0.4	0.4
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	0.6	0.2
NITROGEN	0.5	0.9	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.1
HELIUM	0.02	0.02	0.07
HEATING VALUE*	1169	1199	1186
SPECIFIC GRAVITY	0.666	0.687	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3553 SAMPLE 3882	INDEX 3554 SAMPLE 4440	INDEX 3555 SAMPLE 4548
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LANGLIE	LANGLIE-MATTIX	LANGLIE-MATTIX
WELL NAME	STUART NO. 2	MARTIN NO. B-1	WIMBERLEY
LOCATION	SEC. 11, T25S, R37E	SEC. 31, T24S, R37E	SEC. 23, T25S, R37E
OWNER	ANDERSON-PRICHARD OIL CORP.	CULBERTSON & IRWIN, INC.	R. OLSEN OIL CO.
COMPLETED	09/13/38	10/06/47	10/25/47
SAMPLED	07/14/44	01/16/48	07/16/48
FORMATION	PERM-	PERM-YATES	PERM-GLORIETA U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3910	2880	4740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	2170
OPEN FLOW, MCFD	NOT GIVEN	9000	2820
COMPONENT, MOLE PCT			
METHANE	81.5	83.3	76.9
ETHANE	17.4	14.9	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.3	1.3	2.3
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.3	1.5
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1137	1111	1123
SPECIFIC GRAVITY	0.649	0.638	0.674

	INDEX 3556 SAMPLE 4717	INDEX 3557 SAMPLE 4724	INDEX 3558 SAMPLE 2817
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LANGLIE-MATTIX	LANGLIE-MATTIX	LOVINGTON S
WELL NAME	LYNN NO. 3	E. E. JACK B-15 NO. 1	STATE 182-WELL NO. 2-A
LOCATION	SEC. 26, T23S, R36E	SEC. 15, T24S, R37E	SEC. 31, T16S, R37E
OWNER	CONTINENTAL OIL CO.	W. G. CO.	REPOLLO OIL CO.
COMPLETED	04/03/49	02/07/49	NOT GIVEN
SAMPLED	07/29/49	08/01/49	04/28/39
FORMATION	PERM-YATES & SEVEN RIVERS	PERM-SEVEN RIVERS	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2957	3389	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1235	514	NOT GIVEN
OPEN FLOW, MCFD	11400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.2	82.3	0.0
ETHANE	6.4	8.5	1.4
PROPANE	2.8	4.0	---
N-BUTANE	0.8	1.2	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.4	0.5	---
ISOPENTANE	TRACE	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.6	---
NITROGEN	2.6	1.9	97.9
OXYGEN	0.1	0.2	0.6
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	0.1
HELIUM	0.03	0.02	0.06
HEATING VALUE*	1138	1204	25
SPECIFIC GRAVITY	0.665	0.702	0.970

	INDEX 3559 SAMPLE 8708	INDEX 3560 SAMPLE 8811	INDEX 3561 SAMPLE 1271
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LUSK	LUSK	MALJAMAR
WELL NAME	SO. CALIF. FEDERAL NO. 1	SO. CALIF. FEDERAL NO. 1	NO. 1
LOCATION	SEC. 29, T19S, R32E	SEC. 29, T19S, R32W	SEC. 21, T17S, R32E
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	MALJAMAR OIL CORP.
COMPLETED	07/14/62	07/14/62	04/04/26
SAMPLED	10/15/62	12/19/62	04/14/26
FORMATION	PENN-STRAWN	PENN-MORROW	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11410	12448	3115
WELLHEAD PRESSURE,PSIG	2870	4200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	18250	7000
COMPONENT, MOLE PCT			
METHANE	73.4	86.1	33.2
ETHANE	16.4	5.8	16.3
PROPANE	5.7	2.4	---
N-BUTANE	1.2	0.7	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.6	3.0	47.4
OXYGEN	TRACE	0.6	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.3	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.4	0.8
HELIUM	0.03	0.03	0.09
HEATING VALUE*	1270	1098	664
SPECIFIC GRAVITY	0.737	0.653	0.850

	INDEX 3562 SAMPLE 1327	INDEX 3563 SAMPLE 1887	INDEX 3564 SAMPLE 2005
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MALJAMAR	MALJAMAR	MALJAMAR
WELL NAME	OHIO OIL NO. 1	RAINS NO. 2	MCA UNIT NO.29
LOCATION	SEC. 16, T17S, R32E	SEC. 21, T17S, R32E	SEC. 21, T17S, R32E
OWNER	OHIO OIL CO.	MALJAMAR OIL CORP.	MALJAMAR OIL CORP.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	07/16/26
SAMPLED	11/30/26	10/28/29	06/05/30
FORMATION	PERM-	PERM-MALJAMAR	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3215	3104	3115
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	900
OPEN FLOW, MCFD	250	8000	10000
COMPONENT, MOLE PCT			
METHANE	0.0	20.6	61.0
ETHANE	11.4	5.6	0.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	87.5	73.4	38.4
OXYGEN	1.1	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.13	0.09	0.12
HEATING VALUE*	111	359	623
SPECIFIC GRAVITY	0.979	0.887	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3565 SAMPLE 2011	INDEX 3566 SAMPLE 2798	INDEX 3567 SAMPLE 4741
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MONUMENT	MONUMENT	MONUMENT
WELL NAME	SOPHIA MEYERS NO. 1	STATE F NO. 1	J. R. PHILLIPS NO. 7
LOCATION	SEC. 26, T20S, R37E	SEC. 17, T20S, R37E	SEC. 1, T20S, R36E
OWNER	CONTINENTAL OIL CO.	HUMBLE OIL & REFINING CO.	AMERADA PETROLEUM CORP.
COMPLETED	02/21/29	02/26/37	04/08/49
SAMPLED	06/04/30	06/20/38	05/20/49
FORMATION	PERM-QUEEN	PERM-QUEEN	PERM-WICHITA L
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3570	3773	7490
WELLHEAD PRESSURE,PSIG	1340	1170	2928
OPEN FLOW, MCFD	1500	NOT GIVEN	125
COMPONENT, MOLE PCT			
METHANE	84.2	82.1	77.2
ETHANE	14.9	12.3	10.5
PROPANE	---	---	4.2
N-BUTANE	---	---	1.5
ISOBUTANE	---	---	1.0
N-PENTANE	---	---	0.6
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.6
NITROGEN	0.5	1.4	2.8
OXYGEN	0.2	0.8	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	3.4	1.3
HELIUM	TRACE	0.02	0.04
HEATING VALUE*	1120	1052	1126
SPECIFIC GRAVITY	0.633	0.659	0.744

	INDEX 3568 SAMPLE 4742	INDEX 3569 SAMPLE 4910	INDEX 3570 SAMPLE 1779
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MONUMENT	NADINE	NEW MEXICO
WELL NAME	STATE D NO. 6	A. L. FOSTER C NO. 1	S. MEYER NO. 1
LOCATION	SEC. 1, T20S, R36E	SEC. 23, T19S, R38E	SEC. 26, T20S, R37E
OWNER	AMERADA PETROLEUM CORP.	STANOLIND OIL & GAS CO.	MARLAND PRODUCTION CO.
COMPLETED	04/20/49	04/29/50	03/07/29
SAMPLED	05/20/49	08/29/50	05/18/29
FORMATION	PERM-WICHITA U	PERM-DRINKARD BASAL	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7140	7300	3840
WELLHEAD PRESSURE,PSIG	2800	2445	1400
OPEN FLOW, MCFD	125	53	1500
COMPONENT, MOLE PCT			
METHANE	60.9	68.1	79.9
ETHANE	16.0	11.4	15.6
PROPANE	10.4	9.9	---
N-BUTANE	3.9	3.7	---
ISOBUTANE	1.9	1.2	---
N-PENTANE	0.8	0.8	---
ISOPENTANE	1.4	0.8	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.5	---
NITROGEN	0.8	2.7	1.8
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	3.3	0.5	2.7
HELIUM	0.01	0.08	0.03
HEATING VALUE*	1493	1413	1089
SPECIFIC GRAVITY	0.919	0.846	0.667

	INDEX 3571 SAMPLE 1881	INDEX 3572 SAMPLE 4538	INDEX 3573 SAMPLE 4567
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	EMPIRE-CLOSSON	LEONARD NICHOLES ILES NO. 5	JANDA G NO. 1
LOCATION	SEC. 6, T22S, R36E	SEC. 3, T17S, R32E	SEC. 24, T23S, R36E
OWNER	EMPIRE GAS & FUEL CO.	A. W. GOLDEN	GULF OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	06/03/48
SAMPLED	09/27/29	08/--/48	10/04/48
FORMATION	PERM-	NOT GIVEN	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3575	NOT GIVEN	2870
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	1245
OPEN FLOW, MCFD	125000	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	81.8	51.0	82.3
ETHANE	14.0	41.8	16.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	6.6	0.9
OXYGEN	0.3	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.8	0.3	0.2
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1080	1266	1128
SPECIFIC GRAVITY	0.657	0.792	0.642

	INDEX 3574 SAMPLE 4715	INDEX 3575 SAMPLE 4855	INDEX 3576 SAMPLE 5015
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	Z. A. MCMILLAN	MAUD SAUNDERS NO. 1	CHARLOTTE NO. 2
LOCATION	SEC. 3, T19S, R37E	SEC. 34, T14S, R33E	SEC. 32, T20S, R36E
OWNER	TEXAS CO.	GULF OIL CORP.	WILSON OIL CO.
COMPLETED	08/16/49	01/11/50	NOT GIVEN
SAMPLED	09/17/49	04/05/50	03/01/51
FORMATION	PERM-YATES	PENN-	PERM-YATES L
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2980	9865	3847
WELLHEAD PRESSURE,PSIG	1600	3523	1270
OPEN FLOW, MCFD	719	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.3	64.7	78.6
ETHANE	6.5	13.6	9.8
PROPANE	3.0	9.8	4.6
N-BUTANE	0.8	3.6	1.4
ISOBUTANE	0.1	1.4	0.7
N-PENTANE	0.2	0.9	0.3
ISOPENTANE	0.1	0.7	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	50.3	1.4	3.8
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	3.2	0.3
HELIUM	0.07	0.03	0.08
HEATING VALUE*	635	1420	1196
SPECIFIC GRAVITY	0.849	0.878	0.715

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3577 SAMPLE 5379	INDEX 3578 SAMPLE 5904	INDEX 3579 SAMPLE 5927
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MARSHALL NO. 1-D	BELL LAKE UNIT NO. 1-AD	U.S. GEO. NFU-64-A
LOCATION	SEC. 13, T21S, R36E	SEC. 31, T23S, R34E	SEC. 4, T21S, R31E
OWNER	TIDEWATER ASSOC. OIL CO.	CONTINENTAL OIL CO.	NOT GIVEN
COMPLETED	10/17/52	04/13/55	NOT GIVEN
SAMPLED	01/23/53	08/03/55	09/01/55
FORMATION	PERM-QUEEN	DEVO-	PERM-SALADO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3552	15025	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5100	NOT GIVEN
OPEN FLOW, MCFD	1100	15500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.8	95.6	1.4
ETHANE	6.7	1.3	0.1
PROPANE	3.4	0.2	0.0
N-BUTANE	1.3	0.1	TRACE
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	1.2	1.3	97.1
OXYGEN	TRACE	0.0	0.8
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	1.3	0.3
HELIUM	0.01	0.07	0.00
HEATING VALUE*	1141	1005	20
SPECIFIC GRAVITY	0.691	0.584	0.967

	INDEX 3580 SAMPLE 6404	INDEX 3581 SAMPLE 7532	INDEX 3582 SAMPLE 8465
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	AUSTIN NO. 1	NO. 1	USA MARY NELLIS NO. 1
LOCATION	SEC. 17, T14S, R36E	SEC. 6, T19S, R35E	SEC. 5, T19S, R33E
OWNER	PHILLIPS PETROLEUM CO.	OHIO OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/07/57	01/22/60	11/08/61
SAMPLED	09/24/57	05/02/60	03/16/62
FORMATION	MISS-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13194	13033	13234
WELLHEAD PRESSURE,PSIG	3650	3392	4353
OPEN FLOW, MCFD	4925	3750	1800
COMPONENT, MOLE PCT			
METHANE	86.0	78.3	90.9
ETHANE	6.4	9.6	4.6
PROPANE	2.4	5.4	1.9
N-BUTANE	0.4	2.0	0.5
ISOBUTANE	0.6	0.9	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	1.3	0.2
CYCLOPENTANE	0.5	0.3	TRACE
HEXANES PLUS	1.3	0.7	0.1
NITROGEN	0.8	0.7	0.8
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	0.4
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1180	1319	1097
SPECIFIC GRAVITY	0.688	0.760	0.624

	INDEX 3583 SAMPLE 8959	INDEX 3584 SAMPLE 13656	INDEX 3585 SAMPLE 16092
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BUFFALO OPER. AREA NO. 5	SHEARN FEDERAL NO. 1	STATE NO. 1
LOCATION	SEC. 2, T19S, R33E	SEC. 15, T19S, R37E	SEC. 2, T19S, R34E
OWNER	PAN AMERICAN PETROLEUM CORP.	SUN OIL CO.	KNOX INDUSTRIES, INC.
COMPLETED	12/07/62	05/08/72	05/21/80
SAMPLED	05/15/63	07/24/73	10/13/80
FORMATION	PENN-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13110	12231	13571
WELLHEAD PRESSURE,PSIG	4025	3229	4216
OPEN FLOW, MCFD	24500	2331	8090
COMPONENT, MOLE PCT			
METHANE	83.4	77.2	55.3
ETHANE	8.2	10.9	21.6
PROPANE	3.1	6.0	12.6
N-BUTANE	1.1	1.4	2.8
ISOBUTANE	0.7	1.0	1.7
N-PENTANE	0.5	0.2	0.4
ISOPENTANE	0.4	0.5	0.6
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.8	0.1	0.3
NITROGEN	0.8	2.4	3.1
OXYGEN	0.0	TRACE	0.9
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.6
HELIUM	0.02	0.03	TRACE
HEATING VALUE*	1224	1249	1488
SPECIFIC GRAVITY	0.704	0.734	0.908

	INDEX 3586 SAMPLE 13197	INDEX 3587 SAMPLE 11290	INDEX 3588 SAMPLE 7513
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	OSUDO	OSUDO N	PADDOCK
WELL NAME	STATE-M NO. 1	ALVES NO. 1	LOU WORTHAN NO. 8
LOCATION	SEC. 32, T20S, R36E	SEC. 6, T20S, R36E	SEC. 11, T22S, R37E
OWNER	WESTERN OIL PRODUCERS, INC.	MALLARD PETROLEUM INC.	OHIO CO.
COMPLETED	12/27/71	10/15/67	10/27/46
SAMPLED	04/24/72	02/17/68	04/22/60
FORMATION	DEVO-	PENN-MORROW	-PADDOCK
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12600	12150	5092
WELLHEAD PRESSURE,PSIG	3747	6000	925
OPEN FLOW, MCFD	14500	2800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.6	85.3	82.5
ETHANE	4.6	7.3	9.0
PROPANE	1.7	3.7	3.4
N-BUTANE	0.6	1.1	0.8
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	4.7	0.9	2.2
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.9	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.3	1.1
HELIUM	0.07	0.02	0.02
HEATING VALUE*	1064	1180	1144
SPECIFIC GRAVITY	0.661	0.674	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3589 SAMPLE 15156	INDEX 3590 SAMPLE 11675	INDEX 3591 SAMPLE 12217
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	PEARL N	QUAIL RIDGE	QUAIL RIDGE
WELL NAME	HENRY RECORD NO. 1	MESCALERO RIDGE UNIT NO. 31	MESCALERO RIDGE UNIT NO. 1
LOCATION	SEC. 26, T19S, R35E	SEC. 21, T19S, R34E	SEC. 20, T19S, R34E
OWNER	DORCHESTER EXPLORATION, INC.	SINCLAIR OIL CORP.	PENNZOIL UNITED, INC.
COMPLETED	11/13/74	06/28/68	09/26/69
SAMPLED	11/--/77	10/25/68	03/12/70
FORMATION	PENN-MORROW	PERM-YATES	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12529	3958	13460
WELLHEAD PRESSURE,PSIG	3955	1075	4500
OPEN FLOW, MCFD	3846	3939	8955
COMPONENT, MOLE PCT			
METHANE	82.6	63.1	83.2
ETHANE	8.3	5.8	9.3
PROPANE	4.3	2.9	4.0
N-BUTANE	1.4	0.8	0.7
ISOBUTANE	0.7	0.4	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.7	0.1	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.8	26.2	1.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.4
HELIUM	0.03	0.26	0.02
HEATING VALUE*	1239	882	1169
SPECIFIC GRAVITY	0.709	0.748	0.673

	INDEX 3592 SAMPLE 15537	INDEX 3593 SAMPLE 11163	INDEX 3594 SAMPLE 9714
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	QUERECHE PLAINS	RANGER LAKE W	RED HILLS
WELL NAME	FEDERAL "E" NO. 1	WEST RANGER UNIT NO. 2	NO. 1
LOCATION	SEC. 27, T18S, R32E	SEC. 23, T12S, R34E	SEC. 32, T25S, R33E
OWNER	MEWBOURNE OIL CO.	TEXAS PACIFIC OIL CO.	PURE OIL CO.
COMPLETED	03/22/77	08/13/66	12/26/64
SAMPLED	12/10/78	10/11/67	01/22/65
FORMATION	PENN-MORROW	DEVO-	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12620	12907	11643
WELLHEAD PRESSURE,PSIG	4004	3450	8022
OPEN FLOW, MCFD	2446	2270	15750
COMPONENT, MOLE PCT			
METHANE	86.7	68.0	88.5
ETHANE	7.3	7.4	7.3
PROPANE	3.1	3.8	2.1
N-BUTANE	0.7	1.8	TRACE
ISOBUTANE	0.3	1.0	0.1
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.2	1.4	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.7	0.1
NITROGEN	0.7	11.3	1.0
OXYGEN	0.0	1.9	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.8	0.2
HELIUM	0.03	0.07	0.01
HEATING VALUE*	1145	1139	1115
SPECIFIC GRAVITY	0.655	0.804	0.633

	INDEX 3595 SAMPLE 15335	INDEX 3596 SAMPLE 13649	INDEX 3597 SAMPLE 4569
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	REEVES N	SAND DUNES S	SAWYER
WELL NAME	HANLOD STATE NO. 1	SUNDANCE FEDERAL NO. 1	LANDRETH NO. 1
LOCATION	SEC. 2, T18S, R35E	SEC. 14, T24S, R31E	SEC. 18, T9S, R38E
OWNER	HEYCO	EL PASO NATURAL GAS CO.	DEVONIAN CO.
COMPLETED	09/16/77	06/22/72	05/31/48
SAMPLED	08/03/78	07/19/73	10/06/48
FORMATION	PERM-QUEEN	PENN-ATOKA & MORROW	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4212	13691	4938
WELLHEAD PRESSURE,PSIG	1303	6553	1300
OPEN FLOW, MCFD	2415	3376	2750
COMPONENT, MOLE PCT			
METHANE	34.2	94.7	64.9
ETHANE	4.1	3.0	20.7
PROPANE	2.0	0.6	---
N-BUTANE	0.7	0.0	---
ISOBUTANE	0.3	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	57.9	1.1	7.1
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.6	6.9
HELIUM	0.18	0.02	0.09
HEATING VALUE*	537	1029	1028
SPECIFIC GRAVITY	0.863	0.586	0.755

	INDEX 3598 SAMPLE 4960	INDEX 3599 SAMPLE 15848	INDEX 3600 SAMPLE 8214
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	SAWYER	SHOEBAR	VACUUM
WELL NAME	UNION-FEDERAL NO. 3	NEW MEXICO STATE 28 NO. 1	STATE F NO. 1
LOCATION	SEC. 31, T9S, R38E	SEC. 28, T16S, R35E	SEC. 36, T17S, R33E
OWNER	GEO. P. LIVERMORE, INC.	HNG OIL CO.	TEXAS GULF PRODUCING CO.
COMPLETED	08/08/50	07/25/79	02/15/55
SAMPLED	11/08/50	11/20/79	09/27/61
FORMATION	PERM-SAN ANDRES	PENN-ATOKA	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4910	12453	3843
WELLHEAD PRESSURE,PSIG	1300	4325	1025
OPEN FLOW, MCFD	385	8173	91000
COMPONENT, MOLE PCT			
METHANE	69.8	88.2	46.2
ETHANE	6.1	6.6	4.6
PROPANE	2.6	2.4	2.0
N-BUTANE	0.6	0.4	1.0
ISOBUTANE	0.2	0.3	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.3	1.3	44.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	8.8	0.4	0.5
HELIUM	0.14	0.03	0.17
HEATING VALUE*	925	1121	678
SPECIFIC GRAVITY	0.764	0.642	0.819

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3601 SAMPLE 15261	INDEX 3602 SAMPLE 4850	INDEX 3603 SAMPLE 1369
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	VACUUM N	WARREN MCKEE	WILDCAT
WELL NAME	STATE SECTION 7 NO. 1	WARREN UNIT B-28 NO. 2	INGLEFIELD-BRIDGES
LOCATION	SEC. 7, T17S, R35E	SEC. 28, T20S, R38E	SEC. 4, T17, R34
OWNER	MARATHON OIL CO.	CONTINENTAL OIL CO.	INGLEFIELD-BRIDGES
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/17/78	04/03/50	03/24/27
FORMATION	PENN-ATOKA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12000	NOT GIVEN	4707
WELLHEAD PRESSURE,PSIG	3577	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	13738	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	88.9	84.2	11.1
ETHANE	6.0	7.5	46.6
PROPANE	1.9	3.5	---
N-BUTANE	0.6	1.0	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.4	2.4	38.6
OXYGEN	0.1	0.1	2.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	1.3
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1109	1144	948
SPECIFIC GRAVITY	0.635	0.669	0.971

	INDEX 3604 SAMPLE 5786	INDEX 3605 SAMPLE 6100	INDEX 3606 SAMPLE 10118
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	AMERICAN REP. FED. NO. 1	NEW MEXICO STATE G-4	CUSTER MOUNTAIN UNIT NO. 1
LOCATION	SEC. 28, T25S, R37E	SEC. 7, T18S, R34E	SEC. 9, T24S, R35E
OWNER	ANDERSON-PRICHARD OIL CORP.	SUNRAY MID-CONTINENT OIL CO.	MIDWEST OIL CORP.
COMPLETED	01/18/55	06/05/56	04/28/64
SAMPLED	03/03/55	07/05/56	09/14/65
FORMATION	DEVO-	PERM-QUEEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8270	4354	14000
WELLHEAD PRESSURE,PSIG	3233	1100	6500
OPEN FLOW, MCFD	67500	7000	8000
COMPONENT, MOLE PCT			
METHANE	88.7	52.4	92.9
ETHANE	5.0	5.5	4.3
PROPANE	1.8	2.7	1.1
N-BUTANE	0.5	0.6	0.1
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.2	0.2
NITROGEN	1.3	37.5	0.5
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.9	0.1	0.4
HELIUM	0.04	0.15	0.02
HEATING VALUE*	1117	761	1071
SPECIFIC GRAVITY	0.649	0.792	0.604

	INDEX 3607 SAMPLE 11017	INDEX 3608 SAMPLE 13297	INDEX 3609 SAMPLE 9927
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	WILDCAT	WILDCAT	WILSON S
WELL NAME	COTTON DRAW NO. 69	SHELL-STATE COM. NO. 1	NO. 1
LOCATION	SEC. 18, T25S, R32E	SEC. 6, T13S, R35E	SEC. 23, T21S, R34E
OWNER	TEXACO INC.	UNION TEXAS PETROLEUM CORP	SINCLAIR OIL & GAS CO.
COMPLETED	05/19/66	06/11/71	03/10/64
SAMPLED	06/29/67	07/11/72	06/17/65
FORMATION	DEVO-	DEVO-	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16490	13096	12624
WELLHEAD PRESSURE,PSIG	5407	2914	4567
OPEN FLOW, MCFD	NOT GIVEN	3571	2050
COMPONENT, MOLE PCT			
METHANE	96.0	83.4	89.8
ETHANE	0.5	5.8	5.4
PROPANE	0.1	3.0	2.3
N-BUTANE	0.0	1.0	0.8
ISOBUTANE	0.0	1.3	0.3
N-PENTANE	0.0	0.5	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	1.5	2.9	0.5
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.7	0.4
HELIUM	0.05	0.10	0.02
HEATING VALUE*	984	1141	1125
SPECIFIC GRAVITY	0.579	0.693	0.637

	INDEX 3610 SAMPLE 12722	INDEX 3611 SAMPLE 11401	INDEX 3612 SAMPLE 1078
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MORA
FIELD	HOSPAH LONE PINE	NOT GIVEN	WAGON MOUND
WELL NAME	SANTA FE PACIFIC RR NO. 2	HOSPAH NO. 10	C. F. CRUSE NO. 1
LOCATION	SEC. 13, T17N, R9W	SEC. 12, T17N, R19W	SEC. 11, T19N, R21E
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ARKANSAS FUEL OIL CO.
COMPLETED	09/10/70	05/10/67	--/--/26
SAMPLED	03/17/71	03/25/68	06/15/25
FORMATION	CRET-DAKOTA	CRET-DAKOTA	TRIA-
GEOLOGIC PROVINCE CODE	580	580	455
DEPTH, FEET	2547	2498	1425
WELLHEAD PRESSURE,PSIG	900	895	NOT GIVEN
OPEN FLOW, MCFD	4350	384	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	74.0	---
ETHANE	14.3	14.2	---
PROPANE	6.3	5.2	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	1.0	0.9	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.4	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	5.4	3.9	6.7
OXYGEN	0.0	0.0	1.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.2	0.0	---
CARBON DIOXIDE	TRACE	0.1	92.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1228	1227	0
SPECIFIC GRAVITY	0.748	0.733	1.487

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3613 SAMPLE 1099	INDEX 3614 SAMPLE 9115	INDEX 3615 SAMPLE 5173
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MORA	MORA	RIO ARRIBA
FIELD	WAGON MOUND	WILDCAT	ABIQUIN
WELL NAME	C. F. CRUSE NO. 1	NO. 1	MORTEN NO. 1
LOCATION	SEC. 11, T19N, R21E	SEC. 28, T21N, R21E	SEC. 24, T24N, R5E
OWNER	ARKANSAS FUEL OIL CO.	STATE OF NEW MEXICO	LOWRY ET AL.
COMPLETED	02/05/26	09/25/63	02/10/52
SAMPLED	08/05/25	10/20/63	02/10/52
FORMATION	NOT GIVEN	CRET-DAKOTA	PENN-
GEOLOGIC PROVINCE CODE	455	455	580
DEPTH, FEET	1425	321	1732
WELLHEAD PRESSURE,PSIG	NOT GIVEN	10	690
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25
COMPONENT, MOLE PCT			
METHANE	---	48.5	0.0
ETHANE	---	0.0	0.1
PROPANE	---	0.0	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	7.8	50.6	1.7
OXYGEN	2.2	0.0	0.1
ARGON	---	0.6	TRACE
HYDROGEN	---	0.0	1.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	90.0	0.2	96.5
HELIUM	0.15	0.03	0.41
HEATING VALUE*	0	491	8
SPECIFIC GRAVITY	1.476	0.770	1.497

	INDEX 3616 SAMPLE 10262	INDEX 3617 SAMPLE 7314	INDEX 3618 SAMPLE 8070
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BALLARD	BASIN	BASIN
WELL NAME	AXI APACHE A-9	SAN JUAN NO. 33-17	APACHE FED. NO. 12
LOCATION	SEC. 10, T23N, R5W	SEC. 17, T28N, R5W	SEC. 17, T24N, R5W
OWNER	CONTINENTAL OIL CO.	EL PASO NATURAL GAS CO.	GULF OIL CORP.
COMPLETED	08/29/65	06/08/59	05/15/61
SAMPLED	11/03/65	12/17/59	07/14/61
FORMATION	CRET-PICTURED CLIFFS	CRET-MESAVERDE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2254	5361	6673
WELLHEAD PRESSURE,PSIG	715	1090	2216
OPEN FLOW, MCFD	3700	4761	8821
COMPONENT, MOLE PCT			
METHANE	87.6	84.4	79.2
ETHANE	5.4	9.0	13.4
PROPANE	2.8	3.5	4.2
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.6	0.4	1.0
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.1	0.4	TRACE
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.5
HELIUM	0.04	0.03	0.10
HEATING VALUE*	1132	1175	1249
SPECIFIC GRAVITY	0.652	0.670	0.711

	INDEX 3619 SAMPLE 8697	INDEX 3620 SAMPLE 6869	INDEX 3621 SAMPLE 7604
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BASIN	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	SAN JUAN NO. 28-6-100	FARMING E	MCKENZIE-FEDERAL NO. 1
LOCATION	SEC. 13, T28N, R6W	SEC. 2, T24N, R6W	SEC. 25, T25N, R6W
OWNER	EL PASO NATURAL GAS CO.	SKELLY OIL CO.	KERN COUNTY LAND CO.
COMPLETED	12/09/61	10/17/58	10/07/59
SAMPLED	10/05/62	11/10/58	07/12/60
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7550	6994	6907
WELLHEAD PRESSURE,PSIG	2326	2050	2310
OPEN FLOW, MCFD	7554	10	2066
COMPONENT, MOLE PCT			
METHANE	94.5	84.1	87.9
ETHANE	2.8	8.8	8.3
PROPANE	0.8	2.7	1.8
N-BUTANE	0.1	0.6	0.5
ISOBUTANE	0.1	0.9	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.2
NITROGEN	0.4	1.3	0.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	0.6
HELIUM	0.04	0.10	0.10
HEATING VALUE*	1039	1171	1143
SPECIFIC GRAVITY	0.592	0.677	0.642

	INDEX 3622 SAMPLE 6451	INDEX 3623 SAMPLE 8192	INDEX 3624 SAMPLE 14882
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	LINDRITH UNIT NO. 19	SAN JUAN 30-5 UNIT NO. 35	SAN JUAN 29-6 UNIT NO. 4A
LOCATION	SEC. 12, T24N, R3W	SEC. 7, T30N, R5W	SEC. 17, T29N, R6W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	NORTHWEST PIPELINE CORP.
COMPLETED	04/12/57	05/26/61	10/05/76
SAMPLED	12/02/57	09/12/61	12/28/76
FORMATION	CRET-PICTURED CLIFFS	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3280	5310	5068
WELLHEAD PRESSURE,PSIG	939	1196	724
OPEN FLOW, MCFD	8273	3193	12911
COMPONENT, MOLE PCT			
METHANE	84.2	96.0	84.7
ETHANE	5.9	1.8	8.7
PROPANE	2.7	0.5	3.5
N-BUTANE	0.6	0.1	0.8
ISOBUTANE	0.6	0.1	0.6
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	4.3	0.2	0.4
OXYGEN	1.1	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1096	1030	1174
SPECIFIC GRAVITY	0.668	0.585	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3625 SAMPLE 15321	INDEX 3626 SAMPLE 11094	INDEX 3627 SAMPLE 11095
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BLANCO	CHOZA MESA	CHOZA MESA
WELL NAME	HOYT NO. 2-A	GASBUGGY NO. 1	GASBUGGY NO. 1
LOCATION	SEC. 5, T26N, R6W	SEC. 36, T29N, R4W	SEC. 36, T29N, R4W
OWNER	CONSOLIDATED OIL & GAS INC.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	12/27/77	03/19/67	03/19/67
SAMPLED	07/20/78	06/08/67	05/19/67
FORMATION	CRET-MESAVERDE	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6126	3915	3915
WELLHEAD PRESSURE,PSIG	1070	845	845
OPEN FLOW, MCFD	3129	100	100
COMPONENT, MOLE PCT			
METHANE	82.9	85.2	85.1
ETHANE	9.6	7.3	7.2
PROPANE	3.8	3.7	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.7	0.8	0.8
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	0.9	1.0
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.5	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1197	1175	1181
SPECIFIC GRAVITY	0.682	0.672	0.677

	INDEX 3628 SAMPLE 5113	INDEX 3629 SAMPLE 11937	INDEX 3630 SAMPLE 14881
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	DOSWELL-PETTIGREW	GAVILAN	GAVILAN
WELL NAME	FEDERAL NO. B-1	JICARILLA O NO. 13	JICARILLA 93 NO. 5
LOCATION	SEC. 15, T26N, R6W	SEC. 14, T26N, R3W	SEC. 34, T27W, R3W
OWNER	LOWRY ET AL.	MOBIL OIL CORP.	NORTHWEST PIPELINE CORP.
COMPLETED	05/25/51	04/27/69	11/19/75
SAMPLED	10/05/51	06/17/69	12/28/76
FORMATION	CRET-U	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2857	3748	3922
WELLHEAD PRESSURE,PSIG	NOT GIVEN	778	949
OPEN FLOW, MCFD	NOT GIVEN	1946	2088
COMPONENT, MOLE PCT			
METHANE	85.2	83.2	83.7
ETHANE	6.9	8.1	8.6
PROPANE	3.9	4.6	3.9
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.7	1.5	1.1
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1159	1198	1192
SPECIFIC GRAVITY	0.668	0.687	0.681

	INDEX 3631 SAMPLE 16108	INDEX 3632 SAMPLE 6095	INDEX 3633 SAMPLE 6472
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	GOBERNADOR	HAYSTACK DOME	JICARILLA
WELL NAME	SAN JUAN 29-5 UNIT NO. 97	NAVAJO C NO. 1	N3-5
LOCATION	SEC. 15, T29N, R5W	SEC. 8, T23N, R5W	SEC. 5, T26N, R4W
OWNER	NORTHWEST PIPELINE CORP.	HUMBLE OIL & REFINING CO.	NORTHWEST PRODUCTION CORP.
COMPLETED	06/18/80	NOT GIVEN	05/--/57
SAMPLED	10/22/80	07/10/56	01/08/58
FORMATION	CRET-PICTURED CLIFF	MISS-MADISON	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3782	8070	4030
WELLHEAD PRESSURE,PSIG	953	15	1000
OPEN FLOW, MCFD	3047	NOT GIVEN	37388
COMPONENT, MOLE PCT			
METHANE	89.2	1.5	87.1
ETHANE	5.3	0.2	6.9
PROPANE	2.6	0.0	3.1
N-BUTANE	0.7	0.1	0.8
ISOBUTANE	0.4	0.0	0.7
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.9	0.2	0.7
OXYGEN	0.2	0.2	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	86.1	0.1
HELIUM	TRACE	1.16	0.02
HEATING VALUE*	1121	41	1155
SPECIFIC GRAVITY	0.639	1.455	0.654

	INDEX 3634 SAMPLE 6473	INDEX 3635 SAMPLE 11740	INDEX 3636 SAMPLE 11741
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	JICARILLA	JICARILLA	JICARILLA
WELL NAME	N8-6	JICARILLA APACHE NO. 14	JICARILLA APACHE NO. 14
LOCATION	SEC. 8, T26N, R4W	SEC. 34, T26N, R5W	SEC. 34, T26N, R5W
OWNER	NORTHWEST PRODUCTION CORP.	MARATHON OIL CO.	MARATHON OIL CO.
COMPLETED	06/03/57	11/06/68	11/06/68
SAMPLED	01/08/58	01/17/69	01/17/69
FORMATION	CRET-MESAVERDE	CRET-PICTURED CLIFFS	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5156	2865	7042
WELLHEAD PRESSURE,PSIG	1070	597	2340
OPEN FLOW, MCFD	2275	2076	5661
COMPONENT, MOLE PCT			
METHANE	82.8	82.5	82.0
ETHANE	10.1	7.5	8.6
PROPANE	3.9	4.4	5.0
N-BUTANE	1.0	1.1	0.9
ISOBUTANE	0.7	1.0	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.8	1.9	2.9
OXYGEN	TRACE	0.2	0.7
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.6
HELIUM	0.04	TRACE	0.07
HEATING VALUE*	1210	1213	1143
SPECIFIC GRAVITY	0.689	0.704	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3637 SAMPLE 6077	INDEX 3638 SAMPLE 6078	INDEX 3639 SAMPLE 5013
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	JICARILLA APACHE AREA	JICARILLA APACHE AREA	LARGO CANYON
WELL NAME	JICARILLA APACHE A NO. 3	JICARILLA APACHE A NO. 3	G. W. NICKSON NO. 1
LOCATION	SEC. 23, T25N, R5W	SEC. 23, T25N, R5W	SEC. 33, T28N, R7W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	BYRD-FROST, INC.
COMPLETED	11/10/55	11/10/55	11/30/50
SAMPLED	05/26/56	05/26/56	03/09/51
FORMATION	CRET-LA VENTANA	CRET-GRANEROS	CRET-U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3784	7132	4878
WELLHEAD PRESSURE,PSIG	1475	1350	820
OPEN FLOW, MCFD	NOT GIVEN	1723	487
COMPONENT, MOLE PCT			
METHANE	85.4	78.2	81.7
ETHANE	6.5	10.7	11.0
PROPANE	3.9	6.2	4.5
N-BUTANE	1.0	1.6	1.1
ISOBUTANE	0.7	0.9	0.6
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.1	0.6	0.0
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	0.05	0.06	0.02
HEATING VALUE*	1185	1274	1223
SPECIFIC GRAVITY	0.670	0.734	0.694

	INDEX 3640 SAMPLE 5101	INDEX 3641 SAMPLE 5076	INDEX 3642 SAMPLE 6223
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	LINDRETH	NOT GIVEN	NOT GIVEN
WELL NAME	WHITE NO. 1	JICARILLA APACHE	CORE DRILL HOLE
LOCATION	SEC. 36, T25N, R2W	SEC. 28, T24N, R5W	SEC. 34, T26N, R3E
OWNER	A. G. HILL OIL PRODUCER	AMERADA PETROLEUM CORP.	A. J. SIMON
COMPLETED	NOT GIVEN	NOT GIVEN	08/28/56
SAMPLED	11/23/51	09/07/51	01/05/57
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3454	2228	235
WELLHEAD PRESSURE,PSIG	975	30	NOT GIVEN
OPEN FLOW, MCFD	600	110	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.7	85.9	0.1
ETHANE	8.3	6.2	0.1
PROPANE	3.7	3.4	0.0
N-BUTANE	0.8	0.6	0.0
ISOBUTANE	0.6	1.0	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.2	2.2	90.4
OXYGEN	0.1	0.2	4.9
ARGON	TRACE	TRACE	1.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	3.5
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1172	1145	3
SPECIFIC GRAVITY	0.676	0.665	0.997

	INDEX 3643 SAMPLE 7235	INDEX 3644 SAMPLE 11950	INDEX 3645 SAMPLE 12256
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	EVANS FEDERAL NO. 1	SOUTHERN PETROLEUM COM NO. 4	COM FIELDS NO. 1
LOCATION	SEC. 18, T23N, R1W	SEC. 32, T26N, R6W	SEC. 31, T26N, R6W
OWNER	SOCONY MOBIL OIL CO., INC.	EL PASO NATURAL GAS CO.	R. L. BAYLESS
COMPLETED	06/08/59	NOT GIVEN	NOT GIVEN
SAMPLED	10/05/59	01/07/69	05/03/70
FORMATION	CRET-PICTURED CLIFFS	CRET-CHACRA	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2997	NOT GIVEN	3700
WELLHEAD PRESSURE,PSIG	940	439	775
OPEN FLOW, MCFD	1093	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	75.7	85.7	86.9
ETHANE	6.0	7.4	6.7
PROPANE	3.0	3.6	3.2
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.8	0.6	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.5	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	10.5	1.1	1.3
OXYGEN	2.4	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1039	1174	1150
SPECIFIC GRAVITY	0.713	0.667	0.656

	INDEX 3646 SAMPLE 6782	INDEX 3647 SAMPLE 8762	INDEX 3648 SAMPLE 11939
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	OTERO	OTERO	OTERO-CHACRA
WELL NAME	JICARILLA CONTRACT 148 NO. 9	JICARILLA CONT. 146 NO. 14	CANYON LARGO UNIT NO. 142
LOCATION	SEC. 15, T25N, R5W	SEC. 9, T25N, R5W	SEC. 23, T25N, R6W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.
COMPLETED	03/11/57	09/05/61	NOT GIVEN
SAMPLED	07/22/58	11/09/62	01/07/69
FORMATION	CRET-GRANEROS	CRET-CHACRA	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7220	3831	3372
WELLHEAD PRESSURE,PSIG	2260	926	NOT GIVEN
OPEN FLOW, MCFD	1350	1309	1714
COMPONENT, MOLE PCT			
METHANE	84.3	85.3	85.4
ETHANE	10.3	7.9	6.9
PROPANE	3.1	3.3	3.6
N-BUTANE	0.5	0.9	0.8
ISOBUTANE	0.0	0.7	0.6
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.7	0.4	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.2	0.7	1.5
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	TRACE
HELIUM	TRACE	0.02	0.27
HEATING VALUE*	1176	1185	1166
SPECIFIC GRAVITY	0.671	0.674	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3649 SAMPLE 6785	INDEX 3650 SAMPLE 5348	INDEX 3651 SAMPLE 7220
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	OTERO-GRANEROS	ROSA UNIT	TAPACITOS
WELL NAME	JICARILLA CONTRACT 146 NO. 9	ROSA UNIT NO. 4	W. F. HURT NO. 3
LOCATION	SEC. 10, T28N, R5W	SEC. 27, T31N, R4W	SEC. 14, T25N, R3W
OWNER	PAN AMERICAN PETROLEUM CORP.	COLORADO OIL & GAS CO.	SKELLY OIL CO.
COMPLETED	08/19/57	NOT GIVEN	06/25/59
SAMPLED	07/22/58	12/09/52	09/25/59
FORMATION	CRET-GRANEROS	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7359	NOT GIVEN	3904
WELLHEAD PRESSURE,PSIG	2304	NOT GIVEN	997
OPEN FLOW, MCFD	251	NOT GIVEN	36052
COMPONENT, MOLE PCT			
METHANE	76.9	94.8	80.7
ETHANE	9.5	2.8	6.6
PROPANE	4.6	0.7	2.8
N-BUTANE	1.4	0.1	0.6
ISOBUTANE	1.4	0.2	0.5
N-PENTANE	0.7	0.0	TRACE
ISOPENTANE	1.4	0.0	0.5
CYCLOPENTANE	0.7	TRACE	0.1
HEXANES PLUS	2.0	TRACE	0.1
NITROGEN	0.7	0.1	6.6
OXYGEN	TRACE	TRACE	1.4
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.1
HELIUM	0.10	TRACE	0.01
HEATING VALUE*	1381	1039	1076
SPECIFIC GRAVITY	0.800	0.591	0.683

	INDEX 3652 SAMPLE 4723	INDEX 3653 SAMPLE 5246	INDEX 3654 SAMPLE 5247
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ROSA UNIT NO. 1	HOWELL NO. 2-B	REAMS NO. 1
LOCATION	SEC. 11, T31N, R6W	SEC. 3, T30N, R7W	SEC. 24, T26N, R6W
OWNER	STANOLIND OIL & GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	06/13/49	02/04/52	04/15/51
SAMPLED	06/28/49	06/23/53	06/23/52
FORMATION	CRET-DAKOTA	CRET-U	CRET-U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7465	4969	2325
WELLHEAD PRESSURE,PSIG	2900	1270	1015
OPEN FLOW, MCFD	170	800	264
COMPONENT, MOLE PCT			
METHANE	96.4	90.3	88.0
ETHANE	0.4	6.1	6.1
PROPANE	0.1	1.8	3.1
N-BUTANE	TRACE	0.3	0.6
ISOBUTANE	0.0	0.4	0.5
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.0	0.8
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.4	0.8	0.2
HELIUM	0.02	0.01	0.02
HEATING VALUE*	994	1107	1145
SPECIFIC GRAVITY	0.588	0.627	0.650

	INDEX 3655 SAMPLE 5342	INDEX 3656 SAMPLE 5400	INDEX 3657 SAMPLE 6323
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ABRAHAM NO. 1	HARRINGTON NO. 1	JICARILLA NO. 6-E
LOCATION	SEC. 13, T30N, R6W	SEC. 4, T27N, R5W	SEC. 21, T26N, R4W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	06/30/52	05/21/52	01/06/57
SAMPLED	12/04/52	02/23/53	05/07/57
FORMATION	CRET-FRUITLAND	CRET-DAKOTA	CRET-TOCITO
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2955	7708	7140
WELLHEAD PRESSURE,PSIG	1460	2852	1732
OPEN FLOW, MCFD	2530	4380	9750
COMPONENT, MOLE PCT			
METHANE	87.9	93.4	79.1
ETHANE	6.8	3.2	11.9
PROPANE	2.6	0.7	4.0
N-BUTANE	0.7	0.3	1.0
ISOBUTANE	0.3	0.2	0.8
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	TRACE	0.4	1.6
OXYGEN	TRACE	TRACE	0.5
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	0.5
HELIUM	0.01	0.02	0.05
HEATING VALUE*	1156	1058	1211
SPECIFIC GRAVITY	0.656	0.609	0.710

	INDEX 3658 SAMPLE 5135	INDEX 3659 SAMPLE 13290	INDEX 3660 SAMPLE 9924
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	ROOSEVELT	ROOSEVELT
FIELD	NOT GIVEN	BLUITT	PRAIRIE S
WELL NAME	S. OULCE NO. 1	LIGHT NO. 1	FEDERAL N.M. 8 NO. 1
LOCATION	SEC. 6, T24N, R2W	SEC. 15, T8S, R37E	SEC. 21, T8S, R36E
OWNER	CONTINENTAL OIL CO.	TOM L. INGRAM	LONE STAR PRODUCING CO.
COMPLETED	NOT GIVEN	03/27/71	02/18/64
SAMPLED	09/20/51	07/01/72	06/17/65
FORMATION	CRET-MESAVERDE	PERM-SAN ANDRES	PENN-ATOKA
GEOLOGIC PROVINCE CODE	580	430	430
DEPTH, FEET	NOT GIVEN	4630	12053
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	2535
OPEN FLOW, MCFD	NOT GIVEN	500	1420
COMPONENT, MOLE PCT			
METHANE	86.2	74.9	75.9
ETHANE	7.5	7.3	12.3
PROPANE	2.0	3.5	5.2
N-BUTANE	0.6	0.8	1.2
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.0	7.2	3.1
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.5	5.3	0.7
HELIUM	0.01	0.05	0.07
HEATING VALUE*	1121	1046	1217
SPECIFIC GRAVITY	0.658	0.737	0.729

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3661 SAMPLE 6407	INDEX 3662 SAMPLE 7568	INDEX 3663 SAMPLE 2357
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	ROOSEVELT	SAN JUAN	SAN JUAN
FIELD	WILDCAT	ANGELS PEAK	AZTEC
WELL NAME	STATE AE NO. 1	PHILLIPS NO. 2	NO. 2
LOCATION	SEC. 36, T8S, R36E	SEC. 22, T28N, R11W	SEC. 34, T30N, R11W
OWNER	ATLANTIC REFINING CO.	REDFERN & HERD	R. C. OSWELL
COMPLETED	09/14/57	06/29/59	NOT GIVEN
SAMPLED	10/03/57	06/02/60	06/07/31
FORMATION	PENN-	CRET-DAKOTA	-STRAY SAND
GEOLOGIC PROVINCE CODE	430	580	580
DEPTH, FEET	9650	6203	373
WELLHEAD PRESSURE,PSIG	1260	2094	35
OPEN FLOW, MCFD	NOT GIVEN	13950	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.6	84.7	87.2
ETHANE	14.7	9.4	10.0
PROPANE	10.9	1.3	---
N-BUTANE	4.9	0.4	---
ISOBUTANE	2.4	1.1	---
N-PENTANE	1.2	TRACE	---
ISOPENTANE	1.2	0.4	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.9	0.1	---
NITROGEN	1.5	1.0	1.4
OXYGEN	TRACE	0.0	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	1.3	0.5
HELIUM	0.02	0.05	TRACE
HEATING VALUE*	1573	1137	1063
SPECIFIC GRAVITY	0.929	0.664	0.620

	INDEX 3664 SAMPLE 5794	INDEX 3665 SAMPLE 6117	INDEX 3666 SAMPLE 11972
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	AZTEC	AZTEC	AZTEC
WELL NAME	CAIN NO. 4	MCCLANAHAN NO. 5	MCCULLEY NO. 6
LOCATION	SEC. 31, T29N, R9W	SEC. 13, T28N, R10W	SEC. 15, T28N, R9W
OWNER	AZTEC OIL & GAS CO.	AZTEC OIL & GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	11/28/54	03/31/56	05/08/69
SAMPLED	03/18/55	08/01/56	07/09/69
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2098	1930	2241
WELLHEAD PRESSURE,PSIG	681	646	713
OPEN FLOW, MCFD	2	4514	3483
COMPONENT, MOLE PCT			
METHANE	90.7	88.1	88.9
ETHANE	5.3	6.5	5.6
PROPANE	2.0	2.7	2.5
N-BUTANE	0.4	0.7	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.7	0.1	0.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1103	1151	1127
SPECIFIC GRAVITY	0.623	0.654	0.640

	INDEX 3667 SAMPLE 12119	INDEX 3668 SAMPLE 12182	INDEX 3669 SAMPLE 3083
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	AZTEC	AZTEC	BARKER CREEK
WELL NAME	PIERCE NO. 3	EAST NO. 16	NO. 1
LOCATION	SEC. 30, T31N, R10W	SEC. 26, T31N, R12W	SEC. 21, T32N, R14W
OWNER	AZTEC OIL & GAS CORP.	AZTEC OIL + GAS CO.	SOUTHERN UNION PRODUCTION CO
COMPLETED	NOT GIVEN	06/21/69	01/30/42
SAMPLED	NOT GIVEN	01/30/70	02/12/42
FORMATION	NOT GIVEN	CRET-PICTURED CLIFFS	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	2439	2398
WELLHEAD PRESSURE,PSIG	NOT GIVEN	619	675
OPEN FLOW, MCFD	NOT GIVEN	5272	15000
COMPONENT, MOLE PCT			
METHANE	89.2	86.3	85.9
ETHANE	5.8	7.6	12.9
PROPANE	2.4	3.4	---
N-BUTANE	0.6	0.7	---
ISOBUTANE	0.1	0.5	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.7	0.7	0.5
OXYGEN	0.0	0.0	0.5
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.01	0.01	0.07
HEATING VALUE*	1128	1162	1101
SPECIFIC GRAVITY	0.637	0.656	0.624

	INDEX 3670 SAMPLE 3679	INDEX 3671 SAMPLE 3936	INDEX 3672 SAMPLE 3956
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER CREEK	BARKER CREEK
WELL NAME	CREVICE NEAR FAULT	BARKER NO. 9	BARKER NO. 9
LOCATION	SEC. 16, T32N, R14W	SEC. 21, T32N, R14W	SEC. 21, T32N, R14W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	01/21/45	02/01/45
FORMATION	NOT GIVEN	PENN-DOLOMITE	PENN-DOLOMITE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	8443	8630
WELLHEAD PRESSURE,PSIG	NOT GIVEN	50	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	86.7	86.1
ETHANE	0.8	2.4	2.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	83.5	0.1	2.5
OXYGEN	0.0	0.2	---
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	15.5	10.4	8.6
HELIUM	TRACE	0.23	0.27
HEATING VALUE*	16	921	917
SPECIFIC GRAVITY	1.054	0.668	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3673 SAMPLE 4064	INDEX 3674 SAMPLE 4292	INDEX 3675 SAMPLE 4685
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER CREEK	BARKER CREEK
WELL NAME	BARKER CREEK NO. 11	BARKER NO. 18	SOUTHERN UNION NO. 19
LOCATION	SEC. 16, T32N, R14W	SEC. 11, T32N, R14W	SEC. 21, T32N, R14W
OWNER	SOUTHERN UNION GAS CO.	DELHI OIL CORP.	SOUTHERN UNION GAS CO.
COMPLETED	09/06/45	04/05/47	03/17/49
SAMPLED	08/24/45	04/21/47	04/05/49
FORMATION	PENN-PARADOX	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	8460	8925	8885
WELLHEAD PRESSURE,PSIG	2940	3000	2770
OPEN FLOW, MCFD	27000	74800	63000
COMPONENT, MOLE PCT			
METHANE	78.7	85.3	80.2
ETHANE	6.8	4.0	1.2
PROPANE	---	---	0.5
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	2.1	1.5	1.7
OXYGEN	0.0	0.5	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	12.1	8.5	15.5
HELIUM	0.25	0.20	0.20
HEATING VALUE*	919	936	865
SPECIFIC GRAVITY	0.713	0.665	0.732

	INDEX 3676 SAMPLE 9017	INDEX 3677 SAMPLE 8049	INDEX 3678 SAMPLE 8185
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BASIN	BASIN
WELL NAME	NATONI NO. 1	PURCO STATE NO. 29	MICHENER NO. 6-A
LOCATION	SEC. 7, T31N, R19W	SEC. 36, T29N, R10W	SEC. 31, T28N, R9W
OWNER	MONSANTO CHEMICAL CO.	PURCO PETROLEUM CORP.	EL PASO NATURAL GAS CO.
COMPLETED	06/05/63	06/04/61	06/28/61
SAMPLED	06/06/63	07/03/61	08/29/61
FORMATION	PENN-PARADOX	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6504	6462	6472
WELLHEAD PRESSURE,PSIG	15	1971	2054
OPEN FLOW, MCFD	1622	10313	8778
COMPONENT, MOLE PCT			
METHANE	91.7	78.6	59.8
ETHANE	3.0	12.8	13.8
PROPANE	1.1	4.7	9.8
N-BUTANE	0.7	1.0	5.0
ISOBUTANE	0.2	1.0	3.6
N-PENTANE	0.4	0.2	2.1
ISOPENTANE	TRACE	0.2	1.3
CYCLOPENTANE	0.2	TRACE	0.4
HEXANES PLUS	0.6	0.2	1.9
NITROGEN	1.5	0.1	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	1.2
HELIUM	0.20	0.04	0.04
HEATING VALUE*	1097	1242	1681
SPECIFIC GRAVITY	0.629	0.718	0.995

	INDEX 3679 SAMPLE 8416	INDEX 3680 SAMPLE 11394	INDEX 3681 SAMPLE 11684
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN	BASIN	BASIN
WELL NAME	NAVAJO NO. 2	PRICE NO. 2	FEDERAL GAS COM L NO. 1
LOCATION	SEC. 28, T26N, R11W	SEC. 14, T28N, R8W	SEC. 14, T30N, R11W
OWNER	DEL-TAYLOR OIL CORP.	JEROME P. MCHUGH	PAN AMERICAN PETROLEUM CORP.
COMPLETED	10/26/59	11/14/67	10/07/60
SAMPLED	02/24/62	03/19/68	11/19/68
FORMATION	CRET-	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5958	7450	6759
WELLHEAD PRESSURE,PSIG	1376	2155	2077
OPEN FLOW, MCFD	4050	1567	6898
COMPONENT, MOLE PCT			
METHANE	80.0	74.7	89.7
ETHANE	11.8	10.2	4.7
PROPANE	4.2	3.5	1.4
N-BUTANE	0.8	0.8	0.4
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	1.5	7.0	0.5
OXYGEN	TRACE	1.5	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.9	1.6
HELIUM	0.06	0.02	0.04
HEATING VALUE*	1200	1105	1112
SPECIFIC GRAVITY	0.695	0.720	0.648

	INDEX 3682 SAMPLE 6566	INDEX 3683 SAMPLE 6572	INDEX 3684 SAMPLE 6702
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	P. L. DAVIS NO. 1	P. L. DAVIS NO. 1	VIERSON NO. 1
LOCATION	SEC. 26, T26N, R11W	SEC. 26, T26N, R11W	SEC. 19, T30N, R13W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	MONSANTO CHEMICAL CO.
COMPLETED	12/27/57	12/27/57	12/03/57
SAMPLED	04/19/58	04/19/58	NOT GIVEN
FORMATION	CRET-GALLUP	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5332	6176	5974
WELLHEAD PRESSURE,PSIG	1257	1729	1962
OPEN FLOW, MCFD	1400	1900	5620
COMPONENT, MOLE PCT			
METHANE	80.3	80.4	81.6
ETHANE	11.1	10.9	10.3
PROPANE	4.1	4.1	4.2
N-BUTANE	0.9	0.9	1.2
ISOBUTANE	0.7	0.8	0.9
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.6	1.9	0.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.0
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1208	1196	1240
SPECIFIC GRAVITY	0.700	0.697	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3685 SAMPLE 6780	INDEX 3686 SAMPLE 6781	INDEX 3687 SAMPLE 6783
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	G. H. RANDEL A NO. 1	J. C. GORDON D NO. 1	MARTIN GU NO. 1
LOCATION	SEC. 9, T26N, R11W	SEC. 22, T27N, R10W	SEC. 15, T27N, R10W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/29/58	10/18/52	03/17/52
SAMPLED	08/12/58	07/18/58	07/18/58
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6186	6492	6648
WELLHEAD PRESSURE,PSIG	2040	1029	1339
OPEN FLOW, MCFD	5864	1120	2863
COMPONENT, MOLE PCT			
METHANE	78.1	79.8	81.3
ETHANE	9.7	11.3	11.3
PROPANE	3.1	4.3	3.9
N-BUTANE	1.5	1.1	0.6
ISOBUTANE	1.2	1.3	1.0
N-PENTANE	1.3	0.0	0.0
ISOPENTANE	1.7	0.5	0.7
CYCLOPENTANE	0.4	0.1	0.0
HEXANES PLUS	1.5	0.4	0.2
NITROGEN	0.6	0.3	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.9
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1356	1249	1221
SPECIFIC GRAVITY	0.785	0.718	0.701

	INDEX 3688 SAMPLE 6784	INDEX 3689 SAMPLE 7012	INDEX 3690 SAMPLE 8111
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	G. L. DAVIES NO. 1	HUERFANO 103 %DE	GALLEGOS CANYON UNIT NO. 89
LOCATION	SEC. 27, T28N, R13W	SEC. 3, T26N, R10W	SEC. 6, T27N, R12W
OWNER	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/08/56	12/08/58	05/31/61
SAMPLED	07/08/58	03/24/59	08/08/61
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6195	6880	5957
WELLHEAD PRESSURE,PSIG	1674	1714	2113
OPEN FLOW, MCFD	1141	5303	11381
COMPONENT, MOLE PCT			
METHANE	85.7	81.1	87.0
ETHANE	7.7	11.1	8.2
PROPANE	2.6	4.0	2.5
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	0.5	1.1	0.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.5
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1176	1189	1146
SPECIFIC GRAVITY	0.674	0.690	0.651

	INDEX 3691 SAMPLE 9828	INDEX 3692 SAMPLE 9829	INDEX 3693 SAMPLE 9830
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN AREA
WELL NAME	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1
LOCATION	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	04/09/65	04/09/65	04/09/65
SAMPLED	03/23/65	04/02/65	03/30/65
FORMATION	PENN-HERMOSA	MISS-	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4864	5812	5560
WELLHEAD PRESSURE,PSIG	2692	3274	3233
OPEN FLOW, MCFD	105	245	16
COMPONENT, MOLE PCT			
METHANE	26.4	1.7	8.0
ETHANE	2.4	0.1	0.8
PROPANE	1.2	0.5	0.5
N-BUTANE	0.6	0.0	0.2
ISOBUTANE	0.2	0.0	0.1
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.5	0.0	0.2
NITROGEN	63.7	92.2	83.8
OXYGEN	0.0	0.0	0.0
ARGON	0.6	0.9	0.8
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.0
HELIUM	3.83	4.10	5.42
HEATING VALUE*	419D	3200	1370
SPECIFIC GRAVITY	0.866	0.936	0.907

	INDEX 3694 SAMPLE 9847	INDEX 3695 SAMPLE 9848	INDEX 3696 SAMPLE 6076
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN AREA	BISTI
WELL NAME	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1	KELLY STATE NO. 1
LOCATION	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W	SEC. 16, T25N, R12W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	EL PASO NATURAL GAS CO.
COMPLETED	04/08/65	04/08/65	09/22/55
SAMPLED	04/06/65	04/08/65	05/2?/56
FORMATION	DEVO-MCCRACKEN	DEVO-ANETH	CRET-GALLUP
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6100	6230	4725
WELLHEAD PRESSURE,PSIG	3368	3608	NOT GIVEN
OPEN FLOW, MCFD	87	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.3	1.4	79.2
ETHANE	0.1	0.3	11.1
PROPANE	0.1	0.4	5.7
N-BUTANE	0.1	0.4	0.9
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	93.2	91.1	1.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.9	0.9	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.3
HELIUM	4.05	4.16	0.03
HEATING VALUE*	2900	9800	1221
SPECIFIC GRAVITY	0.936	0.957	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3697 SAMPLE 6169	INDEX 3698 SAMPLE 6170	INDEX 3699 SAMPLE 6410
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BISTI	BISTI	BISTI
WELL NAME	NEW MEX. FEDERAL B NO. 3	NEW MEX. FEDERAL C NO. 15	ES-KA-NEL-E-WOOD NO. 2
LOCATION	SEC. 16, T25N, R12W	SEC. 8, T25N, R12W	SEC. 22, T25N, R11W
OWNER	SUNRAY MID-CONTINENT OIL CO.	SUNRAY MID-CONTINENT OIL CO.	SUNRAY MID-CONTINENT OIL CO.
COMPLETED	07/15/56	07/21/56	05/10/57
SAMPLED	10/28/56	10/21/56	09/30/57
FORMATION	CRET-GALLUP L	CRET-GALLUP L	CRET-GALLUP L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4795	4790	4906
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1340
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	9000
COMPONENT, MOLE PCT			
METHANE	63.7	44.2	72.0
ETHANE	12.6	15.8	8.0
PROPANE	5.7	9.9	5.2
N-BUTANE	3.3	6.9	3.2
ISOBUTANE	3.3	6.8	1.7
N-PENTANE	0.2	0.0	2.0
ISOPENTANE	2.7	4.7	2.4
CYCLOPENTANE	0.2	0.4	0.9
HEXANES PLUS	0.3	0.3	2.3
NITROGEN	5.9	7.5	1.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.2	0.0
HYDROGEN	0.3	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	3.0	0.4
HELIUM	0.05	0.02	0.10
HEATING VALUE*	1389	1682	1512
SPECIFIC GRAVITY	0.883	1.106	0.889

	INDEX 3700 SAMPLE 6479	INDEX 3701 SAMPLE 6940	INDEX 3702 SAMPLE 2000
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BISTI	BISTI	BLANCO
WELL NAME	BLACKROCK FED. NO. 1	CARSON 113-17	NO. 1
LOCATION	SEC. 20, T26N, R11W	SEC. 17, T25N, R11W	SEC. 29, T30N, R9W
OWNER	GULF OIL CORP.	SHELL OIL CO.	DOROTHY OIL CO.
COMPLETED	02/17/57	NOT GIVEN	--/--/2A
SAMPLED	01/14/58	03/03/59	06/02/30
FORMATION	CRET-GALLUP	CRET-DAKOTA	CRET-FARMINGTON
GEOLOGIC PROVINCE CODE	580	430	580
DEPTH, FEET	5036	5980	2515
WELLHEAD PRESSURE,PSIG	1232	NOT GIVEN	600
OPEN FLOW, MCFD	970	NOT GIVEN	230
COMPONENT, MOLE PCT			
METHANE	81.8	76.5	73.3
ETHANE	8.6	13.1	25.7
PROPANE	4.3	4.8	---
N-BUTANE	1.3	1.1	---
ISOBUTANE	0.6	0.8	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.6	0.4	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.5	0.5	---
NITROGEN	1.5	1.2	0.2
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	1.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.0	0.6
HELIUM	0.10	0.10	TRACE
HEATING VALUE*	1226	1261	1203
SPECIFIC GRAVITY	0.710	0.723	0.690

	INDEX 3703 SAMPLE 2257	INDEX 3704 SAMPLE 4618	INDEX 3705 SAMPLE 4654
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	NO. 1	ANNIE L. ELLIOT NO. B-1	DELHI-RIDDLE-FEDERAL NO. 1
LOCATION	SEC. 29, T30N, R9W	SEC. 14, T29N, R9W	SEC. 21, T30N, R9W
OWNER	DOROTHY OIL CO.	STANOLIND OIL & GAS CO.	DELHI OIL CORP. ET AL
COMPLETED	10/01/25	08/24/48	02/02/49
SAMPLED	01/17/31	11/11/48	03/06/49
FORMATION	NOT GIVEN	CRET-	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4152	4900	4905
WELLHEAD PRESSURE,PSIG	1200	1212	1090
OPEN FLOW, MCFD	600	3300	9000
COMPONENT, MOLE PCT			
METHANE	66.2	11.3	84.9
ETHANE	32.9	86.4	8.8
PROPANE	---	---	3.2
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	0.4	1.5	0.8
OXYGEN	0.0	0.3	0.2
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	0.02	TRACE	0.04
HEATING VALUE*	1260	1663	1154
SPECIFIC GRAVITY	0.724	0.995	0.662

	INDEX 3706 SAMPLE 4784	INDEX 3707 SAMPLE 4789	INDEX 3708 SAMPLE 5027
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	RIDDLE-FEDERAL NO. 2	CAIN NO. 3	ATLANTIC-FEDERAL NO. 1
LOCATION	SEC. 17, T30N, R9W	SEC. 30, T29N, R9W	SEC. 25, T31N, R10W
OWNER	DELHI OIL CORP.	SOUTHERN UNION PROD. CO.	DELHI OIL CORP.
COMPLETED	07/06/49	NOT GIVEN	10/13/50
SAMPLED	09/18/49	06/13/49	03/27/51
FORMATION	CRET-POINT LOOKOUT	CRET-MESAVERDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4895	4700	4945
WELLHEAD PRESSURE,PSIG	1092	1008	1040
OPEN FLOW, MCFD	15560	500	1000
COMPONENT, MOLE PCT			
METHANE	82.6	79.1	89.6
ETHANE	9.4	11.9	6.1
PROPANE	3.9	5.2	1.9
N-BUTANE	1.0	1.3	0.4
ISOBUTANE	0.5	0.7	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	2.7	0.8	0.0
OXYGEN	0.1	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	1.1
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1196	1241	1110
SPECIFIC GRAVITY	0.685	0.718	0.633

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3709 SAMPLE 5224	INDEX 3710 SAMPLE 5299	INDEX 3711 SAMPLE 5300
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	CATHERINE F. MOORE NO. 1	JERNIGAN NO. 1	WHITLEY NO. 1-A
LOCATION	SEC. 8, T30S, R8W	SEC. 24, T27N, R9W	SEC. 17, T27N, R11W
OWNER	DELHI OIL CORP.	AZTEC OIL & GAS CO.	AZTEC OIL & GAS CO.
COMPLETED	02/16/51	06/18/52	06/01/52
SAMPLED	03/24/52	10/27/52	10/27/52
FORMATION	CRET-POINT LOOKOUT	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5435	2029	1860
WELLHEAD PRESSURE,PSIG	NOT GIVEN	599	462
OPEN FLOW, MCFD	555	627	116
COMPONENT, MOLE PCT			
METHANE	85.0	88.2	89.6
ETHANE	8.3	5.7	5.7
PROPANE	3.4	2.6	2.4
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.6	1.5	0.6
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1159	1124	1115
SPECIFIC GRAVITY	0.666	0.644	0.630

	INDEX 3712 SAMPLE 5303	INDEX 3713 SAMPLE 5305	INDEX 3714 SAMPLE 5319
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	MANSFIELD NO. 1	SCHWERDTFEGER NO. 2	UTE NO. 1-B
LOCATION	SEC. 29, T30N, R9W	SEC. 27, T31N, R9W	SEC. 11, T32N, R11W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	07/14/52	07/11/52	07/26/52
SAMPLED	10/1/52	10/17/52	11/15/52
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-POINT LOOKOUT
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4178	4847	5175
WELLHEAD PRESSURE,PSIG	1017	1095	1068
OPEN FLOW, MCFD	303	1006	1930
COMPONENT, MOLE PCT			
METHANE	85.0	84.9	89.9
ETHANE	7.1	7.5	5.9
PROPANE	2.8	2.8	1.7
N-BUTANE	0.8	0.8	0.3
ISOBUTANE	0.5	0.6	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.5	0.4	0.0
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.5	0.1
NITROGEN	2.0	1.0	0.3
OXYGEN	0.3	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.9	1.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1149	1178	1096
SPECIFIC GRAVITY	0.671	0.684	0.627

	INDEX 3715 SAMPLE 5320	INDEX 3716 SAMPLE 5333	INDEX 3717 SAMPLE 5334
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	LAWSON NO. 1	SHANE GAS UNIT NO. 1	E. E. ELLIOTT B NO. 1
LOCATION	SEC. 12, T31N, R11W	SEC. 14, T29N, R9W	SEC. 27, T30N, R9W
OWNER	AZTEC OIL & GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	04/18/52	07/09/52	07/10/52
SAMPLED	11/15/52	11/22/52	11/22/52
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4256	4625	4144
WELLHEAD PRESSURE,PSIG	1100	998	1071
OPEN FLOW, MCFD	6800	2610	5020
COMPONENT, MOLE PCT			
METHANE	83.6	87.5	55.4
ETHANE	7.7	6.7	21.0
PROPANE	2.8	2.7	15.0
N-BUTANE	0.8	0.7	3.6
ISOBUTANE	0.4	0.6	2.4
N-PENTANE	0.2	0.3	0.8
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.5
NITROGEN	2.6	0.5	0.0
OXYGEN	0.5	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.5	0.5
HELIUM	0.01	0.16	TRACE
HEATING VALUE*	1129	1156	1609
SPECIFIC GRAVITY	0.679	0.658	0.941

	INDEX 3718 SAMPLE 6708	INDEX 3719 SAMPLE 8171	INDEX 3720 SAMPLE 12082
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUA
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	BLANCO NO. 3	VALENTINE GAS UNIT NO. 1	DAY NO. 5
LOCATION	SEC. 35, T31N, R8W	SEC. 32, T32N, R10W	SEC. 18, T29N, R8W
OWNER	PACIFIC NORTHWEST PIPELINE	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.
COMPLETED	02/24/58	10/--/53	07/09/69
SAMPLED	07/14/58	08/09/61	10/10/69
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5092	NOT GIVEN	3079
WELLHEAD PRESSURE,PSIG	1048	227	767
OPEN FLOW, MCFD	6362	NOT GIVEN	3641
COMPONENT, MOLE PCT			
METHANE	91.9	87.0	91.3
ETHANE	4.5	7.4	4.3
PROPANE	1.5	2.5	2.1
N-BUTANE	0.3	0.7	0.5
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.0	0.4	0.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.2
HELIUM	0.01	0.10	TRACE
HEATING VALUE*	1089	1149	1114
SPECIFIC GRAVITY	0.617	0.656	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3721 SAMPLE 12763	INDEX 3722 SAMPLE 13218	INDEX 3723 SAMPLE 14883
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	GRAMBLING C NO. 7	CANEPLE GAS COM B NO. 1	COX CANYON UNIT NO. 1A
LOCATION	SEC. 12, T30N, R10W	SEC. 13, T31N, R11W	SEC. 16, T32N, R11W
OWNER	EL PASO NATURAL GAS CO.	AMOCO PRODUCTION CO.	NORTHWEST PIPELINE CORP.
COMPLETED	09/08/70	01/--/72	09/07/76
SAMPLED	04/14/71	05/26/72	01/05/77
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3072	2450	5160
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	831
OPEN FLOW, MCFD	NOT GIVEN	2919	10392
COMPONENT, MOLE PCT			
METHANE	87.9	90.0	86.4
ETHANE	6.5	5.7	8.3
PROPANE	2.6	2.5	2.2
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	0.2	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	1.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1142	1119	1129
SPECIFIC GRAVITY	0.654	0.629	0.656

	INDEX 3724 SAMPLE 13450	INDEX 3725 SAMPLE 15142	INDEX 3726 SAMPLE 11754
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO MESAVERDE	BLANCO MESAVERDE	BLANCO S
WELL NAME	VASALY FEDERAL NO. 1-Y	YAGER NO. 2	MOWELL NO. 6
LOCATION	SEC. 31, T32N, R11W	SEC. 20, T32N, R6W	SEC. 26, T28N, R8W
OWNER	AZTEC OIL & GAS CO.	PALMER OIL & GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	04/24/72	11/01/77	10/09/68
SAMPLED	10/17/72	11/09/77	02/04/69
FORMATION	CRET-POINT LOOKOUT	CRET-MESAVERDE	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5380	6000	2364
WELLHEAD PRESSURE,PSIG	766	1000	1049
OPEN FLOW, MCFD	10075	3500	2170
COMPONENT, MOLE PCT			
METHANE	82.8	96.4	91.2
ETHANE	10.0	1.3	4.4
PROPANE	3.7	0.2	2.3
N-BUTANE	0.9	0.0	0.6
ISOBUTANE	0.6	0.0	0.4
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.8	0.5	0.3
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	0.1
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1183	1005	1127
SPECIFIC GRAVITY	0.687	0.580	0.631

	INDEX 3727 SAMPLE 1179	INDEX 3728 SAMPLE 16013	INDEX 3729 SAMPLE 3121
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLOOMFIELD	BLOOMFIELD	FULCHER BASIN
WELL NAME	NOT GIVEN	DAVIS GAS COM-G NO. 1	NO. 2
LOCATION	T29N, R11W	SEC. 27, T29N, R11W	SEC. 13, T29N, R12W
OWNER	NOT GIVEN	AMOCO PRODUCTION CO.	SOUTHERN UNION PROD. CO.
COMPLETED	NOT GIVEN	05/--/80	08/10/41
SAMPLED	11/05/25	07/17/80	03/03/42
FORMATION	NOT GIVEN	CRET-CHACRA	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	2827	1730
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1120	583
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4190
COMPONENT, MOLE PCT			
METHANE	69.9	85.4	81.8
ETHANE	28.2	6.3	17.9
PROPANE	---	2.8	---
N-BUTANE	---	0.7	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	0.9	3.7	0.1
OXYGEN	0.0	0.1	0.1
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	TRACE	0.1
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1213	1117	1149
SPECIFIC GRAVITY	0.706	0.660	0.645

	INDEX 3730 SAMPLE 3123	INDEX 3731 SAMPLE 4460	INDEX 3732 SAMPLE 4570
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FULCHER BASIN	FULCHER BASIN	FULCHER BASIN
WELL NAME	NO. 1	COZZENS NO. 6	S.U.P. BECK NO. 1
LOCATION	SEC. 11, T29N, R12W	SEC. 20, T29N, R11W	SEC. 2, T29N, R12W
OWNER	CARROLL & CORNELL	SOUTHERN UNION PROD. CO.	SOUTHERN UNION PRODUCTION CO
COMPLETED	09/05/40	01/20/48	05/14/48
SAMPLED	03/27/42	04/05/48	10/04/48
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1855	1711	2125
WELLHEAD PRESSURE,PSIG	576	446	416
OPEN FLOW, MCFD	1100	700	189
COMPONENT, MOLE PCT			
METHANE	88.5	80.9	75.8
ETHANE	10.8	17.1	23.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	2.8	0.0
OXYGEN	0.5	0.8	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.00	0.01	0.02
HEATING VALUE*	1114	1126	1193
SPECIFIC GRAVITY	0.631	0.651	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3733 SAMPLE 12181	INDEX 3734 SAMPLE 6043	INDEX 3735 SAMPLE 5260
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FULCHER KUTZ	GALLEGOS-GALLUP	HOGBACK
WELL NAME	COOPER NO. 6	NELSON NO. 1	U.S.G. NO. 13
LOCATION	SEC. 6, T29N, R11W	SEC. 8, T26N, R12W	SEC. 19, T29N, R16W
OWNER	AZTEC OIL & GAS CO.	EL PASO NATURAL GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	06/26/69	07/06/55	NOT GIVEN
SAMPLED	01/30/70	03/26/56	09/24/52
FORMATION	CRET-PICTURED CLIFFS	CRET-GALLUP	MISS-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2074	4850	7000
WELLHEAD PRESSURE,PSIG	352	1317	NOT GIVEN
OPEN FLOW, MCFD	3327	4385	15000
COMPONENT, MOLE PCT			
METHANE	88.1	81.4	5.8
ETHANE	6.1	8.5	0.9
PROPANE	2.8	5.0	1.7
N-BUTANE	0.6	1.1	1.1
ISOBUTANE	0.6	0.5	1.2
N-PENTANE	0.2	0.1	1.0
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.1	1.3
NITROGEN	0.9	2.3	60.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.5
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.4	20.3
HELIUM	0.01	0.13	5.10
HEATING VALUE*	1138	1187	330
SPECIFIC GRAVITY	0.646	0.695	1.104

	INDEX 3736 SAMPLE 5261	INDEX 3737 SAMPLE 5340	INDEX 3738 SAMPLE 5607
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	U.S.G. NO. 13	U.S.G. NO. 13	U.S.G. NO. 13
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	NOT GIVEN	10/06/52	NOT GIVEN
SAMPLED	10/03/52	12/02/52	04/13/54
FORMATION	MISS-	MISS-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6930	6930	6166
WELLHEAD PRESSURE,PSIG	300	2900	970
OPEN FLOW, MCFD	15000	15	7000
COMPONENT, MOLE PCT			
METHANE	6.1	5.8	24.7
ETHANE	0.9	5.9	2.5
PROPANE	1.5	2.7	1.8
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.0	0.4	1.0
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.9	TRACE	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	63.5	58.4	59.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.5	1.1	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	20.0	19.3	1.6
HELIUM	5.10	5.05	7.41
HEATING VALUE*	214	306	414
SPECIFIC GRAVITY	1.059	1.061	0.854

	INDEX 3739 SAMPLE 5716	INDEX 3740 SAMPLE 6093	INDEX 3741 SAMPLE 6094
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	U.S.G. NO. 13	HOGBACK FIELD NO. 1	M. M. GARRETT
LOCATION	SEC. 19, T29N, R16W	SEC. 25, T29N, R17W	SEC. 25, T29N, R17W
OWNER	STANOLIND OIL & GAS CO.	M. M. GARRETT	M. M. GARRETT
COMPLETED	10/13/52	NOT GIVEN	NOT GIVEN
SAMPLED	03/11/54	07/04/56	07/06/56
FORMATION	PENN-	PENN-HERMOSA L	PENN-HERMOSA L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6166	6828	6931
WELLHEAD PRESSURE,PSIG	3068	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	29.1	62.9	42.5
ETHANE	2.8	3.3	4.9
PROPANE	1.8	1.2	3.3
N-BUTANE	0.7	0.6	1.8
ISOBUTANE	0.5	0.1	1.3
N-PENTANE	0.2	0.3	0.7
ISOPENTANE	0.2	0.1	0.8
CYCLOPENTANE	TRACE	0.2	0.5
HEXANES PLUS	0.1	0.3	1.3
NITROGEN	54.6	16.5	37.6
OXYGEN	0.0	0.1	0.0
ARGON	0.6	0.4	0.5
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	8.1	0.1
HELIUM	7.20	5.67	4.60
HEATING VALUE*	454	791	858
SPECIFIC GRAVITY	0.833	0.738	0.869

	INDEX 3742 SAMPLE 6112	INDEX 3743 SAMPLE 6450	INDEX 3744 SAMPLE 6454
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	NAVAJO NO. 1	U.S.G. SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 25, T29N, R17W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	M. M. GARRETT	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/15/56	NOT GIVEN	NOT GIVEN
SAMPLED	07/15/56	12/04/57	12/11/57
FORMATION	MISS-	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7376	6170	6335
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	52	2416
COMPONENT, MOLE PCT			
METHANE	12.0	30.6	32.5
ETHANE	2.5	3.2	3.2
PROPANE	3.6	2.4	2.6
N-BUTANE	2.0	0.9	1.1
ISOBUTANE	1.4	0.9	0.9
N-PENTANE	0.9	0.4	0.7
ISOPENTANE	0.7	0.2	0.1
CYCLOPENTANE	0.4	0.1	0.5
HEXANES PLUS	1.2	0.4	1.5
NITROGEN	68.4	53.7	48.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.6	0.6	0.6
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.0	1.5
HELIUM	5.04	6.40	6.80
HEATING VALUE*	520	540	651
SPECIFIC GRAVITY	0.998	0.844	0.877

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3745 SAMPLE 6458	INDEX 3746 SAMPLE 6463	INDEX 3747 SAMPLE 6481
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/16/57	12/26/57	01/15/58
FORMATION	PENN-	MISS-	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6520	6936	6396
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1600
OPEN FLOW, MCFD	5011	5816	8050
COMPONENT, MOLE PCT			
METHANE	6.6	6.3	32.7
ETHANE	1.9	0.9	2.1
PROPANE	4.8	2.5	0.9
N-BUTANE	5.5	0.8	0.5
ISOBUTANE	4.3	0.3	0.3
N-PENTANE	2.3	0.4	0.3
ISOPENTANE	2.5	0.1	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.8	0.4	0.5
NITROGEN	61.9	62.7	52.7
OXYGEN	TRACE	0.1	TRACE
ARGON	0.6	0.5	0.6
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	19.6	1.3
HELIUM	6.00	5.40	7.70
HEATING VALUE*	465	228	470
SPECIFIC GRAVITY	1.152	1.054	0.812

	INDEX 3748 SAMPLE 6533	INDEX 3749 SAMPLE 6798	INDEX 3750 SAMPLE 6800
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	USG SEC. 19, NO. 13	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/08/58	01/30/58	09/02/58
SAMPLED	03/28/58	08/23/58	09/08/58
FORMATION	PENN-L	PENN-PARADOX	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6514	6045	6643
WELLHEAD PRESSURE,PSIG	325	NOT GIVEN	2650
OPEN FLOW, MCFD	425	NOT GIVEN	613
COMPONENT, MOLE PCT			
METHANE	12.8	29.1	3.7
ETHANE	1.9	3.5	0.6
PROPANE	2.0	1.8	1.2
N-BUTANE	1.1	1.2	0.9
ISOBUTANE	1.0	1.1	0.9
N-PENTANE	0.4	0.4	0.0
ISOPENTANE	0.3	0.5	0.6
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.6	0.6	0.2
NITROGEN	70.1	54.8	79.9
OXYGEN	0.1	TRACE	2.6
ARGON	0.7	0.6	0.8
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	1.2
HELIUM	8.00	5.70	7.30
HEATING VALUE*	351	559	180
SPECIFIC GRAVITY	0.917	0.873	0.947

	INDEX 3751 SAMPLE 6801	INDEX 3752 SAMPLE 7735	INDEX 3753 SAMPLE 7734
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK N
WELL NAME	USG SEC. 19, NO. 13	NAVAJO TRIBE K NO. 2	NAVAJO K NO. 2
LOCATION	SEC. 19, T29N, R16W	SEC. 31, T30N, R16W	SEC. 31, T30N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/01/58	NOT GIVEN	NOT GIVEN
SAMPLED	09/08/58	10/06/60	10/15/60
FORMATION	PENN-	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6620	6100	6554
WELLHEAD PRESSURE,PSIG	1550	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	55	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.8	67.7	35.2
ETHANE	1.1	5.6	4.2
PROPANE	2.4	3.1	2.5
N-BUTANE	1.5	1.5	1.1
ISOBUTANE	1.6	1.2	0.9
N-PENTANE	0.7	0.6	0.4
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.6	0.7	0.6
NITROGEN	76.1	17.4	44.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.9	0.1	0.5
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	0.1	4.0
HELIUM	5.10	1.40	6.00
HEATING VALUE*	328	1044	632
SPECIFIC GRAVITY	0.993	0.762	0.863

	INDEX 3754 SAMPLE 7745	INDEX 3755 SAMPLE 6453	INDEX 3756 SAMPLE 6478
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK N	HORSESHOE-GALLUP	HUERFANO S
WELL NAME	NAVAJO K-2	CHIMNEY ROCK NO. 1	SOUTH HUERFANO NO. 1-X
LOCATION	SEC. 31, T30S, R16W	SEC. 23, T31N, R17W	SEC. 15, T24N, R9W
OWNER	HUMBLE OIL & REFINING CO.	EL PASO NATURAL GAS CO.	GULF OIL CORP.
COMPLETED	11/19/60	12/06/57	09/30/57
SAMPLED	10/28/60	12/10/57	01/14/58
FORMATION	MISS-MADISON	CRET-GALLUP	CRET-GALLUP
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7340	963	5266
WELLHEAD PRESSURE,PSIG	NOT GIVEN	158	1258
OPEN FLOW, MCFD	NOT GIVEN	1160	3
COMPONENT, MOLE PCT			
METHANE	0.1	77.6	80.5
ETHANE	0.0	11.5	8.1
PROPANE	3.6	6.8	4.5
N-BUTANE	TRACE	1.5	1.4
ISOBUTANE	0.0	0.8	0.9
N-PENTANE	0.0	0.2	0.6
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	6.2	1.0	2.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.7	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	88.5	0.1	0.3
HELIUM	1.40	0.10	0.20
HEATING VALUE*	99	1268	1219
SPECIFIC GRAVITY	1.476	0.729	0.718

* CALCULATED GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3757 SAMPLE 1997	INDEX 3758 SAMPLE 4293	INDEX 3759 SAMPLE 4296
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	GARLAND S NO. 3	HARTMAN NO. 1	SUMMITT NO. 5 B
LOCATION	SEC. 11, T28N, R11W	SEC. 28, T29N, R11W	SEC. 33, T29N, R11W
OWNER	ANGELS PEAK OIL CO.	SOUTHERN UNION PROD. CO.	SUMMITT OIL CO.
COMPLETED	03/19/30	02/28/47	04/01/47
SAMPLED	05/31/30	04/21/47	05/09/47
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1827	1533	1626
WELLHEAD PRESSURE,PSIG	600	487	448
OPEN FLOW, MCFD	1470	887	1620
COMPONENT, MOLE PCT			
METHANE	86.5	82.8	81.9
ETHANE	13.1	15.6	14.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	1.1	2.7
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1111	1118	1095
SPECIFIC GRAVITY	0.623	0.640	0.644

	INDEX 3760 SAMPLE 4447	INDEX 3761 SAMPLE 4462	INDEX 3762 SAMPLE 4515
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	FEASEL NO. 1	NEWMAN NO. 4	S.U.P.P. MANGUM NO. 1
LOCATION	SEC. 32, T28N, R10W	SEC. 19, T28N, R10W	SEC. 29, T29N, R11W
OWNER	KUTZ CANYON OIL & GAS CO.	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	11/27/47	12/09/47	06/04/47
SAMPLED	03/27/48	04/05/48	05/04/48
FORMATION	NOT GIVEN	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1950	1975	1597
WELLHEAD PRESSURE,PSIG	560	434	492
OPEN FLOW, MCFD	2240	1160	2750
COMPONENT, MOLE PCT			
METHANE	80.9	83.6	84.0
ETHANE	16.4	14.9	15.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	0.4	0.2
OXYGEN	0.9	0.5	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.6	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1113	1114	1125
SPECIFIC GRAVITY	0.651	0.638	0.635

	INDEX 3763 SAMPLE 4686	INDEX 3764 SAMPLE 4687	INDEX 3765 SAMPLE 4750
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	NEWMAN NO. 5-B	NEWMAN NO. 6-A	TILES NO. 6-B
LOCATION	SEC. 30, T28N, R10W	SEC. 19, T28N, R10W	SEC. 29, T29N, R11W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	10/12/48	01/02/49	03/--/49
SAMPLED	01/13/49	03/12/49	05/20/49
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1945	2062	1626
WELLHEAD PRESSURE,PSIG	451	468	380
OPEN FLOW, MCFD	1930	686	150
COMPONENT, MOLE PCT			
METHANE	88.1	88.1	88.5
ETHANE	6.8	6.3	5.9
PROPANE	2.7	2.5	2.6
N-BUTANE	0.7	0.6	0.9
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.4	0.3
NITROGEN	0.4	0.4	0.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.9	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1140	1138	1154
SPECIFIC GRAVITY	0.645	0.656	0.654

	INDEX 3766 SAMPLE 4751	INDEX 3767 SAMPLE 4788	INDEX 3768 SAMPLE 4805
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	HUBBELL NO. 1	HANKS NO. 2	HANKS NO. 3
LOCATION	SEC. 29, T28N, R10W	SEC. 6, T27N, R9W	SEC. 12, T27N, R10W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	03/31/49	08/01/49	09/19/49
SAMPLED	05/20/49	09/12/49	10/28/49
FORMATION	NOT GIVEN	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2095	2001	1936
WELLHEAD PRESSURE,PSIG	535	619	589
OPEN FLOW, MCFD	1930	450	822
COMPONENT, MOLE PCT			
METHANE	87.7	89.4	88.6
ETHANE	6.8	6.2	6.3
PROPANE	2.7	2.4	2.6
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.5	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.6	0.2	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1147	1131	1139
SPECIFIC GRAVITY	0.653	0.637	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3769 SAMPLE 4853	INDEX 3770 SAMPLE 4864	INDEX 3771 SAMPLE 4866
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	DAVIDSON NO. 1-B	JOHNSON NO. 1	DAVIDSON NO. 1-F
LOCATION	SEC. 28, T28N, R10W	SEC. 21, T27N, R10W	SEC. 27, T28N, R10W
OWNER	BYRD-FROST, INC.	BYRD-FROST, INC.	BYRD-FROST, INC.
COMPLETED	12/07/49	10/25/48	12/19/49
SAMPLED	03/06/50	03/20/50	03/20/50
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2118	1858	1905
WELLHEAD PRESSURE,PSIG	529	480	610
OPEN FLOW, MCFD	857	500	1471
COMPONENT, MOLE PCT			
METHANE	88.3	93.0	88.4
ETHANE	7.0	3.4	6.8
PROPANE	2.7	1.3	2.6
N-BUTANE	0.7	0.3	0.5
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.0	0.8	0.2
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1150	1071	1143
SPECIFIC GRAVITY	0.647	0.605	0.646

	INDEX 3772 SAMPLE 4890	INDEX 3773 SAMPLE 4891	INDEX 3774 SAMPLE 5025
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	GALT NO. 1-A	GALT NO. 1-B	DAUM NO. 1
LOCATION	SEC. 6, T27N, R10W	SEC. 6, T27N, R10W	SEC. 32, T28N, R9W
OWNER	BYRD-FROST, INC.	BYRD-FROST, INC.	DELHI OIL CORP.
COMPLETED	03/14/50	02/07/50	11/09/50
SAMPLED	05/22/50	05/22/50	03/27/51
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1714	1832	2142
WELLHEAD PRESSURE,PSIG	571	544	570
OPEN FLOW, MCFD	228	155	200
COMPONENT, MOLE PCT			
METHANE	89.0	88.5	90.6
ETHANE	6.6	6.0	5.8
PROPANE	2.8	2.8	2.3
N-BUTANE	0.7	0.7	0.4
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.0	0.4	0.0
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1126	1143	1123
SPECIFIC GRAVITY	0.635	0.649	0.626

	INDEX 3775 SAMPLE 7433	INDEX 3776 SAMPLE 4806	INDEX 3777 SAMPLE 4851
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ W	LA PLATA	LA PLATA
WELL NAME	GLENN H. CALLOW NO. 8	RICHARDSON NO. 1	V. EAST NO. 1
LOCATION	SEC. 27, T29N, R13W	SEC. 10, T31N, R12W	SEC. 14, T31N, R12W
OWNER	TENNESSEE GAS TRANSMISSION	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION GAS CO.
COMPLETED	09/05/59	09/13/49	NOT GIVEN
SAMPLED	03/10/60	10/28/49	03/03/50
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5762	5320	5430
WELLHEAD PRESSURE,PSIG	6030	1090	1083
OPEN FLOW, MCFD	2210	5000	400
COMPONENT, MOLE PCT			
METHANE	86.8	81.7	84.0
ETHANE	8.0	10.5	9.9
PROPANE	2.6	4.0	3.6
N-BUTANE	0.7	1.1	1.0
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.3	0.8	0.0
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.7	0.7	0.4
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1158	1201	1196
SPECIFIC GRAVITY	0.660	0.694	0.678

	INDEX 3778 SAMPLE 4881	INDEX 3779 SAMPLE 4893	INDEX 3780 SAMPLE 5038
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LA PLATA	LA PLATA	LA PLATA
WELL NAME	Q. B. DAVIS NO. 1	CULPEPPER MARTIN NO. 1	DAVIS NO. 3
LOCATION	SEC. 11, T31N, R12W	SEC. 21, T32N, R12W	SEC. 1, T31N, R12W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	12/07/49	04/14/50	NOT GIVEN
SAMPLED	03/03/50	05/22/50	04/23/51
FORMATION	CRET-MESAVERDE	CRET-U	CRET-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5904	4645	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1065	932	894
OPEN FLOW, MCFD	396	1000	2785
COMPONENT, MOLE PCT			
METHANE	82.7	82.3	82.9
ETHANE	9.6	10.3	9.5
PROPANE	3.8	4.1	3.6
N-BUTANE	0.8	1.1	0.8
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	0.8	0.0	TRACE
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.6	1.0
HELIUM	0.09	0.02	0.02
HEATING VALUE*	1186	1221	1181
SPECIFIC GRAVITY	0.690	0.700	0.670

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3781 SAMPLE 5178	INDEX 3782 SAMPLE 5034	INDEX 3783 SAMPLE 5012
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LA PLATA	LARGO	LARGO CANYON
WELL NAME	VANDERSLICE NO. 1	NO. 1, H. E. ROELOFS	B. D. DAY NO. 1
LOCATION	SEC. 19, T32N, R10W	SEC. 22, T29N, R8W	SEC. 17, T29N, R8W
OWNER	SOUTHERN UNION GAS CO.	BYRD-FROST, INC.	BYRD-FROST, INC.
COMPLETED	09/04/51	01/09/51	11/20/50
SAMPLED	01/24/52	04/06/51	03/09/51
FORMATION	CRET-POINT LOOKOUT	NOT GIVEN	CRET-U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5210	5610	5204
WELLHEAD PRESSURE,PSIG	965	1060	1075
OPEN FLOW, MCFD	2190	5800	1086
COMPONENT, MOLE PCT			
METHANE	86.9	82.3	83.3
ETHANE	6.2	10.8	9.7
PROPANE	1.8	4.2	4.3
N-BUTANE	0.2	1.0	1.0
ISOBUTANE	0.0	0.3	0.5
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	1.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.7	0.0	0.0
OXYGEN	0.6	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.8	0.6
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1095	1203	1102
SPECIFIC GRAVITY	0.646	0.691	0.685

	INDEX 3784 SAMPLE 8193	INDEX 3785 SAMPLE 14443	INDEX 3786 SAMPLE 15914
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NAVAJO	NAVAJO	NAVAJO CITY
WELL NAME	NAVAJO TRACT 27 NO. 1	STAVER-NAVAJO NO. 1	LIVELY NO. 7Y
LOCATION	SEC. 32, T26N, R15W	SEC. 34, T27N, R18W	SEC. 35, T30N, R8W
OWNER	PURE OIL CO.	CONSOLIDATED OIL & GAS, INC.	LIVELY EXPLORATION CO.
COMPLETED	09/23/61	06/21/75	04/19/74
SAMPLED	09/12/61	08/15/75	03/06/80
FORMATION	MISS-	MISS-	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	10120	6796	7249
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2842	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3349	1817
COMPONENT, MOLE PCT			
METHANE	1.1	1.5	87.9
ETHANE	0.1	0.2	6.1
PROPANE	0.0	TRACE	2.4
N-BUTANE	TRACE	0.1	0.6
ISOBUTANE	TRACE	0.1	0.5
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.5
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	TRACE	0.1	0.4
NITROGEN	2.0	89.9	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.9	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	96.2	0.1	0.9
HELIUM	0.43	7.16	0.01
HEATING VALUE*	113	30	1153
SPECIFIC GRAVITY	1.498	0.910	0.659

	INDEX 3787 SAMPLE 15915	INDEX 3788 SAMPLE 8190	INDEX 3789 SAMPLE 890
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NAVAJO CITY	NAVAJO TRACT 27	NOT GIVEN
WELL NAME	LIVELY NO. 7Y	NO. 1	UTE NO. 1
LOCATION	SEC. 35, T30N, R8W	SEC. 32, T26N, R15W	SEC. 35, T32N, R14W
OWNER	LIVELY EXPLORATION CO.	PURE OIL CO.	MIDWEST REFINING CO.
COMPLETED	04/19/74	NOT GIVEN	NOT GIVEN
SAMPLED	03/06/80	09/12/61	NOT GIVEN
FORMATION	CRET-CHACRA	MISS-	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3700	10079	NOT GIVEN
WELLHEAD PRESSURE,PSIG	748	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4545	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.9	1.2	72.6
ETHANE	6.2	0.1	25.7
PROPANE	2.3	0.1	---
N-BUTANE	0.6	TRACE	---
ISOBUTANE	0.4	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.0	2.2	1.1
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	95.3	0.2
HELIUM	0.01	0.45	0.04
HEATING VALUE*	1132	34	1196
SPECIFIC GRAVITY	0.646	1.499	0.688

	INDEX 3790 SAMPLE 913	INDEX 3791 SAMPLE 914	INDEX 3792 SAMPLE 3658
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	AZTEC NO. 2	UTE NO. 1	BITLABITO NO. 1
LOCATION	SEC. 16, T30N, R11W	SEC. 35, T32N, R14W	SEC. 13, T30N, R21W
OWNER	NOT GIVEN	MIDWEST REFINING CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/06/24	08/04/24	08/08/43
FORMATION	CRET-OJO ALAMO	CRET-DAKOTA	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1006	2325	975
WELLHEAD PRESSURE,PSIG	50	400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1188	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.5	76.4	13.6
ETHANE	20.4	19.6	2.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.1	3.1	73.9
OXYGEN	3.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	TRACE	0.05	9.10
HEATING VALUE*	1009	1125	190
SPECIFIC GRAVITY	0.727	0.667	0.840

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3793 SAMPLE 3659	INDEX 3794 SAMPLE 4620	INDEX 3795 SAMPLE 7445
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BITLABITO NO. 1	UTE NO. 3	W. O. BERGER NO. 2
LOCATION	SEC. 13, T30N, R21W	SEC. 36, T32N, R14W	SEC. 23, T26N, R11W
OWNER	CONTINENTAL OIL CO.	STANOLIND OIL & GAS CO.	TENNESSEE GAS TRANSMISSION
COMPLETED	NOT GIVEN	11/13/47	01/15/59
SAMPLED	08/11/43	11/11/48	03/10/60
FORMATION	TRIA-CHINLE	CRET-	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	975	2370	6196
WELLHEAD PRESSURE,PSIG	NOT GIVEN	192	1631
OPEN FLOW, MCFD	NOT GIVEN	2840	2499
COMPONENT, MOLE PCT			
METHANE	14.8	80.0	52.9
ETHANE	6.4	19.0	15.7
PROPANE	---	---	13.8
N-BUTANE	---	---	6.2
ISOBUTANE	---	---	3.7
N-PENTANE	---	---	1.8
ISOPENTANE	---	---	2.9
CYCLOPENTANE	---	---	0.4
HEXANES PLUS	---	---	1.4
NITROGEN	70.0	0.4	0.5
OXYGEN	0.0	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.5
HELIUM	8.92	0.06	0.04
HEATING VALUE*	261	1151	1797
SPECIFIC GRAVITY	0.841	0.655	1.059

	INDEX 3796 SAMPLE 8641	INDEX 3797 SAMPLE 9634	INDEX 3798 SAMPLE 9635
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NAVAJO N NO. 1	NAVAJO TRACT 4 NO. 1	NAVAJO TRACT 4 NO. 1
LOCATION	SEC. 23, T28N, R15W	SEC. 20, T27N, R17W	SEC. 20, T27N, R17W
OWNER	SKELLY OIL CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	06/27/62	NOT GIVEN	11/18/64
SAMPLED	08/19/62	11/07/64	11/14/64
FORMATION	CRET-GALLUP	MISS-	DEVO-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4560	7520	7850
WELLHEAD PRESSURE,PSIG	1250	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	0.9	1.4
ETHANE	7.1	0.2	0.4
PROPANE	4.7	0.9	1.2
N-BUTANE	1.3	2.5	1.9
ISOBUTANE	0.5	1.6	1.6
N-PENTANE	0.2	1.0	1.2
ISOPENTANE	0.3	0.9	0.3
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.9	1.5
NITROGEN	4.8	85.3	85.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.15	4.96	4.40
HEATING VALUE*	1158	306	280
SPECIFIC GRAVITY	0.702	1.024	1.032

	INDEX 3799 SAMPLE 9636	INDEX 3800 SAMPLE 11425	INDEX 3801 SAMPLE 11438
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NAVAJO TRACT 4 NO. 1	NAVAJO TRACT 4 NO. 1	NAVAJO TRACT 4 NO. 1
LOCATION	SEC. 20, T27N, R17W	SEC. 20, T27N, R17W	SEC. 20, T27N, R17W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	03/19/68	03/19/68
SAMPLED	11/06/64	03/30/68	04/05/68
FORMATION	MISS-	MISS-	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7820	7454	7080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3209	2175
OPEN FLOW, MCFD	45	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.6	1.7	9.3
ETHANE	0.2	0.3	1.7
PROPANE	0.5	0.2	1.5
N-BUTANE	0.4	0.4	0.8
ISOBUTANE	0.2	0.1	0.5
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.4	0.2	0.6
NITROGEN	90.1	89.3	77.8
OXYGEN	0.1	0.0	0.3
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.2
HELIUM	5.81	6.14	5.70
HEATING VALUE*	84	64	271
SPECIFIC GRAVITY	0.939	0.927	0.934

	INDEX 3802 SAMPLE 11697	INDEX 3803 SAMPLE 12203	INDEX 3804 SAMPLE 9067
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	PAJARITO
WELL NAME	J. W. GODDARD NO. 3	ATLANTIC B NO. 10	NAVAJO TRACT 20 NO. 1
LOCATION	SEC. 11, T26N, R12W	SEC. 5, T30N, R10W	SEC. 31, T29N, R17W
OWNER	SKELLY OIL CO.	EL PASO NATURAL GAS CO.	AMERADA PETROLEUM CORP.
COMPLETED	09/27/68	01/06/70	05/23/63
SAMPLED	12/06/68	02/18/70	08/19/63
FORMATION	CRET-FRUITLAND	CRET-PICTURED CLIFFS	PENN-PARADOX C
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1184	3102	7198
WELLHEAD PRESSURE,PSIG	474	954	1850
OPEN FLOW, MCFD	1814	2595	169
COMPONENT, MOLE PCT			
METHANE	96.0	88.8	40.7
ETHANE	0.8	5.9	9.9
PROPANE	2.1	2.5	7.3
N-BUTANE	0.0	0.6	2.4
ISOBUTANE	0.0	0.4	1.6
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.2	0.8
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	3.2	0.9	22.2
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.3
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	12.9
HELIUM	0.02	0.01	1.20
HEATING VALUE*	983	1135	980
SPECIFIC GRAVITY	0.570	0.646	0.983

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3805 SAMPLE 9102	INDEX 3806 SAMPLE 6044	INDEX 3807 SAMPLE 6045
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	PAJARITO	PARADOX BASIN	PARADOX BASIN
WELL NAME	NAVAJO TRACT 20 NO. 2	NAVAJO INDIANS B-1	NAVAJO INDIANS B-1
LOCATION	SEC. 30, T29N, R17W	SEC. 29, T32N, R20W	SEC. 29, T32N, R20W
OWNER	AMERADA PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/04/63	NOT GIVEN	NOT GIVEN
SAMPLED	10/04/63	03/10/56	03/01/56
FORMATION	PENN-PARADOX B	PENN-PARADOX L	PENN-PARADOX U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6850	5968	5539
WELLHEAD PRESSURE,PSIG	25	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.1	66.8	79.4
ETHANE	11.4	10.2	9.2
PROPANE	11.7	8.5	4.2
N-BUTANE	5.0	2.8	1.3
ISOBUTANE	1.3	1.0	0.7
N-PENTANE	1.7	0.6	0.4
ISOPENTANE	1.2	0.9	0.6
CYCLOPENTANE	0.4	0.2	0.3
HEXANES PLUS	1.7	0.4	0.6
NITROGEN	1.2	1.5	3.0
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.1	6.8	0.0
HELIUM	0.10	0.19	0.19
HEATING VALUE*	1515	1301	1231
SPECIFIC GRAVITY	1.013	0.861	0.723

	INDEX 3808 SAMPLE 15874	INDEX 3809 SAMPLE 10917	INDEX 3810 SAMPLE 2092
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	PICTURED CLIFFS	PINON	RATTLESNAKE
WELL NAME	NORTHEAST BLANCO NO. 204	GALLEGOS CANYON UNIT NO. 220	NO. 17
LOCATION	SEC. 1 , T31N, R7W	SEC. 13, T28N, R12W	SEC. 2, T29N, R19W
OWNER	BLACKWOOD & NICHOLS CO.	PAN AMERICAN PETROLEUM CORP.	SANTA FE CO.
COMPLETED	08/21/79	06/14/66	04/28/29
SAMPLED	01/04/80	04/09/67	08/16/30
FORMATION	CRET-FRUITLAND	CRET-FRUITLAND	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3404	1228	6769
WELLHEAD PRESSURE,PSIG	1420	549	NOT GIVEN
OPEN FLOW, MCFD	5914	4551	1471
COMPONENT, MOLE PCT			
METHANE	87.2	88.3	46.9
ETHANE	6.7	6.7	48.6
PROPANE	2.8	2.6	---
N-BUTANE	0.5	1.0	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.4	0.3	3.7
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.4	0.1	0.5
HELIUM	TRACE	0.01	0.23
HEATING VALUE*	1124	1158	1346
SPECIFIC GRAVITY	0.652	0.650	0.815

	INDEX 3811 SAMPLE 2227	INDEX 3812 SAMPLE 2229	INDEX 3813 SAMPLE 3712
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	SANTA FE NO. 17	NOT GIVEN	NO. 111
LOCATION	SEC. 2, T29, R19W	NOT GIVEN	SEC. 2, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	04/01/29	NOT GIVEN	12/29/43
SAMPLED	10/30/30	10/30/30	NOT GIVEN
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6769	NOT GIVEN	725
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3000	NOT GIVEN	150
COMPONENT, MOLE PCT			
METHANE	44.8	0.0	96.6
ETHANE	53.6	36.8	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	0.4	2.9
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.19	0.00	0.00
HEATING VALUE*	1414	659	979
SPECIFIC GRAVITY	0.830	0.395	0.570

	INDEX 3814 SAMPLE 5404	INDEX 3815 SAMPLE 5586	INDEX 3816 SAMPLE 5587
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	RATTLESNAKE NO. 1-G	RATTLESNAKE NO. 1-G	RATTLESNAKE NO. 1-G
LOCATION	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W
OWNER	U.S. BUREAU OF MINES	U. S. BUREAU OF MINES	U. S. BUREAU OF MINES
COMPLETED	08/26/43	01/--/54	01/--/54
SAMPLED	03/02/53	01/08/54	01/11/54
FORMATION	DEVO-OURAY	DEVO--OURAY	DEVO--OURAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7004	6980	6980
WELLHEAD PRESSURE,PSIG	700	3000	3000
OPEN FLOW, MCFD	NOT GIVEN	7000	7000
COMPONENT, MOLE PCT			
METHANE	10.4	10.1	10.1
ETHANE	1.1	1.2	1.1
PROPANE	0.7	0.6	0.5
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	75.9	76.9	76.6
OXYGEN	0.1	TRACE	TRACE
ARGON	0.8	0.9	0.9
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.2	1.9
HELIUM	7.99	7.55	7.81
HEATING VALUE*	180	162	169
SPECIFIC GRAVITY	0.888	0.861	0.889

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3817 SAMPLE 5596	INDEX 3818 SAMPLE 5795	INDEX 3819 SAMPLE 6886
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NAVAJO NO. 1	RATTLESNAKE 1-G	RATTLESNAKE NO. 135
LOCATION	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W	SEC. 1, T29N, R19W
OWNER	U. S. BUREAU OF MINES	U. S. BUREAU OF MINES	CONTINENTAL OIL CO.
COMPLETED	08/--/42	08/26/43	NOT GIVEN
SAMPLED	02/04/54	03/22/55	12/10/58
FORMATION	MISS-DEVO-OURAY	DEVO-OURAY	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6950	7004	6602
WELLHEAD PRESSURE,PSIG	2956	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	11730	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	13.7	19.8	71.0
ETHANE	1.4	6.7	5.9
PROPANE	0.7	5.9	4.3
N-BUTANE	0.2	2.5	1.3
ISOBUTANE	0.2	2.3	0.7
N-PENTANE	0.1	1.3	0.4
ISOPENTANE	0.0	0.6	0.3
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.2	1.5	0.4
NITROGEN	71.3	48.2	1.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	1.0	0.8	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	7.8	14.4
HELIUM	7.49	2.45	0.10
HEATING VALUE*	210	801	1061
SPECIFIC GRAVITY	0.890	1.068	0.829

	INDEX 3820 SAMPLE 8219	INDEX 3821 SAMPLE 8484	INDEX 3822 SAMPLE 8485
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NO. 136	NO. 140	NO. 141
LOCATION	SEC. 2, T29N, R19W	SEC. 11, T29N, R19W	SEC. 12, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	02/17/62	03/27/62
SAMPLED	09/25/61	03/29/62	03/29/62
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	6658	6627
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1125	NOT GIVEN
OPEN FLOW, MCFD	435	3000	700
COMPONENT, MOLE PCT			
METHANE	72.9	80.1	61.3
ETHANE	11.0	8.5	15.8
PROPANE	5.9	3.2	10.1
N-BUTANE	2.4	0.8	3.9
ISOBUTANE	1.6	0.9	3.0
N-PENTANE	0.6	0.1	0.9
ISOPENTANE	1.0	0.2	1.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.1	0.9
NITROGEN	3.8	5.4	2.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.18	0.30	0.07
HEATING VALUE*	1321	1126	1542
SPECIFIC GRAVITY	0.789	0.687	0.918

	INDEX 3823 SAMPLE 8486	INDEX 3824 SAMPLE 8487	INDEX 3825 SAMPLE 9280
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NO. 139	NO. 134	NO. 136
LOCATION	SEC. 2, T29N, R19W	SEC. 2, T29N, R19W	SEC. 2&11, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	01/12/62	12/28/60	--/--/62
SAMPLED	03/29/62	03/29/62	04/10/64
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-B
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6573	6726	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	1880
OPEN FLOW, MCFD	700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	70.3	87.3
ETHANE	10.3	13.4	5.7
PROPANE	4.0	7.1	2.2
N-BUTANE	1.0	2.1	1.0
ISOBUTANE	1.1	2.0	0.5
N-PENTANE	0.3	0.5	0.4
ISOPENTANE	0.4	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	5.1	3.1	1.8
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.20	0.11	0.15
HEATING VALUE*	1182	1342	1138
SPECIFIC GRAVITY	0.722	0.800	0.656

	INDEX 3826 SAMPLE 13468	INDEX 3827 SAMPLE 13011	INDEX 3828 SAMPLE 13012
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	SAN JUAN	SAN JUAN BASIN	SAN JUAN BASIN
WELL NAME	WOPTON NO. 3	SUNRAY-P NO. 4	SUNRAY A-5
LOCATION	SEC. 35, T32N, R11W	SEC. 1, T30N, R10W	SEC. 1, T30N, R10W
OWNER	EL PASO NATURAL GAS CO.	ELPASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	07/25/72	05/13/71	05/05/71
SAMPLED	11/06/72	09/17/71	09/17/71
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2861	3338	3223
WELLHEAD PRESS,PSIG	964	925	925
OPEN FLOW, MCFD	2613	7282	5397
COMPONENT, MOLE PCT			
METHANE	87.1	82.8	89.3
ETHANE	7.2	5.4	5.8
PROPANE	3.2	2.2	2.4
N-BUTANE	0.7	0.5	0.5
ISOBUTANE	0.6	0.3	0.5
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.1	6.2	0.6
OXYGEN	0.0	1.4	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.6	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1140	1037	1118
SPECIFIC GRAVITY	0.660	0.663	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3829 SAMPLE 13375	INDEX 3830 SAMPLE 13139	INDEX 3831 SAMPLE 4969
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	SAN JUAN BASIN	SNAKE EYES	TABLE MESA
WELL NAME	DAY NO. 6	SNAKE EYES NO. 1	TRIBAL NO. 17
LOCATION	SEC. 17, T29N, R8W	SEC. 20, T21N, R8W	SEC. 3, T27N, R17W
OWNER	EL PASO NATURAL GAS CO.	DAVIS OIL CO.	CONTINENTAL OIL CO.
COMPLETED	08/02/71	08/11/71	NOT GIVEN
SAMPLED	09/01/72	01/--/72	01/10/51
FORMATION	CRET-PICTURED CLIFFS	CRET-DAKOTA	MISS-MADISON & DEVO-OURAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2996	4597	7450
WELLHEAD PRESSURE,PSIG	993	1750	1060
OPEN FLOW, MCFD	3695	2553	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	87.0	5.9
ETHANE	4.9	8.2	0.8
PROPANE	2.2	1.8	0.9
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.1	1.3	83.2
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	0.7
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	1.4
HELIUM	TRACE	0.08	5.73
HEATING VALUE*	1127	1122	142
SPECIFIC GRAVITY	0.632	0.643	0.925

	INDEX 3832 SAMPLE 4970	INDEX 3833 SAMPLE 4971	INDEX 3834 SAMPLE 5030
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TABLE MESA NO. 17	TRIBAL NO. 17	NO. 17
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	01/05/51	01/05/51	03/17/51
FORMATION	MISS-MADISON & DEVO-OURAY	MISS-MADISON & DEVO-OURAY	MISS-MADISON
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7450	7434	7500
WELLHEAD PRESSURE,PSIG	1060	1060	3900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.8	6.5	6.2
ETHANE	0.8	1.0	0.8
PROPANE	0.9	1.1	0.8
N-BUTANE	0.6	0.8	0.0
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.3	0.5	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.4	0.8
NITROGEN	83.0	81.6	83.3
OXYGEN	0.1	0.1	0.2
ARGON	0.7	0.7	0.7
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.4	1.3	1.6
HELIUM	5.64	5.52	5.60
HEATING VALUE*	160	200	134
SPECIFIC GRAVITY	0.937	0.945	0.929

	INDEX 3835 SAMPLE 5031	INDEX 3836 SAMPLE 5032	INDEX 3837 SAMPLE 5558
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TABLE MESA NO. 17	TABLE MESA NO. 17	NO. 17
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/19/51	03/21/51	10/12/53
FORMATION	MISS-MADISON	MISS-MADISON	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7500	NOT GIVEN	7010
WELLHEAD PRESSURE,PSIG	3900	NOT GIVEN	3025
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.9	5.7	15.3
ETHANE	0.8	0.8	2.7
PROPANE	0.8	0.9	1.9
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	0.8	1.0	0.3
NITROGEN	83.8	83.9	71.0
OXYGEN	0.1	0.1	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	1.2	0.3
HELIUM	5.70	5.70	5.60
HEATING VALUE*	131	140	337
SPECIFIC GRAVITY	0.928	0.932	0.902

	INDEX 3838 SAMPLE 5728	INDEX 3839 SAMPLE 8025	INDEX 3840 SAMPLE 8039
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 1	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R15W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	05/25/61	NOT GIVEN
SAMPLED	11/03/54	06/16/61	06/24/61
FORMATION	PENN-HERMOSA U	PENN-PARADOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6840	7096	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3037	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	21500	21500
COMPONENT, MOLE PCT			
METHANE	25.1	15.6	17.5
ETHANE	4.5	3.1	3.0
PROPANE	2.4	2.6	1.7
N-BUTANE	0.9	2.6	0.6
ISOBUTANE	0.6	2.3	0.5
N-PENTANE	0.3	2.3	0.2
ISOPENTANE	0.3	1.2	TRACE
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.5	2.2	0.1
NITROGEN	58.9	62.1	69.8
OXYGEN	0.9	TRACE	TRACE
ARGON	0.5	0.5	0.7
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.3
HELIUM	4.73	4.70	5.50
HEATING VALUE*	507	720	327
SPECIFIC GRAVITY	0.888	1.040	0.883

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3841 SAMPLE 8048	INDEX 3842 SAMPLE 8218	INDEX 3843 SAMPLE 8371
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 24
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 4, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/--/61	09/26/61	01/12/62
FORMATION	PENN-PARADOX L	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7187
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3050	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.3	17.5	19.9
ETHANE	3.1	2.9	4.5
PROPANE	1.7	1.6	2.1
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.5	0.5	1.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.2	1.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	69.8	71.7	64.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.6
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	5.50	3.54	4.92
HEATING VALUE*	330	342	437
SPECIFIC GRAVITY	0.885	0.908	0.899

	INDEX 3844 SAMPLE 8382	INDEX 3845 SAMPLE 8462	INDEX 3846 SAMPLE 8585
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	NO. 24	NO. 3-18
LOCATION	SEC. 4, T27N, R17W	SEC. 4, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	03/--/62	05/31/61
SAMPLED	01/25/62	03/14/62	06/20/62
FORMATION	MISS-	MISS-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	7676	7100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3000	3150
OPEN FLOW, MCFD	NOT GIVEN	300	22000
COMPONENT, MOLE PCT			
METHANE	17.9	20.8	17.5
ETHANE	2.1	2.1	2.9
PROPANE	2.2	2.0	1.7
N-BUTANE	1.5	0.9	0.7
ISOBUTANE	1.3	0.5	0.5
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.8	0.1	0.2
NITROGEN	68.7	68.1	69.6
OXYGEN	TRACE	TRACE	0.1
ARGON	0.6	0.6	0.7
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	TRACE	0.7	0.3
HELIUM	3.61	3.69	5.46
HEATING VALUE*	470	370	341
SPECIFIC GRAVITY	0.950	0.893	0.891

	INDEX 3847 SAMPLE 8586	INDEX 3848 SAMPLE 8587	INDEX 3849 SAMPLE 8588
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	06/20/62	06/20/62	06/20/62
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3150	3150	3150
OPEN FLOW, MCFD	22000	22000	22000
COMPONENT, MOLE PCT			
METHANE	17.6	17.5	17.5
ETHANE	2.9	2.9	2.9
PROPANE	1.7	1.7	1.7
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	69.6	69.6	69.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	5.46	5.49	5.47
HEATING VALUE*	337	341	324
SPECIFIC GRAVITY	0.888	0.890	0.891

	INDEX 3850 SAMPLE 8589	INDEX 3851 SAMPLE 8590	INDEX 3852 SAMPLE 8591
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T17W, R27N	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	06/20/62	06/20/62	06/20/62
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3150	3150	3150
OPEN FLOW, MCFD	22000	22000	22000
COMPONENT, MOLE PCT			
METHANE	17.6	17.3	17.3
ETHANE	2.9	2.9	2.9
PROPANE	1.8	1.7	1.8
N-BUTANE	0.8	0.8	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	69.6	69.7	69.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.7	0.7	0.6
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	5.50	5.49	5.48
HEATING VALUE*	336	340	349
SPECIFIC GRAVITY	0.893	0.893	0.894

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3853 SAMPLE 8592	INDEX 3854 SAMPLE 8593	INDEX 3855 SAMPLE 8594
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/62	05/31/62	05/31/61
SAMPLED	06/20/62	06/20/62	06/20/62
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3150	3150	3150
OPEN FLOW, MCFD	22000	22000	22000
COMPONENT, MOLE PCT			
METHANE	17.4	17.4	17.5
ETHANE	2.9	2.9	2.9
PROPANE	1.8	1.7	1.7
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	69.6	69.9	69.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	5.48	5.50	5.48
HEATING VALUE*	346	327	336
SPECIFIC GRAVITY	0.893	0.885	0.889

	INDEX 3856 SAMPLE 8748	INDEX 3857 SAMPLE 8749	INDEX 3858 SAMPLE 8790
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	NO. 24	NO. 3-18
LOCATION	SEC. 4, T27N, R17W	SEC. 4, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	05/31/61
SAMPLED	10/29/62	10/29/62	11/29/62
FORMATION	PENN-	PENN-	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7097
WELLHEAD PRESSURE,PSIG	1480	1480	3000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3100
COMPONENT, MOLE PCT			
METHANE	20.0	20.2	17.3
ETHANE	3.4	3.5	2.9
PROPANE	2.0	2.1	1.7
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	66.5	66.3	69.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	5.25	5.21	5.72
HEATING VALUE*	382	380	334
SPECIFIC GRAVITY	0.884	0.881	0.887

	INDEX 3859 SAMPLE 8791	INDEX 3860 SAMPLE 8792	INDEX 3861 SAMPLE 9165
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	NO. 24	TABLE MESA 28
LOCATION	SEC. 4, T27N, R17W	SEC. 4, T27N, R17W	SEC. 33, T28N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	11/01/62	11/01/62	NOT GIVEN
SAMPLED	11/29/62	11/29/62	11/13/63
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7208	7208	7208
WELLHEAD PRESSURE,PSIG	1500	1500	NOT GIVEN
OPEN FLOW, MCFD	800	800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	19.8	19.8	22.3
ETHANE	3.6	3.4	3.9
PROPANE	2.1	1.9	2.0
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	66.4	66.9	63.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.7	0.6
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.7
HELIUM	5.28	5.33	5.20
HEATING VALUE*	381	366	407
SPECIFIC GRAVITY	0.875	0.879	0.874

	INDEX 3862 SAMPLE 10230	INDEX 3863 SAMPLE 10231	INDEX 3864 SAMPLE 10232
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18,	3-18,
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	14.9	10.4	14.7
ETHANE	2.5	2.0	2.5
PROPANE	1.6	1.9	1.5
N-BUTANE	0.9	1.3	0.6
ISOBUTANE	0.1	0.9	0.2
N-PENTANE	0.2	1.1	0.1
ISOPENTANE	0.3	0.8	0.3
CYCLOPENTANE	TRACE	0.7	TRACE
HEXANES PLUS	0.2	2.4	0.2
NITROGEN	72.6	72.8	73.1
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.2	0.4
HELIUM	5.65	3.80	5.69
HEATING VALUE*	245	495	287
SPECIFIC GRAVITY	0.897	1.027	0.894

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3865 SAMPLE 10233	INDEX 3866 SAMPLE 10234	INDEX 3867 SAMPLE 10235
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18,	3-18, COMPRESSOR OUTLET
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	14.6	14.7	14.8
ETHANE	2.4	2.5	2.6
PROPANE	1.4	1.4	1.3
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.4	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	73.2	73.1	73.2
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	5.64	5.71	5.83
HEATING VALUE*	296	295	276
SPECIFIC GRAVITY	0.899	0.896	0.889

	INDEX 3868 SAMPLE 10236	INDEX 3869 SAMPLE 10237	INDEX 3870 SAMPLE 10238
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18,	3-18,
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	5000	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	14.6	14.8	15.0
ETHANE	2.3	2.5	2.4
PROPANE	1.2	1.4	1.3
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	73.5	73.1	73.2
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	5.88	5.60	5.77
HEATING VALUE*	271	289	275
SPECIFIC GRAVITY	0.891	0.896	0.211

	INDEX 3871 SAMPLE 10239	INDEX 3872 SAMPLE 10240	INDEX 3873 SAMPLE 10413
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA NO. 29
WELL NAME	3-18,	3-18,	SEC. 9, T27N, R17W
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	CONTINENTAL OIL CO.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	DRILL STEM TEST NO. 3
COMPLETED	05/31/61	05/31/61	02/21/66
SAMPLED	10/21/65	10/21/65	MISS-
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	580
GEOLOGIC PROVINCE CODE	580	580	7455
DEPTH, FEET	7100	7100	3100
WELLHEAD PRESSURE,PSIG	3363	3363	5000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	15.2	14.6	4.7
ETHANE	2.4	2.2	0.8
PROPANE	1.1	1.1	1.3
N-BUTANE	0.5	0.3	1.0
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	TRACE	0.6
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	1.0
NITROGEN	72.7	74.0	81.8
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	1.3
HELIUM	5.99	6.05	5.93
HEATING VALUE*	283	285	241
SPECIFIC GRAVITY	0.888	0.879	0.970

	INDEX 3874 SAMPLE 10414	INDEX 3875 SAMPLE 10419	INDEX 3876 SAMPLE 11911
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TABLE MESA NO. 29	TABLE MESA NO. 29	TABLE MESA NO. 29
LOCATION	SEC. 9, T27N, R17W	SEC. 9, T27N, R17W	SEC. 9, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	DRILL STEM TEST NO. 3	DRILL STEM TEST NO. 1	03/07/67
SAMPLED	02/21/66	02/07/66	05/07/69
FORMATION	MISS-	PENN-TABLE MESA	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7455	6979	7037
WELLHEAD PRESSURE,PSIG	3100	2805	NOT GIVEN
OPEN FLOW, MCFD	5000	440	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.1	12.2	13.5
ETHANE	0.8	2.3	2.5
PROPANE	1.1	1.4	2.0
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.5	0.2	0.4
N-PENTANE	0.6	0.4	0.4
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.5	0.5
NITROGEN	81.9	74.9	72.7
OXYGEN	0.1	0.0	0.1
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	0.2
HELIUM	4.3%	5.85	5.58
HEATING VALUE*	216	299	334
SPECIFIC GRAVITY	0.958	0.917	0.921

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3877 SAMPLE 11912	INDEX 3878 SAMPLE 11913	INDEX 3879 SAMPLE 9291
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TOCITO
WELL NAME	NO. 29	TABLE MESA NO. 18	NAVAJO "AL" NO. 1
LOCATION	SEC. 9, T27N, R17W	SEC. 3, T27N, R17W	SEC. 28, T26N, R18W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	02/25/66	05/25/61	NOT GIVEN
SAMPLED	05/07/69	05/07/69	04/12/64
FORMATION	MISS-	PENN-	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7461	7097	6215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3325
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1800
COMPONENT, MOLE PCT			
METHANE	5.2	16.0	67.1
ETHANE	0.9	3.2	10.8
PROPANE	1.1	2.4	6.6
N-BUTANE	0.6	0.9	4.5
ISOBUTANE	0.6	0.8	1.8
N-PENTANE	0.4	0.5	2.2
ISOPENTANE	0.1	0.4	TRACE
CYCLOPENTANE	0.1	0.3	0.5
HEXANES PLUS	0.3	0.8	2.2
NITROGEN	82.4	68.4	3.3
OXYGEN	1.4	0.0	0.1
ARGON	0.8	0.7	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.3	0.6
HELIUM	4.67	5.31	0.23
HEATING VALUE*	178	430	1483
SPECIFIC GRAVITY	0.955	0.931	0.895

	INDEX 3880 SAMPLE 9393	INDEX 3881 SAMPLE 3641	INDEX 3882 SAMPLE 3687
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO	TOCITO DOME	TOCITO DOME
WELL NAME	NAVAJO "AL" TRIBAL NO. 2	TOCITO NO. 1	TOCITO NO. 1
LOCATION	SEC. 28, T26N, R18W	SEC. 17, T26N, R18W	SEC. 17, T26N, R18W
OWNER	TEXACO INC.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/12/64	05/25/43	10/30/43
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-ORAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2505
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	69.8	2.6	2.0
ETHANE	11.7	0.8	0.3
PROPANE	6.3	---	---
N-BUTANE	2.9	---	---
ISOBUTANE	1.5	---	---
N-PENTANE	0.8	---	---
ISOPENTANE	1.1	---	---
CYCLOPENTANE	0.4	---	---
HEXANES PLUS	1.3	---	---
NITROGEN	3.1	89.0	90.2
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	0.3	0.2
HELIUM	0.15	7.27	7.06
HEATING VALUE*	1391	41	26
SPECIFIC GRAVITY	0.839	0.898	0.902

	INDEX 3883 SAMPLE 8907	INDEX 3884 SAMPLE 9321	INDEX 3885 SAMPLE 9669
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	TOCITO DOME	TOCITO DOME
WELL NAME	NAVAJO TRIBAL N NO. 1	NAVAJO AL NO. 1	NAVAJO TRIBAL 3-N
LOCATION	SEC. 17, T26N, R18W	SEC. 28, T26N, R18W	SEC. 17, T26N, R18W
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	DRILL STEM TEST	10/12/64
SAMPLED	03/21/63	04/29/64	12/17/64
FORMATION	MISS-	NOT GIVEN	PENN-D
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6634	NOT GIVEN	6253
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2602
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5120
COMPONENT, MOLE PCT			
METHANE	0.8	0.9	79.9
ETHANE	0.1	0.0	7.4
PROPANE	0.2	0.2	2.3
N-BUTANE	TRACE	0.0	0.4
ISOBUTANE	TRACE	0.0	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	90.0	90.0	7.9
OXYGEN	0.0	0.0	0.3
ARGON	0.9	1.0	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	TRACE	0.8
HELIUM	6.56	7.81	0.51
HEATING VALUE*	21	15	1030
SPECIFIC GRAVITY	0.924	0.903	0.668

	INDEX 3886 SAMPLE 15122	INDEX 3887 SAMPLE 12189	INDEX 3888 SAMPLE 11830
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	UNDESIGNATED	UNDESIGNATED GALLUP
WELL NAME	NAVAJO-TOCITO NO. 3	ALLEN NO. 1	L. C. KELLY NO. 3
LOCATION	SEC. 9, T26N, R18W	SEC. 12, T26N, R12W	SEC. 3, T30N, R12W
OWNER	MOBIL OIL CORP.	THOMAS A. DUGAN	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	12/12/69	02/07/69
SAMPLED	10/06/77	02/10/70	04/18/69
FORMATION	PENN-D	CRET-FRUITLAND	CRET-GALLUP
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6414	1156	5996
WELLHEAD PRESSURE,PSIG	NOT GIVEN	299	1136
OPEN FLOW, MCFD	NOT GIVEN	2135	7027
COMPONENT, MOLE PCT			
METHANE	60.0	98.5	80.9
ETHANE	5.8	0.5	11.2
PROPANE	1.9	0.1	4.3
N-BUTANE	0.5	0.0	1.1
ISOBUTANE	0.2	0.0	0.6
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	25.9	0.8	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.3	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	TRACE	0.5
HELIUM	1.47	0.01	0.04
HEATING VALUE*	811	1010	1215
SPECIFIC GRAVITY	0.762	0.561	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3889 SAMPLE 10901	INDEX 3890 SAMPLE 1998	INDEX 3891 SAMPLE 1999
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UNNAMED	UTE DOME	UTE DOME
WELL NAME	SHIPROCK NO. 5	MIDWEST NO. 1	MIDWEST NO. 2
LOCATION	SEC. 14, T32N, R18W	SEC. 36, T32N, R14W	SEC. 36, T32N, R14W
OWNER	THOMAS A. DUGAN	MIDWEST REFINING CO.	MIDWEST REFINING CO.
COMPLETED	03/02/67	10/22/21	06/30/22
SAMPLED	03/10/67	06/02/30	06/02/30
FORMATION	CRET-GALLUP	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	380	2190	2365
WELLHEAD PRESSURE, PSIG	166	730	730
OPEN FLOW, MCFD	1200	7000	14000
COMPONENT, MOLE PCT			
METHANE	92.6	84.1	90.8
ETHANE	1.1	15.0	8.2
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.4	0.4	0.2
OXYGEN	0.2	0.2	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	4.7	0.3	0.4
HELIUM	0.01	0.04	0.08
HEATING VALUE*	958	1121	1067
SPECIFIC GRAVITY	0.613	0.634	0.602

	INDEX 3892 SAMPLE 4619	INDEX 3893 SAMPLE 4621	INDEX 3894 SAMPLE 4622
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE DOME
WELL NAME	UTE NO. 2	UTE NO. 5	P&R NO. 6
LOCATION	SEC. 36, T32N, R14W	SEC. 35, T32N, R14W	SEC. 1, T31N, R14W
OWNER	STANOLIND GAS & OIL CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	04/23/23	NOT GIVEN	04/23/23
SAMPLED	11/11/48	11/11/48	11/11/48
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2340	2232	2160
WELLHEAD PRESSURE, PSIG	170	112	NOT GIVEN
OPEN FLOW, MCFD	1525	2355	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	75.9	79.8
ETHANE	19.9	23.0	17.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	0.4	1.7
OXYGEN	0.3	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.5
HELIUM	0.08	0.05	0.08
HEATING VALUE*	1155	1181	1126
SPECIFIC GRAVITY	0.660	0.676	0.655

	INDEX 3895 SAMPLE 6606	INDEX 3896 SAMPLE 6607	INDEX 3897 SAMPLE 6608
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE DOME
WELL NAME	UTE MOUNTAIN TRIBAL D NO. 1	UTE MOUNTAIN TRIBAL D NO. 1	UTE MOUNTAIN TRIBAL D NO. 1
LOCATION	SEC. 10, T31N, R14W	SEC. 10, T31N, R14W	SEC. 10, T31N, R14W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/31/58	05/31/58	05/30/58
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	8694	8248	8762
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	10400	9600	8150
COMPONENT, MOLE PCT			
METHANE	65.0	67.3	64.7
ETHANE	0.5	0.5	0.5
PROPANE	0.0	0.0	0.0
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.7	1.7	1.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	1.3	1.5	1.3
CARBON DIOXIDE	30.9	28.5	31.2
HELIUM	0.30	0.20	0.30
HEATING VALUE*	688	713	685
SPECIFIC GRAVITY	0.878	0.856	0.880

	INDEX 3898 SAMPLE 10526	INDEX 3899 SAMPLE 13504	INDEX 3900 SAMPLE 1147
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE RESERVATION
WELL NAME	UTE MOUNTAIN TRIBAL-K NO. 1	MOUNTAIN UTE G.U."E"NO. 1	NO. 1
LOCATION	SEC. 33, T32N, R14W	SEC. 10, T31N, R14W	SEC. 16, T32N, R14W
OWNER	PAN AMERICAN PETROLEUM CORP.	AMOCO PRODUCTION CO.	GYPSY OIL CO.
COMPLETED	DRILL STEM TEST NO. 6	10/27/72	NOT GIVEN
SAMPLED	04/14/66	01/10/73	09/22/25
FORMATION	PENN-PARADOX	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	9141	2928	3171
WELLHEAD PRESSURE, PSIG	3372	717	NOT GIVEN
OPEN FLOW, MCFD	4200	3739	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.0	84.0	11.1
ETHANE	0.5	9.5	6.8
PROPANE	0.1	3.6	---
N-BUTANE	0.1	0.8	---
ISOBUTANE	0.1	0.6	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.5	0.5	80.5
OXYGEN	TRACE	0.0	1.5
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.1	0.0	---
CARBON DIOXIDE	33.7	0.4	0.1
HELIUM	0.41	0.04	0.00
HEATING VALUE*	665	1180	234
SPECIFIC GRAVITY	0.930	0.672	0.930

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3901 SAMPLE 9292	INDEX 3902 SAMPLE 4919	INDEX 3903 SAMPLE 4947
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WHITE HILLS W	WILDCAT	WILDCAT
WELL NAME	NAVAJO TRIBAL NO. 1-21	ALLISON UNIT NO. 1	LACKEY FEDERAL NO. 1
LOCATION	SEC. 35, T31N, R18W	SEC. 17, T32N, R6W	SEC. 26, T28N, R9W
OWNER	STANDARD OIL CO. OF TEXAS	AMERADA PETROLEUM CORP.	JAMES D. HANCOCK& CO., LTD.
COMPLETED	NOT GIVEN	10/--/50	04/03/50
SAMPLED	04/14/64	09/18/50	07/27/50
FORMATION	PENN-PARADOX	CRET-DAKOTA	CRET-POINT LOOKOUT
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6672	8070	4739
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	1075
OPEN FLOW, MCFD	NOT GIVEN	57	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.1	94.8	80.9
ETHANE	7.6	0.3	11.1
PROPANE	4.0	0.1	4.9
N-BUTANE	1.8	0.1	1.0
ISOBUTANE	1.2	0.0	0.6
N-PENTANE	0.9	0.1	0.2
ISOPENTANE	0.6	0.0	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	0.9	0.1	0.2
NITROGEN	2.6	0.4	0.4
OXYGEN	0.1	0.1	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.8	4.1	0.2
HELIUM	0.11	0.01	0.03
HEATING VALUE*	1264	977	1224
SPECIFIC GRAVITY	0.753	0.606	0.698

	INDEX 3904 SAMPLE 4953	INDEX 3905 SAMPLE 5058	INDEX 3906 SAMPLE 5062
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ALLISON UNIT NO. 1	CRANDELL NO. 1	ROBINSON NO. 1
LOCATION	SEC. 17, T32N, R6W	SEC. 19, T31N, R10W	SEC. 22, T28N, R13W
OWNER	AMERADA PETROLEUM CORP.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	10/--/50	04/29/51	03/25/51
SAMPLED	09/16/50	06/15/51	06/14/51
FORMATION	CRET-DAKOTA	CRET-U	CRET-U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	8001	4950	1620
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1075	294
OPEN FLOW, MCFD	6	4	108
COMPONENT, MOLE PCT			
METHANE	93.4	85.6	89.8
ETHANE	0.3	8.6	5.6
PROPANE	0.3	3.0	2.2
N-BUTANE	0.1	0.7	0.5
ISOBUTANE	0.0	0.6	0.3
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	3.3	0.4	0.7
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.5	0.1	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	968	1171	1112
SPECIFIC GRAVITY	0.601	0.661	0.631

	INDEX 3907 SAMPLE 5092	INDEX 3908 SAMPLE 5180	INDEX 3909 SAMPLE 5182
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HUERFANO UNIT NO. 2	NAVAJO NO. 1	NAVAJO NO. 1
LOCATION	SEC. 25, T26N, R10W	SEC. 34, T31N, R17W	SEC. 34, T31N, R17W
OWNER	STANOLIND OIL & GAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	--/--/50	NOT GIVEN	NOT GIVEN
SAMPLED	06/23/51	04/25/52	05/02/52
FORMATION	CRET-PICTURED CLIFFS	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2033	6874	7068
WELLHEAD PRESSURE,PSIG	645	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.5	82.9	83.0
ETHANE	2.3	7.3	6.8
PROPANE	0.2	3.7	2.7
N-BUTANE	0.1	1.1	0.6
ISOBUTANE	0.0	0.9	0.7
N-PENTANE	0.0	0.4	0.4
ISOPENTANE	0.0	0.6	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.2	2.1	1.9
OXYGEN	0.2	0.1	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	2.5
HELIUM	0.02	0.35	0.73
HEATING VALUE*	1014	1191	1117
SPECIFIC GRAVITY	0.589	0.693	0.684

	INDEX 3910 SAMPLE 5183	INDEX 3911 SAMPLE 5218	INDEX 3912 SAMPLE 5304
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO NO. 1	NAVAJO NO. 1	SCHWERDTFERGER
LOCATION	SEC. 34, T31N, R17W	SEC. 34, T31N, R17W	SEC. 27, T31N, R9W
OWNER	TEXAS CO.	TEXAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/08/52
SAMPLED	05/02/52	04/18/52	10/17/52
FORMATION	NOT GIVEN	NOT GIVEN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7061	6788	4644
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1067
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2013
COMPONENT, MOLE PCT			
METHANE	86.5	87.2	84.2
ETHANE	6.2	4.6	7.6
PROPANE	2.1	2.3	2.9
N-BUTANE	0.5	0.9	0.8
ISOBUTANE	0.2	0.8	0.4
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	3.1	2.7	2.1
OXYGEN	TRACE	0.1	0.4
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.8
HELIUM	0.76	0.26	0.01
HEATING VALUE*	1075	1124	1135
SPECIFIC GRAVITY	0.634	0.657	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3913 SAMPLE 5321		INDEX 3914 SAMPLE 5322		INDEX 3915 SAMPLE 5353	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO NO. 1		NAVAJO NO. 1		NAVAJO NO. 1, DST. NO. 3	
LOCATION	SEC. 5, T30N, R17W		SEC. 5, T30N, R17W		SEC. 27, T31N, R17W	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		THREE STATES NATURAL GAS CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	11/13/52		11/13/52		11/13/52	
FORMATION	PENN-HERMOSA		PENN-HERMOSA		PENN-DOLOMITE LIME	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	6779		6779		6912	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		1750	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		168	
COMPONENT, MOLE PCT						
METHANE	47.2	----------	49.8	----------	91.4	----------
ETHANE	5.0		4.9		3.1	
PROPANE	2.2	----------	2.3	----------	1.5	----------
N-BUTANE	0.9		0.8		0.6	
ISOBUTANE	0.5	----------	0.3	----------	0.5	----------
N-PENTANE	0.3		0.4		0.4	
ISOPENTANE	0.3	----------	0.2	----------	0.1	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.4	----------	0.3	----------	0.5	----------
NITROGEN	22.7		19.5		1.7	
OXYGEN	0.3	----------	0.1	----------	TRACE	----------
ARGON	0.3		0.3		0.0	
HYDROGEN	0.1	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	16.7	----------	17.9	----------	0.0	----------
HELIUM	3.16		3.09		0.09	
HEATING VALUE*	722	----------	734	----------	1108	----------
SPECIFIC GRAVITY	0.894		0.884		0.632	

	INDEX 3916 SAMPLE 5354		INDEX 3917 SAMPLE 5355		INDEX 3918 SAMPLE 5387	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO NO. 1, DST. NO. 5		NAVAJO NO. 1, DST. NO. 7		AZTEC NAVAJO NO. 1-A	
LOCATION	SEC. 27, T31N, R17W		SEC. 27, T31N, R17W		SEC. 36, T32N, R18W	
OWNER	THREE STATES NATURAL GAS CO.		THREE STATES NATURAL GAS CO.		SOUTHERN UNION GAS CO.	
COMPLETED	12/31/52		12/31/52		02/25/53	
SAMPLED	11/20/52		12/07/52		02/06/53	
FORMATION	PENN-HERMOSA		PENN-HERMOSA		PENN-PARADOX	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	7035		7278		7570	
WELLHEAD PRESSURE,PSIG	3500		820		NOT GIVEN	
OPEN FLOW, MCFD	280		15		179	
COMPONENT, MOLE PCT						
METHANE	74.8	----------	73.1	----------	86.5	----------
ETHANE	2.2		4.7		2.2	
PROPANE	1.1	----------	2.6	----------	1.0	----------
N-BUTANE	0.4		1.2		0.5	
ISOBUTANE	0.2	----------	0.8	----------	0.3	----------
N-PENTANE	0.3		0.6		0.3	
ISOPENTANE	TRACE	----------	0.4	----------	TRACE	----------
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.3	----------	0.6	----------	0.4	----------
NITROGEN	9.3		10.8		1.0	
OXYGEN	TRACE	----------	1.2	----------	TRACE	----------
ARGON	0.2		0.1		0.0	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.6	
CARBON DIOXIDE	10.8	----------	3.0	----------	6.9	----------
HELIUM	0.66		0.52		0.14	
HEATING VALUE*	477	----------	1041	----------	1010	----------
SPECIFIC GRAVITY	0.743		0.750		0.679	

	INDEX 3919 SAMPLE 5398		INDEX 3920 SAMPLE 5399		INDEX 3921 SAMPLE 5402	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO NO. 1-A		AZTEC NAVAJO NO. 1-A		AZTEC NAVAJO NO. 1-A	
LOCATION	SEC. 36, T32N, R18W		SEC.36,T32N,R18W		SEC. 36, T32N, R18W	
OWNER	SOUTHERN UNION GAS CO.		SOUTHERN UNION GAS CO.		SOUTHERN UNION GAS CO.	
COMPLETED	NOT GIVEN		02/25/53		02/25/53	
SAMPLED	02/19/53		02/20/53		02/22/53	
FORMATION	PENN-HERMOSA		PENN-PARADOX		PENN-PARADOX	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	7700		7662		7623	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		4000	
COMPONENT, MOLE PCT						
METHANE	15.6	----------	53.8	----------	81.1	----------
ETHANE	1.3		1.8		1.5	
PROPANE	0.3	----------	0.3	----------	3.6	----------
N-BUTANE	0.1		0.1		0.7	
ISOBUTANE	0.0	----------	0.0	----------	0.0	----------
N-PENTANE	0.0		0.0		0.5	
ISOPENTANE	0.2	----------	0.3	----------	0.0	----------
CYCLOPENTANE	0.0		TRACE		0.2	
HEXANES PLUS	0.0	----------	0.1	----------	0.8	----------
NITROGEN	68.6		36.2		0.4	
OXYGEN	2.3	----------	0.1	----------	TRACE	----------
ARGON	0.3		0.1		0.0	
HYDROGEN	11.5	----------	7.2	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		0.0		0.7	
CARBON DIOXIDE	0.0	----------	0.1	----------	10.3	----------
HELIUM	0.00		0.10		0.16	
HEATING VALUE*	238	----------	630	----------	1040	----------
SPECIFIC GRAVITY	0.813		0.694		0.747	

	INDEX 3922 SAMPLE 5438		INDEX 3923 SAMPLE 5439		INDEX 3924 SAMPLE 6031	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	AZTEC NAVAJO NO. 1-A		AZTEC NAVAJO NO. 1-A		CHACO UNIT NO. 2	
LOCATION	SEC. 36, T32N, R18W		SEC. 36, T32N, R18W		SEC. 16, T23N, R8W	
OWNER	SOUTHERN UNION GAS-TEXAS CO.		SOUTHERN UNION GAS-TEXAS CO.		GREAT WESTERN DRILLING CO.	
COMPLETED	02/25/53		02/25/53		05/19/55	
SAMPLED	03/13/53		03/31/53		03/06/56	
FORMATION	PENN-PARADOX		PENN-PARADOX		CRET-TOCITO	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	7604		7604		4910	
WELLHEAD PRESSURE,PSIG	3000		3000		NOT GIVEN	
OPEN FLOW, MCFD	13900		13900		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.3	----------	85.0	----------	75.9	----------
ETHANE	1.6		1.4		9.3	
PROPANE	0.6	----------	0.9	----------	6.5	----------
N-BUTANE	0.3		0.3		2.0	
ISOBUTANE	0.1	----------	0.1	----------	0.7	----------
N-PENTANE	0.1		0.1		0.4	
ISOPENTANE	0.1	----------	0.0	----------	0.6	----------
CYCLOPENTANE	TRACE		TRACE		0.2	
HEXANES PLUS	0.2	----------	0.2	----------	0.4	----------
NITROGEN	1.2		0.9		3.3	
OXYGEN	TRACE	----------	TRACE	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.3	----------	0.1	----------	TRACE	----------
HYDROGEN SULFIDE**	0.1		0.4		0.0	
CARBON DIOXIDE	5.1	----------	10.5	----------	0.3	----------
HELIUM	0.10		0.16		0.16	
HEATING VALUE*	988	----------	940	----------	1016	----------
SPECIFIC GRAVITY	0.634		0.691		0.754	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3925 SAMPLE 6032	INDEX 3926 SAMPLE 6306	INDEX 3927 SAMPLE 6465
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CHACO UNIT NO. 1	BLANCO 30-12 NO. 4-10	USG SEC. 19, NO. 17
LOCATION	SEC. 14, T23N, R9W	SEC. 10, T30N, R12W	SEC. 19, T29N, R16W
OWNER	GREAT WESTERN DRILLING CO.	NORTHWEST PRODUCTION CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	05/09/55	02/17/57	NOT GIVEN
SAMPLED	03/06/56	04/17/57	01/03/58
FORMATION	CRET-TOCITO	CRET-FRUITLAND	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4630	1816	6530
WELLHEAD PRESSURE,PSIG	NOT GIVEN	692	1340
OPEN FLOW, MCFD	NOT GIVEN	5946	5500
COMPONENT, MOLE PCT			
METHANE	73.2	88.8	5.2
ETHANE	10.1	5.0	0.7
PROPANE	7.7	2.9	1.6
N-BUTANE	2.1	0.6	0.8
ISOBUTANE	0.9	0.9	0.8
N-PENTANE	0.4	0.1	0.4
ISOPENTANE	0.7	0.2	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	3.8	1.0	80.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.5
HELIUM	0.12	0.02	8.20
HEATING VALUE*	1298	1138	192
SPECIFIC GRAVITY	0.779	0.644	0.923

	INDEX 3928 SAMPLE 6577	INDEX 3929 SAMPLE 6583	INDEX 3930 SAMPLE 6981
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	UTE MOUNTAIN TRIBAL O NO. 1	UTE MOUNTAIN TRIBAL D NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 10, T31N, R14W	SEC. 10, T31N, R14W	SEC. 1, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	04/21/59
SAMPLED	05/10/58	05/15/58	02/23/59
FORMATION	MISS-	MISS-	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	9322	9466	5937
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1141	7025	64
COMPONENT, MOLE PCT			
METHANE	8.7	8.7	66.4
ETHANE	0.1	0.1	5.8
PROPANE	0.0	0.2	3.0
N-BUTANE	0.1	0.0	1.2
ISOBUTANE	TRACE	0.0	0.8
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	TRACE	0.0	0.6
NITROGEN	2.4	2.4	18.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	88.0	88.0	TRACE
HELIUM	0.60	0.50	2.40
HEATING VALUE*	93	95	990
SPECIFIC GRAVITY	1.422	1.423	0.743

	INDEX 3931 SAMPLE 6986	INDEX 3932 SAMPLE 6990	INDEX 3933 SAMPLE 6994
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	HAMRAH NO. 1	HAMRAH NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 11, T29N, R17W	SEC. 11, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	SAN JUAN DRILLING CO.	SAN JUAN DRILLING CO.
COMPLETED	04/21/59	NOT GIVEN	NOT GIVEN
SAMPLED	03/01/59	03/04/59	03/09/59
FORMATION	PENN-PARADOX	NOT GIVEN	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6110	NOT GIVEN	6827
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	209	NOT GIVEN	25
COMPONENT, MOLE PCT			
METHANE	66.4	70.4	16.5
ETHANE	5.2	7.0	10.5
PROPANE	2.7	3.5	4.2
N-BUTANE	1.1	1.4	1.3
ISOBUTANE	0.9	1.0	1.1
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.3	0.6	0.2
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.7	0.9	0.5
NITROGEN	18.8	10.8	59.4
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.2	0.7
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.7	0.1
HELIUM	2.70	1.70	4.90
HEATING VALUE*	977	1115	600
SPECIFIC GRAVITY	0.739	0.765	0.942

	INDEX 3934 SAMPLE 6995	INDEX 3935 SAMPLE 6997	INDEX 3936 SAMPLE 7003
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	NAVAJO C NO. 1	HAMRAH NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W	SEC. 11, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	SAN JUAN DRILLING CO.
COMPLETED	04/21/59	04/21/59	NOT GIVEN
SAMPLED	03/08/59	03/13/59	03/14/59
FORMATION	PENN-PARADOX	PENN-PARADOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6287	6360	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	209	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.9	37.4	65.4
ETHANE	5.2	4.3	6.0
PROPANE	2.7	2.9	2.6
N-BUTANE	1.1	TRACE	0.8
ISOBUTANE	0.8	0.0	0.6
N-PENTANE	0.4	1.1	0.3
ISOPENTANE	0.3	2.2	0.1
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.7	0.5	0.5
NITROGEN	20.5	42.0	19.2
OXYGEN	0.0	0.1	0.0
ARGON	0.4	0.5	0.3
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	3.0	1.2
HELIUM	4.70	5.70	2.70
HEATING VALUE*	898	742	935
SPECIFIC GRAVITY	0.756	0.867	0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3937 SAMPLE 7004	INDEX 3938 SAMPLE 7005	INDEX 3939 SAMPLE 7010
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HAMRAH NO. 1	NAVAJO C NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 11, T29N, R17W	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W
OWNER	SAN JUAN DRILLING CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	04/21/59	04/21/59
SAMPLED	03/15/59	03/18/59	03/21/59
FORMATION	NOT GIVEN	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	6435	6585
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.2	59.1	1.6
ETHANE	8.9	6.5	TRACE
PROPANE	4.6	3.5	0.7
N-BUTANE	1.8	1.4	1.2
ISOBUTANE	1.3	1.0	0.8
N-PENTANE	0.5	0.5	0.4
ISOPENTANE	0.6	0.4	0.4
CYCLOPENTANE	0.2	0.3	0.2
HEXANES PLUS	0.7	0.9	0.6
NITROGEN	50.9	21.5	84.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.6	0.3	0.7
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.1	1.7
HELIUM	4.50	4.30	6.90
HEATING VALUE*	709	983	174
SPECIFIC GRAVITY	0.951	0.776	0.967

	INDEX 3940 SAMPLE 7013	INDEX 3941 SAMPLE 7020	INDEX 3942 SAMPLE 7025
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	RICLABITO NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 13, T30N, R21W	SEC. 1, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	CONTINENTAL OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/21/59	08/03/43	04/21/59
SAMPLED	03/29/59	04/07/59	04/18/59
FORMATION	MISS-	MISS-DEVO-OURAY	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6950	990	6366
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2925
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	9900
COMPONENT, MOLE PCT			
METHANE	11.8	22.9	37.0
ETHANE	0.8	1.4	4.2
PROPANE	0.3	0.5	2.7
N-BUTANE	0.4	0.2	1.1
ISOBUTANE	0.0	0.1	0.9
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.7	0.2	0.5
NITROGEN	40.8	66.4	42.3
OXYGEN	0.1	0.0	TRACE
ARGON	0.5	0.7	0.5
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	38.2	0.1	4.3
HELIUM	2.10	7.50	5.79
HEATING VALUE*	311	295	643
SPECIFIC GRAVITY	1.169	0.828	0.855

	INDEX 3943 SAMPLE 7026	INDEX 3944 SAMPLE 7038	INDEX 3945 SAMPLE 7079
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	NAVAJO C NO. 1	RICLABITO NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W	SEC. 25, T30N, R20W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PURE OIL CO.
COMPLETED	04/21/59	04/21/59	NOT GIVEN
SAMPLED	04/19/59	04/20/59	05/20/59
FORMATION	PENN-PARADOX	PENN-PARADOX	MISS-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6366	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3000	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8949	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.8	37.0	0.4
ETHANE	4.2	4.2	0.0
PROPANE	2.8	2.8	0.0
N-BUTANE	1.2	1.1	0.0
ISOBUTANE	0.9	0.8	0.0
N-PENTANE	0.4	0.4	0.0
ISOPENTANE	0.4	0.3	0.0
CYCLOPENTANE	0.2	0.1	0.0
HEXANES PLUS	0.6	0.4	0.0
NITROGEN	41.8	42.7	96.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.5	0.5	1.2
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.9	4.0	1.3
HELIUM	5.77	5.60	0.10
HEATING VALUE*	464	641	5
SPECIFIC GRAVITY	0.863	0.853	0.974

	INDEX 3946 SAMPLE 8071	INDEX 3947 SAMPLE 8102	INDEX 3948 SAMPLE 8910
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO E NO. 1	BRITISH AMERICAN NO. 1	NAVAJO TRIBAL N NO. 1
LOCATION	SEC. 15, T31N, R20W	SEC. 15, T31N, R20W	SEC. 17, T26N, R18W
OWNER	BRITISH AMERICAN OIL PROD.	BRITISH AMERICAN OIL PROD.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/13/61	07/26/61	04/03/63
FORMATION	PENN-BLUFF	MISS-	PENN-PARADOX L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5690	6810	6392
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1615	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5190
COMPONENT, MOLE PCT			
METHANE	86.9	18.4	77.6
ETHANE	5.2	1.2	8.0
PROPANE	2.7	0.9	3.4
N-BUTANE	1.0	0.2	1.3
ISOBUTANE	0.9	0.1	0.6
N-PENTANE	0.5	0.1	0.4
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.3
NITROGEN	1.5	56.5	6.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.7	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	19.2	0.8
HELIUM	0.20	6.60	0.48
HEATING VALUE*	1167	310	1131
SPECIFIC GRAVITY	0.673	0.977	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3949 SAMPLE 9045	INDEX 3950 SAMPLE 9050	INDEX 3951 SAMPLE 9055
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO TRIBAL 141 NO. 1	NAVAJO TRACT 24 NO. 1	NAVAJO 24 NO. 1
LOCATION	SEC. 34, T27N, R18W	SEC. 15, T31N, R18W	SEC. 15, T31N, R18W
OWNER	SINCLAIR OIL & GAS CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	08/23/63	12/16/63	12/16/63
SAMPLED	07/16/63	07/29/63	08/04/63
FORMATION	MISS-	PENN-DESERT CREEK	CRET--BARKER CREEK
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6812	NOT GIVEN	7324
WELLHEAD PRESSURE,PSIG	3170	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1006	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.1	90.5	88.5
ETHANE	0.1	4.1	4.7
PROPANE	TRACE	1.5	2.4
N-BUTANE	0.1	0.8	1.2
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	TRACE	0.4	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.7	0.3
NITROGEN	90.3	1.0	1.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	1.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	7.00	0.10	0.10
HEATING VALUE*	21	1133	1143
SPECIFIC GRAVITY	0.911	0.644	0.654

	INDEX 3952 SAMPLE 9063	INDEX 3953 SAMPLE 9571	INDEX 3954 SAMPLE 9841
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO 24 NO. 1	NAVAJO NO. 49	NAVAJO TRIBE AP-IX
LOCATION	SEC. 15, T31N, R18W	SEC. 23, T26N, R18W	SEC. 8, T30N, R18W
OWNER	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.	TEXACO INC.
COMPLETED	12/16/63	10/02/64	05/11/65
SAMPLED	08/08/63	09/30/64	04/07/65
FORMATION	PENN-	MISS-	PENN-ISMAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7585	8757	6390
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3005
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	13
COMPONENT, MOLE PCT			
METHANE	90.9	2.3	88.0
ETHANE	3.4	0.1	4.3
PROPANE	1.1	0.1	2.1
N-BUTANE	0.4	0.1	0.8
ISOBUTANE	0.3	TRACE	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.3	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	3.0	93.6	3.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.7	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.30	2.54	0.25
HEATING VALUE*	1052	37	1113
SPECIFIC GRAVITY	0.613	0.941	0.649

	INDEX 3955 SAMPLE 9881	INDEX 3956 SAMPLE 9893	INDEX 3957 SAMPLE 10093
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO AP 1-X	NAVAJO AP NO. 1-X	TABLE MESA NO. 1
LOCATION	SEC. 8, T30N, R18W	SEC. 8, T30N, R18W	SEC. 27, T28N, R17N
OWNER	TEXACO INC.	TEXACO INC.	SUNRAY DX OIL CO.
COMPLETED	DRILL STEM TEST	05/11/65	DRILL STEM TEST
SAMPLED	04/10/65	05/11/65	08/29/65
FORMATION	PENN-	PENN-	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6650	6680	7399
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	87.6	28.9
ETHANE	6.3	4.8	8.2
PROPANE	3.0	2.0	5.6
N-BUTANE	0.7	0.8	2.4
ISOBUTANE	0.6	0.7	1.4
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.2	0.2	1.1
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.8	0.5
NITROGEN	5.2	1.2	47.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.0	1.5
HELIUM	0.03	0.12	1.90
HEATING VALUE*	1100	1154	8070
SPECIFIC GRAVITY	0.670	0.672	0.960

	INDEX 3958 SAMPLE 10242	INDEX 3959 SAMPLE 10253	INDEX 3960 SAMPLE 10274
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	TABLE MESA NO. 2	NO. 1 NAVAJO-HUMBLE	TABLE MESA NO. 2
LOCATION	SEC. 27, T28N, R17W	SEC. 16, T25N, R19W	SEC. 27, T28N, R17W
OWNER	SUNRAY DX OIL CO.	CHAMPLIN PETROLEUM CO.	SUNRAY DX OIL CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	11/07/65
SAMPLED	10/22/65	10/30/65	11/08/65
FORMATION	PENN-TABLE MESA	DEVO-ANETH	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7291	6220	7295
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	111	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	21.6	2.5	22.9
ETHANE	3.3	0.5	6.1
PROPANE	1.7	0.6	4.8
N-BUTANE	0.5	0.5	2.4
ISOBUTANE	0.3	0.2	1.3
N-PENTANE	0.1	0.4	0.6
ISOPENTANE	0.2	0.2	1.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.6	0.6
NITROGEN	65.5	90.7	54.3
OXYGEN	0.2	0.1	0.0
ARGON	0.7	0.7	0.6
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.0	1.3
HELIUM	4.83	2.87	3.89
HEATING VALUE*	37600	1340	6970
SPECIFIC GRAVITY	0.878	0.970	0.964

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3961 SAMPLE 10275		INDEX 3962 SAMPLE 10292		INDEX 3963 SAMPLE 10320	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	TABLE MESA NO. 1		RAVEN NO. 1		TABLE MESA NO. 1	
LOCATION	SEC. 27, T28N, R17W		SEC. 6, T27N, R14W		SEC. 27, T28N, R17W	
OWNER	SUNRAY DX OIL CO.		THOMAS A. DUGAN		SUNRAY DX OIL CO.	
COMPLETED	09/18/65		10/23/65		09/18/65	
SAMPLED	11/08/65		11/26/65		12/09/65	
FORMATION	PENN-PARADOX		CRET-DAKOTA		PENN-PARADOX	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	7411		5470		7411	
WELLHEAD PRESSURE,PSIG	1100		1446		1100	
OPEN FLOW, MCFD	NOT GIVEN		1398		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	25.6		79.7		24.2	
ETHANE	8.7		8.4		7.7	
PROPANE	7.7		5.3		7.5	
N-BUTANE	4.1		1.7		4.7	
ISOBUTANE	2.3		0.7		2.2	
N-PENTANE	1.1		0.4		1.5	
ISOPENTANE	1.2		0.8		1.4	
CYCLOPENTANE	0.2		0.3		0.3	
HEXANES PLUS	0.8		0.5		1.3	
NITROGEN	43.1		1.4		42.4	
OXYGEN	0.2		TRACE		0.1	
ARGON	0.6		TRACE		0.6	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.0		0.7		3.0	
HELIUM	2.39		0.07		3.08	
HEATING VALUE*	9740		1264		1012	
SPECIFIC GRAVITY	1.033		0.739		1.063	

	INDEX 3964 SAMPLE 10321		INDEX 3965 SAMPLE 10431		INDEX 3966 SAMPLE 10469	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	TABLE MESA NO. 2		NAVAJO AW NO. 1		NAVAJO AW NO. 1	
LOCATION	SEC. 27, T28N, R17W		SEC. 7, T27N, R20W		SEC. 7, T27N, R20W	
OWNER	SUNRAY DX OIL CO.		TEXACO INC.		TEXACO INC.	
COMPLETED	11/07/65		NOT GIVEN		03/17/66	
SAMPLED	12/09/65		03/04/66		03/17/66	
FORMATION	PENN-PARADOX		PENN-		DEVO-	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	7295		5160		6020	
WELLHEAD PRESSURE,PSIG	1200		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	23.8		17.1		0.6	
ETHANE	6.3		2.1		0.0	
PROPANE	5.0		1.3		0.0	
N-BUTANE	2.3		0.5		0.0	
ISOBUTANE	1.1		0.4		0.0	
N-PENTANE	0.6		0.1		0.0	
ISOPENTANE	0.9		0.1		0.0	
CYCLOPENTANE	0.2		0.1		0.0	
HEXANES PLUS	0.6		0.2		0.0	
NITROGEN	53.2		72.0		90.5	
OXYGEN	0.1		0.0		0.0	
ARGON	0.6		0.7		1.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.6		0.2		0.1	
HELIUM	3.72		5.20		7.80	
HEATING VALUE*	7010		297		6	
SPECIFIC GRAVITY	0.960		0.885		0.905	

	INDEX 3967 SAMPLE 10746		INDEX 3968 SAMPLE 10968		INDEX 3969 SAMPLE 11152	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	SHIPROCK NO. 3		NAVAJO TRIBAL 141 NO. 1		NAVAJO I NO. 1	
LOCATION	SEC. 14, T30N, R18W		SEC. 34, T27N, R18W		SEC. 34, T24N, R20W	
OWNER	THOMAS A. DUGAN		SINCLAIR OIL & GAS CO.		KERR-MCGEE CORP.	
COMPLETED	NOT GIVEN		01/09/63		NOT GIVEN	
SAMPLED	10/14/66		05/25/67		10/05/67	
FORMATION	CRET-TOCITO		PENN-		CAMB-	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	370		6812		3902	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3537		648	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	92.4		1.3		0.6	
ETHANE	1.1		0.1		0.0	
PROPANE	TRACE		TRACE		TRACE	
N-BUTANE	0.0		0.1		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.1		0.0	
ISOPENTANE	0.0		0.1		0.0	
CYCLOPENTANE	0.0		TRACE		0.0	
HEXANES PLUS	0.0		0.1		0.0	
NITROGEN	1.1		90.1		92.9	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		1.0		0.7	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	5.4		0.1		0.3	
HELIUM	TRACE		7.07		5.50	
HEATING VALUE*	956		32		6	
SPECIFIC GRAVITY	0.617		0.915		0.924	

	INDEX 3970 SAMPLE 11291		INDEX 3971 SAMPLE 11910		INDEX 3972 SAMPLE 13125	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO TRIBAL AD NO. 1		NAVAJO RR NO. 1		ASHCROFT NO. 1	
LOCATION	SEC. 13, T30N, R21W		SEC. 25, T26N, R20W		SEC. 26, T23N, R12W	
OWNER	P&M AMERICAN PETROLEUM CORP.		GULF OIL CO.		APACHE CORP.	
COMPLETED	12/05/67		DRILL STEM TEST		NOT GIVEN	
SAMPLED	02/16/68		06/05/69		12/22/71	
FORMATION	PERM-CUTLER		MISS-LIMESTONE		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	1468		6600		4547	
WELLHEAD PRESSURE,PSIG	710		2615		NOT GIVEN	
OPEN FLOW, MCFD	3620		64		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	82.8		5.3		46.7	
ETHANE	4.9		0.6		23.0	
PROPANE	1.8		0.6		19.4	
N-BUTANE	0.5		0.4		3.9	
ISOBUTANE	0.4		0.2		3.3	
N-PENTANE	0.1		0.3		0.2	
ISOPENTANE	TRACE		TRACE		2.1	
CYCLOPENTANE	TRACE		0.1		0.3	
HEXANES PLUS	0.1		0.3		0.8	
NITROGEN	9.0		87.4		0.0	
OXYGEN	0.1		1.0		TRACE	
ARGON	0.1		0.8		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.3	
HELIUM	0.52		2.55		TRACE	
HEATING VALUE*	1003		112		1781	
SPECIFIC GRAVITY	0.668		0.956		1.044	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3973 SAMPLE 9254	INDEX 3974 SAMPLE 1414	INDEX 3975 SAMPLE 1547
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SANDOVAL	TORRANCE	TORRANCE
FIELD	NACIMIENTO	ESTANCIA VALLEY	ESTANCIA VALLEY
WELL NAME	OIL TEST	PACE NO. 1	PACE NO. 1
LOCATION	SEC. 1, T16N, R1W	NOT GIVEN	SEC. 12, T6N, R7E
OWNER	ZIA PUEBLOS	E. PACE HEIRS	NOT GIVEN
COMPLETED	10/--/26	NOT GIVEN	NOT GIVEN
SAMPLED	03/14/64	07/29/27	11/25/27
FORMATION	NOT GIVEN	PENN-	CAMB-
GEOLOGIC PROVINCE CODE	580	460	460
DEPTH, FEET	NOT GIVEN	1640	1640
WELLHEAD PRESSURE,PSIG	225	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	790	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	0.1	0.0	0.0
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	11.8	1.6	1.0
OXYGEN	0.4	0.0	0.0
ARGON	0.2	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	86.4	98.4	99.0
HELIUM	1.09	0.04	0.03
HEATING VALUE*	2	0	0
SPECIFIC GRAVITY	1.445	1.520	1.523

	INDEX 3976 SAMPLE 2247	INDEX 3977 SAMPLE 2246	INDEX 3978 SAMPLE 2641
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	TORRANCE	UNION	UNION
FIELD	TORRANCE	NOT GIVEN	NOT GIVEN
WELL NAME	J. B. WITT TEXT	GAS SEEPAGE	GAS SEEPAGE
LOCATION	SEC. 12, T7N, R7E	SEC. 19, T23N, R32E	SEC. 17, T23N, R34E
OWNER	SINCO OIL CO.	NOT GIVEN	H. C. GILLILAND
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/01/30	12/04/30	09/04/33
FORMATION	PENN-MAGDALENA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	460	445	445
DEPTH, FEET	1293	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	440	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	250	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	88.0	51.2
ETHANE	0.0	0.0	9.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	9.0	30.8
OXYGEN	0.0	1.3	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	97.4	1.7	7.4
HELIUM	0.08	0.00	0.00
HEATING VALUE*	0	891	696
SPECIFIC GRAVITY	1.510	0.615	0.807

	INDEX 3979 SAMPLE 2661	INDEX 3980 SAMPLE 2670	INDEX 3981 SAMPLE 2698
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	UNION	UNION	UNION
FIELD	NOT GIVEN	NOT GIVEN	SIERRA GRANDE
WELL NAME	GAS SEEPAGE	GAS SEEPAGE	ROGERS NO. 1
LOCATION	SEC. 6, T22N, R34E	SEC. 6, T22N, R34E	SEC. 4, T29N, R29E
OWNER	W. E. FRENCH	W. E. FRENCH	SIERRA GRANDE OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/13/33	NOT GIVEN	04/24/35
FORMATION	NOT GIVEN	NOT GIVEN	TRIA-SANTA ROSA
GEOLOGIC PROVINCE CODE	445	445	445
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1188
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	72.1	0.0
ETHANE	4.1	4.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.1	12.9	1.2
OXYGEN	2.6	2.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.5	8.5	98.4
HELIUM	0.00	0.02	0.00
HEATING VALUE*	840	802	0
SPECIFIC GRAVITY	0.698	0.724	1.521

	INDEX 3982 SAMPLE 9186	INDEX 3983 SAMPLE 9101	INDEX 3984 SAMPLE 9106
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	VALENCIA	VALENCIA	VALENCIA
FIELD	COMANCHE DRAW	NOT GIVEN	NOT GIVEN
WELL NAME	SPRING	NOT GIVEN	NOT GIVEN
LOCATION	SEC. 35, T6N, R3W	SEC. 12, T9N, R5W	SEC. 12, T9N, R5W
OWNER	USGS QUALITY OF WATER BR.	U.S.BUREAU OF INDIAN AFFAIRS	U.S.BUREAU OF INDIAN AFFAIRS
COMPLETED	NOT GIVEN	NOT GIVEN	09/27/63
SAMPLED	11/30/63	10/04/63	10/07/63
FORMATION	PENN-MADERA	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	1650	1665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	170
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	TRACE	0.0
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.4	44.1	48.0
OXYGEN	0.1	TRACE	1.6
ARGON	0.0	0.6	0.7
HYDROGEN	0.0	31.8	4.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.4	21.4	42.7
HELIUM	0.01	2.00	2.30
HEATING VALUE*	0	103	15
SPECIFIC GRAVITY	1.519	0.787	1.151

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3985 SAMPLE 9185	INDEX 3986 SAMPLE 9624	INDEX 3987 SAMPLE 12220
STATE	NEW MEXICO	NEW MEXICO	NEW YORK
COUNTY	VALENCIA	VALENCIA	ALLEGANY
FIELD	NOT GIVEN	NOT GIVEN	HILL E
WELL NAME	SPRING	INDIAN WATER WELL OF MESITA	ALLEN RAMSEY NO. 1
LOCATION	SEC. 15, T8N, R3W	SEC. 12, T9N, R5W	SCIO TOWNSHIP
OWNER	USGS, QUALITY OF WATER BR.	U.S. BUREAU OF INDIAN AFFAIR	PROFESSIONAL PETROLEUM EXPL.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	11/29/63	11/13/64	02/27/70
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	DEVO-CANEADEA
GEOLOGIC PROVINCE CODE	580	580	160
DEPTH, FEET	1300	1725	902
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8
COMPONENT, MOLE PCT			
METHANE	0.0	0.5	82.2
ETHANE	0.0	0.1	10.4
PROPANE	0.0	0.0	3.7
N-BUTANE	0.0	0.0	0.7
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	7.1	44.6	1.5
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.7	0.0
HYDROGEN	0.0	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	92.1	52.1	0.0
HELIUM	0.60	2.00	0.11
HEATING VALUE*	0	7	1169
SPECIFIC GRAVITY	1.480	1.244	0.670

	INDEX 3988 SAMPLE 12304	INDEX 3989 SAMPLE 12305	INDEX 3990 SAMPLE 9615
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	HILL E	HILL E	INDEPENDENCE LOT 67
WELL NAME	ALLEN RAMSEY NO. 1	ALLEN RAMSEY NO. 1	MOSES NO. 2171
LOCATION	SCIO TOWNSHIP	SCIO TOWNSHIP	INDEPENDENCE TWP.
OWNER	PROFESSIONAL PETROLEUM EXPL.	PROFESSIONAL PETROLEUM EXPL.	IROQUOIS GAS CORP.
COMPLETED	03/30/70	03/30/70	04/28/17
SAMPLED	06/17/70	06/17/70	10/14/64
FORMATION	NOT GIVEN	DEVO-ORISKANY	DEVO-U
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3849	788
WELLHEAD PRESSURE,PSIG	415	1360	39
OPEN FLOW, MCFD	46	7100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	84.1	84.9
ETHANE	11.1	11.2	8.9
PROPANE	2.7	2.9	3.2
N-BUTANE	0.5	0.5	1.0
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.1	0.3	0.4
OXYGEN	0.5	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.04	0.04	0.10
HEATING VALUE*	1140	1181	1195
SPECIFIC GRAVITY	0.663	0.664	0.674

	INDEX 3991 SAMPLE 9611	INDEX 3992 SAMPLE 14725	INDEX 3993 SAMPLE 15896
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	INDEPENDENT LOT 106	NEW ORISKANY	NOT GIVEN
WELL NAME	C. A. WILSON NO. 2304	BEERS NO. 1	BENTLEY 20614-C
LOCATION	INDEPENDENCE TWP.	LOT 30, BOLIVAR TOWNSHIP	TOWN OF GRANGER
OWNER	IROQUOIS GAS CORP.	THOMAS E. HUNGERFORD	COLUMBIA GAS TRANSMISSION
COMPLETED	05/31/40	07/01/76	01/24/79
SAMPLED	10/14/64	07/22/76	01/28/80
FORMATION	DEVO-ORISKANY	DEVO-TULLY	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4612	4200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1824	1130	NOT GIVEN
OPEN FLOW, MCFD	16000	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.5	81.2	79.1
ETHANE	5.6	12.1	13.3
PROPANE	0.4	4.0	4.4
N-BUTANE	TRACE	1.0	1.3
ISOBUTANE	0.1	0.4	0.6
N-PENTANE	TRACE	0.2	0.4
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.1	0.7	0.4
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1061	1213	1249
SPECIFIC GRAVITY	0.589	0.688	0.710

	INDEX 3994 SAMPLE 15897	INDEX 3995 SAMPLE 10243	INDEX 3996 SAMPLE 14312
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	NOT GIVEN	STATE LINE	WATER WELL
WELL NAME	BENTLEY 20614-T	LEE HARDER NO. 1	NO. 1
LOCATION	TOWN OF GRANGER	TOWN OF ALMA	BELMONT
OWNER	COLUMBIA GAS TRANSMISSION	CONSOLIDATED GAS SUPPLY CORP	N.Y. DEPT. TRANSPORTATION
COMPLETED	01/24/79	NOT GIVEN	NOT GIVEN
SAMPLED	01/28/80	10/21/65	04/02/75
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3050	4840	400
WELLHEAD PRESSURE,PSIG	NOT GIVEN	530	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.7	93.1	76.2
ETHANE	15.8	4.4	TRACE
PROPANE	7.0	0.7	TRACE
N-BUTANE	1.3	0.2	0.0
ISOBUTANE	0.7	0.1	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.0	0.9	21.7
OXYGEN	TRACE	0.0	1.4
ARGON	0.0	0.0	0.4
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1357	1064	772
SPECIFIC GRAVITY	0.761	0.601	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3997 SAMPLE 10773	INDEX 3998 SAMPLE 11577	INDEX 3999 SAMPLE 10252
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	CATTARAUGUS
FIELD	WILDCAT	WILDCAT	ALLEGANY STATE PARK
WELL NAME	LYTLE NO. 1	CLAIR NO. 1	LENA LOCKWOOD NO. 5
LOCATION	CANASERAGA QUADRANGLE	ALMA TOWNSHIP	NOT GIVEN
OWNER	GREAT LAKES GAS CORP.	QUAKER STATE OIL REF. CORP.	FELMONT OIL CORP.
COMPLETED	11/05/66	07/11/68	12/18/65
SAMPLED	11/05/66	07/08/68	10/26/65
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3486	4652	4279
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1160	1100
OPEN FLOW, MCFD	2	1700	8000
COMPONENT, MOLE PCT			
METHANE	84.0	87.5	84.1
ETHANE	10.8	9.6	10.2
PROPANE	2.6	1.8	2.9
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.2	0.0	0.5
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	1.4	0.3	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.03	0.14	0.04
HEATING VALUE*	1153	1122	1173
SPECIFIC GRAVITY	0.658	0.629	0.668

	INDEX 4000 SAMPLE 14407	INDEX 4001 SAMPLE 15207	INDEX 4002 SAMPLE 15906
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	COMBO	W-15	Q. S. NO. 3
LOCATION	OLEAN	NOT GIVEN	TOWN OF OLEAN
OWNER	THROPP OIL & GAS CO.	QUAKER STATE REFINING CORP.	BARNUM 100 DEVELOPMENT
COMPLETED	06/16/75	08/10/77	NOT GIVEN
SAMPLED	06/16/75	02/02/78	02/23/80
FORMATION	NOT GIVEN	DEVO-BRADFORD	DEVO-BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	40
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	40.7	44.0	71.2
ETHANE	14.8	25.4	17.1
PROPANE	6.4	17.6	7.3
N-BUTANE	4.1	5.8	1.7
ISOBUTANE	0.0	2.9	0.9
N-PENTANE	0.0	1.3	0.3
ISOPENTANE	20.8	1.6	0.4
CYCLOPENTANE	0.3	0.2	TRACE
HEXANES PLUS	0.0	0.8	0.1
NITROGEN	10.1	TRACE	0.4
OXYGEN	0.9	TRACE	TRACE
ARGON	0.3	0.0	TRACE
HYDROGEN	TRACE	0.3	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	TRACE	0.0
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1879	1824	1341
SPECIFIC GRAVITY	1.229	1.066	0.766

	INDEX 4003 SAMPLE 15945	INDEX 4004 SAMPLE 9960	INDEX 4005 SAMPLE 6280
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	BRADFORD	MCCLURE HOLLOW	NOT GIVEN
WELL NAME	QUINLAN E NO. 2	FRED SMITH NO. 1	SENECA NO. 1
LOCATION	TOWN OF OLEAN	ALLEGANY TOWNSHIP	COLD SPRING TWP.
OWNER	PENNZOIL CO.	THROPP OIL AND GAS CORP.	DEVONIAN GAS & OIL CO.
COMPLETED	01/20/80	05/01/65	03/05/57
SAMPLED	04/24/80	07/03/65	03/15/57
FORMATION	DEVO-	DEVO-ORISKANY	DEVO-CHEMUNG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3927	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1815	150
OPEN FLOW, MCFD	NOT GIVEN	2100	500
COMPONENT, MOLE PCT			
METHANE	79.8	82.9	88.2
ETHANE	12.7	10.6	6.6
PROPANE	4.3	3.7	2.1
N-BUTANE	1.0	0.9	0.4
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.2	0.8	1.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.02	0.05	0.19
HEATING VALUE*	1220	1196	1107
SPECIFIC GRAVITY	0.698	0.680	0.629

	INDEX 4006 SAMPLE 15168	INDEX 4007 SAMPLE 15844	INDEX 4008 SAMPLE 10826
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	NOT GIVEN	NOT GIVEN	OLEAN N POOL
WELL NAME	GAS SEEP IN LAKE	SEEP	FELMONT OIL NO. 1 FEE
LOCATION	ELLICOTTVILLE QUADRANGLE	TOWN OF OTTO	OLEAN QUADRANGLE
OWNER	BOB WESTFALL	WESLEY FARNER	FELMONT OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	11/21/66
SAMPLED	12/03/77	11/15/79	12/14/66
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	998
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	76.4	71.2	48.1
ETHANE	0.0	0.3	22.8
PROPANE	TRACE	TRACE	16.2
N-BUTANE	0.0	TRACE	5.6
ISOBUTANE	0.0	0.0	2.9
N-PENTANE	0.0	TRACE	1.6
ISOPENTANE	0.0	TRACE	0.6
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	TRACE	0.9
NITROGEN	2.0	27.9	0.7
OXYGEN	1.0	TRACE	0.0
ARGON	0.1	0.5	0.0
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	20.6	0.2	0.0
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	774	727	1751
SPECIFIC GRAVITY	0.770	0.677	1.028

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4009 SAMPLE 488	INDEX 4010 SAMPLE 15842	INDEX 4011 SAMPLE 15843
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	POLAR	UTLEY BROOK	UTLEY BROOK
WELL NAME	WAITE NO. 1	ZOAR VALLEY NO. 1163A	ZOAR VALLEY NO. 1163A
LOCATION	RANDOLPH TWP.	UTLEY BROOK	TOWN OF OTTO
OWNER	SUMMIT OIL & GAS CO.	FLINT OIL & GAS, INC.	FLINT OIL & GAS, INC.
COMPLETED	03/--/19	06/06/77	06/06/77
SAMPLED	09/17/20	11/15/79	11/15/79
FORMATION	NOT GIVEN	DEVO-SHALE	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	860	300	2700
WELLHEAD PRESSURE,PSIG	150	120	1000
OPEN FLOW, MCFD	10	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	83.6	91.5
ETHANE	0.0	10.1	2.3
PROPANE	---	3.1	0.2
N-BUTANE	---	0.7	0.1
ISOBUTANE	---	0.2	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.0	1.5	5.5
OXYGEN	0.0	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.3	TRACE
HELIUM	TRACE	0.06	0.18
HEATING VALUE*	0	1157	986
SPECIFIC GRAVITY	0.000	0.666	0.596

	INDEX 4012 SAMPLE 11457	INDEX 4013 SAMPLE 9042	INDEX 4014 SAMPLE 15682
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CAYUGA	CAYUGA
FIELD	WILDCAT	AUBURN	AUBURN W
WELL NAME	COUNTRY SIDE S&G NO. 1	O'HARA NO. 2	FEE NO. 1
LOCATION	NEW ALBION TOWNSHIP	NOT GIVEN	UNION SPRINGS TOWNSHIP
OWNER	DAN GERNOTT	MIDWEST OIL CORP.	N.Y. CONFERENCE OF 7 DAY ADV
COMPLETED	02/01/68	09/03/62	04/18/78
SAMPLED	09/16/68	07/10/63	06/29/79
FORMATION	SILU-MEDINA	SILU-MEDINA & ORDO-QUEENSTON	ORDO-QUEENSTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3172	1510	1950
WELLHEAD PRESSURE,PSIG	802	615	610
OPEN FLOW, MCFD	93	1500	441
COMPONENT, MOLE PCT			
METHANE	89.0	97.2	96.3
ETHANE	3.8	1.1	1.5
PROPANE	0.3	0.1	0.1
N-BUTANE	0.3	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	6.1	1.4	1.5
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.16	0.10	0.11
HEATING VALUE*	988	1007	1011
SPECIFIC GRAVITY	0.607	0.566	0.571

	INDEX 4015 SAMPLE 14459	INDEX 4016 SAMPLE 13505	INDEX 4017 SAMPLE 10880
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CAYUGA	CHAUTAUQUA	CHAUTAUQUA
FIELD	WATER WELL	BUSTI	BUSTI E
WELL NAME	SAM OSARO NO. 1	CLARENCE NELSON NO. 1	ANDERSON-COONS UNIT NO. 1
LOCATION	NOT GIVEN	JAMESTOWN USGS QUADRANGLE	JAMESTOWN QUADRANGLE
OWNER	SAM OSARO	KIN TEX DRILLING	GEORGE L. COONS
COMPLETED	08/--/75	10/02/68	01/18/67
SAMPLED	NOT GIVEN	01/15/73	03/01/67
FORMATION	SILU- LOCKPORT	DEVO-GLADE	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	390	661
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	215
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	73.1	78.6	86.4
ETHANE	0.1	3.0	7.9
PROPANE	0.0	0.5	1.8
N-BUTANE	0.0	TRACE	0.5
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	24.9	0.2	2.3
OXYGEN	0.1	0.0	0.0
ARGON	0.2	TRACE	0.1
HYDROGEN	0.0	0.0	0.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	17.6	0.2
HELIUM	1.37	0.04	0.17
HEATING VALUE*	742	863	1083
SPECIFIC GRAVITY	0.657	0.746	0.632

	INDEX 4018 SAMPLE 15559	INDEX 4019 SAMPLE 9792	INDEX 4020 SAMPLE 15523
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	BUSTI GAS	DEWITTVILLE	LAKE SHORE
WELL NAME	HOLLIDAY NO. 1	BOSWELL NO. 1	SHALLOW GAS SEEP
LOCATION	TOWN OF BUSTI	ELLERY TOWNSHIP	CASSADAGA LAKE
OWNER	[illegible] OIL & GAS	MINARD RUN OIL CO.	MARVIN LEWIS
COMPLETED	07/16/78	02/04/65	NOT GIVEN
SAMPLED	01/30/79	03/10/65	11/21/78
FORMATION	SILU-MEDINA	SILU-MEDINA	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4446	3515	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	970	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	580	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	93.0	60.6
ETHANE	3.5	2.8	1.4
PROPANE	0.8	0.3	0.2
N-BUTANE	0.3	TRACE	0.1
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	4.7	3.6	35.2
OXYGEN	TRACE	0.0	1.7
ARGON	TRACE	TRACE	0.4
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.13	0.13	0.06
HEATING VALUE*	1035	1007	653
SPECIFIC GRAVITY	0.618	0.587	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4021 SAMPLE 15562	INDEX 4022 SAMPLE 15588	INDEX 4023 SAMPLE 15637
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKE SHORE	LAKE SHORE	LAKE SHORE
WELL NAME	R. CASH UNIT NO. 1	ASSUMPTION UNIT NO. 104	ROBERTSON NO. 540
LOCATION	TOWN OF ARKWRIGHT	POMFRET TWP.	ARKWRIGHT TOWNSHIP
OWNER	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.
COMPLETED	09/05/74	10/22/74	05/03/79
SAMPLED	02/07/79	03/23/79	06/01/79
FORMATION	DEVO-SHALE	DEVO-SHALE	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2500	3180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	70	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	116	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.9	83.9	87.0
ETHANE	9.1	8.4	5.7
PROPANE	3.7	3.4	1.7
N-BUTANE	1.1	0.7	0.4
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.8	2.3	4.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.5	0.4	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.15	0.15	0.23
HEATING VALUE*	1173	1134	1060
SPECIFIC GRAVITY	0.675	0.658	0.629

	INDEX 4024 SAMPLE 15793	INDEX 4025 SAMPLE 15794	INDEX 4026 SAMPLE 15813
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKE SHORE	LAKE SHORE	LAKE SHORE
WELL NAME	MID MEADOWS UNIT 406	NOTARO UNIT 505	KNIGHT-KOFOED 31-013-14420
LOCATION	TOWN OF CHAUTAUQUA	TOWN OF CHAUTAUQUA	TOWN OF RIPLEY
OWNER	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.	J. M. RESOURCES
COMPLETED	05/10/77	05/20/77	10/02/79
SAMPLED	09/27/79	09/27/79	10/25/79
FORMATION	SILU-MEDINA	DEVO-SHALE	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3400	NOT GIVEN	2500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	145	730
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.3	86.0	91.0
ETHANE	3.2	6.4	3.4
PROPANE	0.4	2.7	0.6
N-BUTANE	0.1	0.7	0.2
ISOBUTANE	TRACE	0.3	0.1
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.6	2.7	4.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.15	0.17	0.15
HEATING VALUE*	1015	1110	1018
SPECIFIC GRAVITY	0.594	0.644	0.603

	INDEX 4027 SAMPLE 15686	INDEX 4028 SAMPLE 14857	INDEX 4029 SAMPLE 15635
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKESHORE	NOT GIVEN	NOT GIVEN
WELL NAME	MANCUSO NO. 1, 31-013-13209	CHAUTAUQUA 4 NO. 1	S. Z. PAM NO. 1 31-013-12717
LOCATION	CHARLOTTE TOWNSHIP	PANAMA QUADRANGLE	POMFRET TOWNSHIP
OWNER	DESERT GAS EXPLORATION	SEIS-EX, GEOPHYSICAL LTD.	GAILBERT EXPLORATIONS
COMPLETED	NOT GIVEN	11/03/76	05/22/77
SAMPLED	07/05/79	11/03/76	06/01/79
FORMATION	DEVO-SHALES	SILU-MEDINA	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1700	4237	1025
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1150	510
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	85.8	87.8	81.2
ETHANE	7.5	3.7	11.0
PROPANE	2.9	0.9	3.8
N-BUTANE	0.7	0.3	0.7
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.3	6.7	2.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.10	0.15	0.17
HEATING VALUE*	1122	1010	1167
SPECIFIC GRAVITY	0.648	0.623	0.678

	INDEX 4030 SAMPLE 15812	INDEX 4031 SAMPLE 14613	INDEX 4032 SAMPLE 15151
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	RIPLEY	WILDCAT	WILDCAT
WELL NAME	KNIGHT-KOFOED 31-013-14420	LEGERS BROTHERS NO. 1	SIMMONAL NO. 1
LOCATION	TOWN OF RIPLEY	NOT GIVEN	PANAMA (T)
OWNER	J. M. RESOURCES	EDGECLIFF RESOURCES, INC.	BOUNTY OIL & GAS CO.
COMPLETED	10/02/79	NOT GIVEN	10/26/77
SAMPLED	10/25/79	03/11/76	11/18/77
FORMATION	DEVO-SHALE	SILU-MEDINA	SILU-GRIMSBY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	460	3828	4366
WELLHEAD PRESSURE,PSIG	100	825	NOT GIVEN
OPEN FLOW, MCFD	3	50	73
COMPONENT, MOLE PCT			
METHANE	80.0	90.3	90.8
ETHANE	10.4	4.2	3.1
PROPANE	4.7	0.8	0.4
N-BUTANE	1.1	0.2	0.1
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.4	4.0	5.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.05	0.14	0.14
HEATING VALUE*	1189	1034	998
SPECIFIC GRAVITY	0.692	0.611	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4033 SAMPLE 15566	INDEX 4034 SAMPLE 15567	INDEX 4035 SAMPLE 8532
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHEMUNG
FIELD	WILDCAT	WILDCAT	VAN ETTEN
WELL NAME	MILLER NO. 1	MILLER NO. 1	N-833
LOCATION	TOWN OF KIANTONE	TOWN OF KIANTONE	NOT GIVEN
OWNER	SEIS-EX GEOPHYSICAL, LTD.	SEIS-EX GEOPHYSICAL, LTD.	NEW YORK STATE NAT. GAS CORP
COMPLETED	01/--/79	01/--/79	01/05/62
SAMPLED	02/14/79	02/14/79	04/24/62
FORMATION	DEVO-GLADE	SILU-MEDINA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	500	4500	3376
WELLHEAD PRESSURE,PSIG	380	NOT GIVEN	1360
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3355
COMPONENT, MOLE PCT			
METHANE	91.9	92.7	97.9
ETHANE	4.0	2.6	1.7
PROPANE	0.8	0.3	TRACE
N-BUTANE	0.2	TRACE	TRACE
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	3.0	4.1	0.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.11	0.08	0.04
HEATING VALUE*	1039	999	1022
SPECIFIC GRAVITY	0.603	0.589	0.562

	INDEX 4036 SAMPLE 10256	INDEX 4037 SAMPLE 13744	INDEX 4038 SAMPLE 15641
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHENANGO	DELAWARE	ERIE
FIELD	SMITHFIELD FLATS	WILDCAT	AKRON
WELL NAME	DECKER NO. 2	WEICKERT NO. 1	FEE NO. 1
LOCATION	WILBUR DECKER FARM	HOBART QUADRANGLE	NEWSTEAD TOWNSHIP
OWNER	GENEGANTSLET GAS & OIL CO.	ANSCHUTZ CORP.	AKRON CENTRAL SCHOOL
COMPLETED	01/01/64	DRILL STEM TEST	05/12/79
SAMPLED	10/28/65	10/08/73	06/08/79
FORMATION	SILU-DECKER	SILU-ONEIDA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2020	5350	800
WELLHEAD PRESSURE,PSIG	565	42	405
OPEN FLOW, MCFD	2500	160	1350
COMPONENT, MOLE PCT			
METHANE	97.3	97.9	85.6
ETHANE	1.8	1.5	8.0
PROPANE	0.2	0.1	1.9
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.3	0.3	3.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.06	0.03	0.23
HEATING VALUE*	1024	1022	1090
SPECIFIC GRAVITY	0.565	0.563	0.641

	INDEX 4039 SAMPLE 15841	INDEX 4040 SAMPLE 9534	INDEX 4041 SAMPLE 10228
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	BUFFALO	FOUR MILE LEVEL	GLENWOOD E
WELL NAME	FEE NO. 1	EELS NO. 1671	HANCHER NO. 1790
LOCATION	CHEEKTOWAGA	COLLINS TWP., RB	GOLDEN TOWNSHIP
OWNER	MOTHER OF DIVINE CHURCH	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.
COMPLETED	NOT GIVEN	06/13/27	03/08/62
SAMPLED	11/16/79	08/11/64	10/18/65
FORMATION	SILU-LOCKPORT	SILU-MEDINA, WHITE	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2341	2748
WELLHEAD PRESSURE,PSIG	NOT GIVEN	124	818
OPEN FLOW, MCFD	NOT GIVEN	1592	6200
COMPONENT, MOLE PCT			
METHANE	84.2	91.0	93.2
ETHANE	6.2	2.5	2.2
PROPANE	1.1	0.4	0.2
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	6.6	5.6	4.2
OXYGEN	0.7	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.21	0.21	0.17
HEATING VALUE*	1020	986	98900
SPECIFIC GRAVITY	0.642	0.596	0.584

	INDEX 4042 SAMPLE 372	INDEX 4043 SAMPLE 374	INDEX 4044 SAMPLE 375
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	LAWTONS	LAWTONS	LAWTONS
WELL NAME	SORMAN NO. 1 WELL NO. 514	DILLINGTON NO. 1 NO. 517	HEAVY NO. 1 WELL NO. 468
LOCATION	NOT GIVEN	20 MI SE HAMBURG	24 MI SE HAMBURG
OWNER	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.
COMPLETED	--/--/16	--/--/17	--/--/16
SAMPLED	04/22/20	06/22/20	06/22/20
FORMATION	SILU-MEDINA	SILU-MEDINA	-FLINT
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2450	2400	1550
WELLHEAD PRESSURE,PSIG	760	320	500
OPEN FLOW, MCFD	1400	2000	700
COMPONENT, MOLE PCT			
METHANE	94.7	85.7	75.5
ETHANE	1.9	1.0	23.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	10.0	0.6
OXYGEN	1.1	2.9	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.11	0.2	0.1
HELIUM	0.24	0.26	0.24
HEATING VALUE*	993	886	1179
SPECIFIC GRAVITY	0.578	0.61P	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4045 SAMPLE 376	INDEX 4046 SAMPLE 9533	INDEX 4047 SAMPLE 15939
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	LAWTONS	MARSHFIELD	NOT GIVEN
WELL NAME	HOUVER NO. 1 WELL NO. 526	DIBLASI NO. 669	NATURAL SEEP
LOCATION	25 MI SE HAMBURG	COLLINS TWP., R7	TOWN OF EDEN
OWNER	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.	BUREAU OF MINERAL RESOURCES
COMPLETED	--/--/16	01/11/23	NOT GIVEN
SAMPLED	06/22/20	08/11/64	04/08/80
FORMATION	-FLINT	DEVO-ONONDAGA	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1500	1840	NOT GIVEN
WELLHEAD PRESSURE,PSIG	500	245	NOT GIVEN
OPEN FLOW, MCFD	750	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	79.0	71.3
ETHANE	18.5	12.3	15.1
PROPANE	---	4.8	7.8
N-BUTANE	---	1.1	1.6
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	6.5	1.7	2.2
OXYGEN	2.7	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.7
HELIUM	0.20	0.15	0.02
HEATING VALUE*	1060	1221	1296
SPECIFIC GRAVITY	0.689	0.704	0.769

	INDEX 4048 SAMPLE 425	INDEX 4049 SAMPLE 15895	INDEX 4050 SAMPLE 13585
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	GENESEE	GENESEE	GENESEE
FIELD	ALDEN	INDIAN FALLS	WILDCAT
WELL NAME	EWELL NO. 7	KLOTZBACH	KERN UNIT NO. 1
LOCATION	TOWNSITE	TOWN OF ALABAMA	NOT GIVEN
OWNER	REPUBLIC LT., HT. & PR. CO.	JUD NOBLE & ASSOCIATES	JUD NOBLE + ASSOCIATES
COMPLETED	--/--/94	10/25/74	09/--/72
SAMPLED	09/07/20	01/30/80	04/23/73
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1300	940	720
WELLHEAD PRESSURE,PSIG	170	NOT GIVEN	360
OPEN FLOW, MCFD	200	NOT GIVEN	288
COMPONENT, MOLE PCT			
METHANE	87.7	85.3	84.6
ETHANE	9.5	8.4	8.5
PROPANE	---	2.0	2.2
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.5	3.1	3.2
OXYGEN	0.7	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	TRACE
HELIUM	0.18	0.28	0.22
HEATING VALUE*	1059	1099	1107
SPECIFIC GRAVITY	0.615	0.643	0.648

	INDEX 4051 SAMPLE 365	INDEX 4052 SAMPLE 367	INDEX 4053 SAMPLE 9197
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	LIVINGSTON	LIVINGSTON	LIVINGSTON
FIELD	CALEDONIA	CALEDONIA	LEICESTER
WELL NAME	MALOCK NO. 1	MCGOVERN NO. 1	PARNELL N-883
LOCATION	1 MI N CALEDONIA	1 MI N CALEDONIA	NOT GIVEN
OWNER	CALEDONIA NATURAL GAS CO.	CALEDONIA NATURAL GAS CO.	NEW YORK STATE NAT. GAS CORP
COMPLETED	--/--/00	--/--/01	08/05/63
SAMPLED	06/19/20	06/19/20	10/16/63
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1180	1090	1964
WELLHEAD PRESSURE,PSIG	60	80	550
OPEN FLOW, MCFD	400	350	582
COMPONENT, MOLE PCT			
METHANE	0.0	75.2	85.6
ETHANE	0.0	6.4	6.9
PROPANE	---	---	1.5
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	16.0	4.8
OXYGEN	0.0	1.9	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.18	0.24	0.20
HEATING VALUE*	0	876	1061
SPECIFIC GRAVITY	0.000	0.662	0.638

	INDEX 4054 SAMPLE 15808	INDEX 4055 SAMPLE 9811	INDEX 4056 SAMPLE 10254
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	LIVINGSTON	MADISON	ONEIDA
FIELD	WILDCAT	HAMILTON	SANGER
WELL NAME	EVERMAN-FEE NO. 1	V. ALBIE NO. 1 N-939	DOUGLAS ELLIOT NO. 1
LOCATION	WEST SPARTA, N.Y.	MADISON TOWNSHIP	EASTERN DISTRICT
OWNER	H. EVERMAN	NEW YORK STATE NAT. GAS CORP	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	NOT GIVEN	12/29/64	05/19/59
SAMPLED	10/15/79	03/16/65	10/27/65
FORMATION	DEVO-HAMILTON	SILU-HERKIMER SAUQUOT&ONEI.	SILU-HERKIMER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	600	2133	1600
WELLHEAD PRESSURE,PSIG	150	710	645
OPEN FLOW, MCFD	NOT GIVEN	192	264000
COMPONENT, MOLE PCT			
METHANE	93.7	98.1	97.2
ETHANE	0.2	1.3	1.2
PROPANE	TRACE	0.0	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	3.4	0.5	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	TRACE	0.0
HELIUM	0.01	0.03	0.05
HEATING VALUE*	961	1017	1009
SPECIFIC GRAVITY	0.598	0.562	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4057 SAMPLE 9938	INDEX 4058 SAMPLE 9246	INDEX 4059 SAMPLE 10923
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONTARIO	ONTARIO	ONTARIO
FIELD	BLOOMFIELD E	CANANDAIGUA	NOT GIVEN
WELL NAME	C. MURPHY NO. 1	SANDERS NO. 1	ONDERDONK NO. 1
LOCATION	BLOOMFIELD TOWNSHIP	BRISTOL	SENECA TOWNSHIP
OWNER	BRADLEY PRODUCING CORP.	O. W. FRANCHOT & CO., INC.	OKLAHOMA FUEL & ENERGY CORP.
COMPLETED	02/08/62	09/14/60	02/20/67
SAMPLED	06/22/65	02/04/64	04/10/67
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2203	3038	2210
WELLHEAD PRESSURE,PSIG	490	410	600
OPEN FLOW, MCFD	1500	3500	1400
COMPONENT, MOLE PCT			
METHANE	89.9	93.0	95.7
ETHANE	5.6	3.0	1.2
PROPANE	0.6	0.5	0.1
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	3.0	3.1	2.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.20	0.30	0.16
HEATING VALUE*	1049	1009	997
SPECIFIC GRAVITY	0.610	0.585	0.575

	INDEX 4060 SAMPLE 420	INDEX 4061 SAMPLE 421	INDEX 4062 SAMPLE 428
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONTARIO	ONTARIO	ONTARIO
FIELD	ONTARIO	ONTARIO	ONTARIO
WELL NAME	MORROW NO. 1	HAYES NO. 1	HAYES NO. 2
LOCATION	BLK. 37, W BLOOMFIELD TWP.	BLK. 36, BRISTOL TWP.	BLK. 36, BRISTOL TWP.
OWNER	REPUBLIC LT., HT. & PR. CO.	REPUBLIC LT., HT. & PR. CO.	REPUBLIC LT., HT. & PR. CO.
COMPLETED	--/--/12	--/--/08	--/--/10
SAMPLED	09/07/20	09/07/20	09/07/20
FORMATION	SILU-MEDINA	SILU-MEDINA	DEVO-HAMILTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2088	2190	2005
WELLHEAD PRESSURE,PSIG	90	210	25
OPEN FLOW, MCFD	35	75	135
COMPONENT, MOLE PCT			
METHANE	91.2	93.4	82.8
ETHANE	6.3	3.9	3.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	1.8	13.0
OXYGEN	0.0	0.8	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.0	0.3
HELIUM	0.18	0.23	TRACE
HEATING VALUE*	1037	1016	901
SPECIFIC GRAVITY	0.597	0.585	0.634

	INDEX 4063 SAMPLE 429	INDEX 4064 SAMPLE 434	INDEX 4065 SAMPLE 436
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONTARIO	OSWEGO	OSWEGO
FIELD	ONTARIO	PULASKI	SANDY CREEK
WELL NAME	DAVIDSON NO. 1	PINE GROVE NO. 1	HOLLIS NO. 4
LOCATION	BLK. 76, BLOOMFIELD TWP.	RICHLAND TWP.,5 MI NWPULASKI	2 MI E SANDY CREEK
OWNER	REPUBLIC LT., HT. & PR. CO.	PULASKI GAS & OIL CO.	SANDY CREEK OIL & GAS CO.
COMPLETED	--/--/16	--/--/14	--/--/14
SAMPLED	09/07/20	09/10/20	09/10/20
FORMATION	DEVO-HAMILTON	ORDO-TRENTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	945	600	670
WELLHEAD PRESSURE,PSIG	34	50	5
OPEN FLOW, MCFD	700	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.3	96.9	97.3
ETHANE	27.0	2.1	1.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.9	0.1	1.2
OXYGEN	0.7	0.5	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	3.3	0.2	0.0
HELIUM	TRACE	0.10	0.14
HEATING VALUE*	1186	1019	1011
SPECIFIC GRAVITY	0.726	0.569	0.566

	INDEX 4066 SAMPLE 14276	INDEX 4067 SAMPLE 2374	INDEX 4068 SAMPLE 2375
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	RENSSELAER	SCHUYLER	SCHUYLER
FIELD	NOT GIVEN	DUNDEE-WAYNE	DUNDEE-WAYNE
WELL NAME	JOHN BUONO WATER WELL	E. PULVER NO. 1	S. SPROUL NO. 1
LOCATION	8 MI TR 9, SCHODACK LANDING	NOT GIVEN	NOT GIVEN
OWNER	JOHN L. BUONO	BELMONT QUADRANGLE DRG. CORP	BELMONT QUADRANGEL DRG. CORP
COMPLETED	08/17/73	02/26/30	02/12/31
SAMPLED	02/21/75	08/14/31	08/14/31
FORMATION	ORDO-BLACK SHALE	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	100	160	160
DEPTH, FEET	287	2075	2038
WELLHEAD PRESSURE,PSIG	NOT GIVEN	700	720
OPEN FLOW, MCFD	NOT GIVEN	5500	9500
COMPONENT, MOLE PCT			
METHANE	82.8	90.8	89.3
ETHANE	TRACE	6.5	8.3
PROPANE	TRACE	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	16.7	1.7	1.9
OXYGEN	TRACE	0.4	0.3
ARGON	0.3	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.0	0.2
HELIUM	0.05	0.04	0.04
HEATING VALUE*	839	1036	1053
SPECIFIC GRAVITY	0.625	0.601	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4069 SAMPLE 15900	INDEX 4070 SAMPLE 2431	INDEX 4071 SAMPLE 2432
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	SCHUYLER	SCHUYLER	SCHUYLER
FIELD	NOT GIVEN	WAYNE	WAYNE
WELL NAME	PRATT NO. 20611-T	A. LENT NO. 1	A. LENT NO. 2
LOCATION	TOWN OF READING	NOT GIVEN	NOT GIVEN
OWNER	COLUMBIA GAS TRANSMISSION	BELMONT QUADRANGLE DRG. CORP	BELMONT QUADRANGLE DRG. CORP
COMPLETED	05/23/79	05/29/31	05/29/31
SAMPLED	02/08/80	10/23/31	10/23/31
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2300	1721	1721
WELLHEAD PRESSURE,PSIG	NOT GIVEN	705	705
OPEN FLOW, MCFD	NOT GIVEN	3500	3500
COMPONENT, MOLE PCT			
METHANE	97.1	95.0	90.5
ETHANE	1.9	2.1	2.3
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.8	2.5	6.8
OXYGEN	TRACE	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.04	0.05	0.03
HEATING VALUE*	1020	1000	958
SPECIFIC GRAVITY	0.568	0.578	0.597

	INDEX 4072 SAMPLE 10385	INDEX 4073 SAMPLE 9763	INDEX 4074 SAMPLE 14380
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	SENECA	SENECA	STEFEN
FIELD	ROSEHILL	WATERLOO	STONE HILL
WELL NAME	GARRETT NO. 2	G. CHRISTENSEN NO. 1	W. J. FULLER UNIT NO. 1
LOCATION	TOWN OF FAYETTE	FAYETTE TOWNSHIP	SEC. D, HASKINVILLE QUAD.
OWNER	CONSOLIDATED GAS SUPPLY CORP	NEW YORK STATE NAT. GAS CORP	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	10/29/62	01/12/65	08/01/73
SAMPLED	01/28/66	02/17/65	06/04/75
FORMATION	ORDO-QUEENSTON	ORDO-QUEENSTON	DEVO-HELDERBURG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1800	1747	3432
WELLHEAD PRESSURE,PSIG	640	410	1324
OPEN FLOW, MCFD	668000	219	12169
COMPONENT, MOLE PCT			
METHANE	96.4	95.5	84.0
ETHANE	1.2	1.3	11.0
PROPANE	0.2	0.1	3.3
N-BUTANE	0.0	TRACE	0.7
ISOBUTANE	0.0	TRACE	0.3
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	2.1	2.7	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.11	0.13	0.04
HEATING VALUE*	1003	9980	1185
SPECIFIC GRAVITY	0.571	0.575	0.667

	INDEX 4075 SAMPLE 13452	INDEX 4076 SAMPLE 15162	INDEX 4077 SAMPLE 10286
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	STEUBEN	STEUBEN	STEUBEN
FIELD	ADRIAN	CORNING N	HOWARD
WELL NAME	W. RAISH NO. 1	SARA CASS NO. 1	HANLEY & BIRD ROOSA NO. 2312
LOCATION	SEC. C, GREENWOOD QUAD.	CORNING QUADRANGLE	HOWARD TOWNSHIP, LOT 26
OWNER	ANDERSON OIL, LTD.	J.V.P. EXPLORATION	IROQUOIS GAS CORP.
COMPLETED	06/29/71	11/23/77	05/27/41
SAMPLED	10/12/72	11/23/77	11/12/65
FORMATION	DEVO-ONONDAGA	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4156	3620	3589
WELLHEAD PRESSURE,PSIG	1640	1728	280
OPEN FLOW, MCFD	29000	13300	880
COMPONENT, MOLE PCT			
METHANE	83.9	96.7	87.9
ETHANE	10.5	2.4	9.2
PROPANE	3.2	0.1	1.8
N-BUTANE	0.8	0.0	0.3
ISOBUTANE	0.6	0.0	0.1
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.5	0.6	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1190	1025	1125
SPECIFIC GRAVITY	0.673	0.570	0.630

	INDEX 4078 SAMPLE 10460	INDEX 4079 SAMPLE 427	INDEX 4080 SAMPLE 10734
STATE	NEW YORK	NEW YORK	NORTH CAROLINA
COUNTY	STEUBEN	YATES	BERTIE
FIELD	UNION W	BRANCHPORT	FARM POND
WELL NAME	HAMILTON WELL NO. 2063	EVANS NO. 1	GAS SEEP
LOCATION	LOT 67 WEST UNION TOWNSHIP	1/2 MI W BRANCHPORT	1/2 MI. W OF POWELLSVILLE
OWNER	IROQUOIS GAS CORP.	E. E. EVANS, SR.	L.E. DAILEY, JR.
COMPLETED	06/27/41	--/--/06	NOT GIVEN
SAMPLED	03/04/66	09/10/20	09/29/66
FORMATION	DEVO-ORISKANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	120
DEPTH, FEET	4967	800	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	65	NOT GIVEN
OPEN FLOW, MCFD	9300	100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	91.7	81.7
ETHANE	2.5	2.1	0.0
PROPANE	0.1	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.3	5.0	1.0
OXYGEN	0.0	1.0	0.0
ARGON	0.0	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.0	17.1
HELIUM	0.03	0.10	0.01
HEATING VALUE*	1030	967	828
SPECIFIC GRAVITY	0.568	0.590	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4081 SAMPLE 11125	INDEX 4082 SAMPLE 15936	INDEX 4083 SAMPLE 9051
STATE	NORTH CAROLINA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BERTIE	BILLINGS	BILLINGS
FIELD	FARM POND	BIG STICK W	SCORIA
WELL NAME	GAS SEEP	FEDERAL NO.A-24	NO. 8
LOCATION	1/2 MILE W. OF POWELLSVILLE	SEC. 24,T142N, R101W	SEC. 10, T139N, R101W
OWNER	L. E. DAILEY JR.	KOCH EXPLORATION CO.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	01/13/80	DRILL STEM TEST
SAMPLED	09/16/67	04/09/80	07/24/63
FORMATION	NOT GIVEN	MISS-FRYBURG	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	120	395	395
DEPTH, FEET	NOT GIVEN	9600	11901
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	2060
OPEN FLOW, MCFD	NOT GIVEN	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	45.6	77.0
ETHANE	0.0	20.8	14.0
PROPANE	TRACE	14.1	4.7
N-BUTANE	0.0	5.5	1.3
ISOBUTANE	0.0	2.4	0.7
N-PENTANE	0.0	1.1	0.4
ISOPENTANE	0.0	2.1	0.2
CYCLOPENTANE	0.0	0.2	TRACE
HEXANES PLUS	0.0	0.6	0.2
NITROGEN	4.1	0.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	2.8	0.0
CARBON DIOXIDE	32.0	4.0	1.0
HELIUM	0.04	0.01	0.10
HEATING VALUE*	646	1660	1256
SPECIFIC GRAVITY	0.884	1.058	0.730

	INDEX 4084 SAMPLE 5555	INDEX 4085 SAMPLE 10425	INDEX 4086 SAMPLE 10426
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BILLINGS	BOTTINEAU	BOTTINEAU
FIELD	WILDCAT	NEWBURG	NEWBURG
WELL NAME	HERMAN MAY NO. 1	ARNOLD NERMYR A. NO. 2	ROLLIN STAIRS TR-2 NO. 4
LOCATION	SEC. 9, T139N, R100W	NOT GIVEN	NOT GIVEN
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	09/23/53	06/10/59	11/09/58
SAMPLED	09/23/53	03/01/66	03/01/66
FORMATION	MISS-MADISON	TRIA-SPEARFISH	MISS-CHARLES
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	9403	3222	3311
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	48.4	11.8	27.6
ETHANE	21.7	1.5	20.8
PROPANE	14.8	35.2	18.8
N-BUTANE	5.3	12.5	7.6
ISOBUTANE	2.9	4.6	2.6
N-PENTANE	1.6	3.2	1.0
ISOPENTANE	1.0	2.4	2.9
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.8	2.5	0.6
NITROGEN	1.3	26.0	17.6
OXYGEN	TRACE	TRACE	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.0	0.0
HELIUM	0.01	0.04	0.06
HEATING VALUE*	1700	2015	1685
SPECIFIC GRAVITY	1.032	1.457	1.167

	INDEX 4087 SAMPLE 2560	INDEX 4088 SAMPLE 10567	INDEX 4089 SAMPLE 10565
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BOWMAN	BURKE	BURKE
FIELD	CEDAR CREEK	BLACK SLOUGH	LIGNITE
WELL NAME	GAS DEVELOPMENT CO. NO. 38	H. HERMANSON NO. 1-B	C. S. STAALESON NO. 1
LOCATION	SEC. 3, T130N, R107W	SEC. 14, T162N, R92W	SEC. 5, T162N, R91W
OWNER	GAS DEVELOPMENT CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/08/29	03/30/63	01/02/56
SAMPLED	09/27/32	05/09/66	05/09/66
FORMATION	CRET-EAGLE	MISS-RIVAL	MISS-MIDALE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1180	6300	6060
WELLHEAD PRESSURE,PSIG	430	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	540	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	65.9	46.6
ETHANE	0.0	14.3	44.3
PROPANE	---	7.1	6.2
N-BUTANE	---	2.8	0.9
ISOBUTANE	---	0.9	0.0
N-PENTANE	---	0.7	0.0
ISOPENTANE	---	1.1	0.0
CYCLOPENTANE	---	0.3	0.0
HEXANES PLUS	---	0.7	0.0
NITROGEN	3.2	3.2	1.3
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.5	0.0
CARBON DIOXIDE	0.0	2.4	0.5
HELIUM	0.05	0.03	0.01
HEATING VALUE*	976	1360	1457
SPECIFIC GRAVITY	0.569	0.849	0.860

	INDEX 4090 SAMPLE 14036	INDEX 4091 SAMPLE 14454	INDEX 4092 SAMPLE 14458
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BURKE	EMMONS	EMMONS
FIELD	STOVEVIEW	NOT GIVEN	NOT GIVEN
WELL NAME	HOLTE-BANK OF ND NO. 1	HUBER NO. 1	LOER NO. 1
LOCATION	SEC. 31, T161N, R94W	SEC. 2, T133N, R74W	SEC. 10, T133N, R75W
OWNER	H.L. HUNT/PHILLIPS PET CO.	KELSCH & DONLIN	KELSCH & DONLIN
COMPLETED	07/02/72	NOT GIVEN	NOT GIVEN
SAMPLED	06/18/74	NOT GIVEN	NOT GIVEN
FORMATION	DEVO-ORDO COMMINGLED	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	10714	NOT GIVEN	2276
WELLHEAD PRESSURE,PSIG	3650	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3[illegible]000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	85.2	86.4
ETHANE	4.7	0.1	0.1
PROPANE	1.8	TRACE	TRACE
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	6.8	13.4	12.2
OXYGEN	0.0	0.3	0.5
ARGON	0.4	0.2	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.5
HELIUM	0.37	0.05	0.04
HEATING VALUE*	937	865	877
SPECIFIC GRAVITY	0.629	0.620	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4093 SAMPLE 10465	INDEX 4094 SAMPLE 10466	INDEX 4095 SAMPLE 10467
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	MCKENZIE
FIELD	ANTELOPE	ANTELOPE	ANTELOPE
WELL NAME	ANTELOPE UNIT E NO. 1	MILDRED BANCROFT NO. 1	E-518, E. BRENNA TR-1 NO. 1
LOCATION	SEC. 32, T153N, R94W	SEC. 6, T152N, R94W	SEC. 1, T152N, R95W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	03/27/63	07/08/59	10/14/56
SAMPLED	03/15/66	03/15/66	03/15/66
FORMATION	SILU-	DEVO-SANISH	MISS-MADISON
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	11917	10241	8690
WELLHEAD PRESSURE,PSIG	1135	1045	1350
OPEN FLOW, MCFD	1023	1052	1585
COMPONENT, MOLE PCT			
METHANE	56.7	70.3	54.0
ETHANE	15.5	18.5	16.1
PROPANE	9.7	5.8	10.3
N-BUTANE	4.1	1.3	5.6
ISOBUTANE	3.3	0.6	2.3
N-PENTANE	2.7	0.3	1.9
ISOPENTANE	TRACE	0.1	1.5
CYCLOPENTANE	0.3	0.1	0.5
HEXANES PLUS	1.9	0.4	1.4
NITROGEN	5.0	1.9	2.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.7
CARBON DIOXIDE	0.7	0.7	2.5
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1577	1300	1616
SPECIFIC GRAVITY	0.972	0.767	1.011

	INDEX 4096 SAMPLE 10468	INDEX 4097 SAMPLE 10464	INDEX 4098 SAMPLE 16062
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	MCKENZIE
FIELD	ANTELOPE	CHARLSON	CHARLSON
WELL NAME	ANTELOPE UNIT C NO. 1	M.L. SLAATEN UNIT NO. 1	SILURIAN UNIT 5NO.1
LOCATION	SEC. 2, T152N, R95W	SEC. 8, T153N, R95W	SEC. 34,T154N, R95W
OWNER	AMERADA PETROLEUM CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	12/23/62	11/13/65	NOT GIVEN
SAMPLED	03/15/66	03/16/66	09/02/80
FORMATION	DEVO-	PENN-MINNELUSA	SILU-INTERLAKE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	10888	6974	11408
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2800	2500
OPEN FLOW, MCFD	776	24589	2000
COMPONENT, MOLE PCT			
METHANE	69.6	0.4	75.4
ETHANE	14.7	0.0	8.3
PROPANE	8.0	0.0	4.3
N-BUTANE	2.2	0.0	1.7
ISOBUTANE	1.5	0.0	1.2
N-PENTANE	0.7	0.0	0.6
ISOPENTANE	0.6	0.0	0.5
CYCLOPENTANE	0.3	0.0	0.1
HEXANES PLUS	0.6	0.0	0.4
NITROGEN	0.9	98.0	3.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	3.8
CARBON DIOXIDE	0.9	1.5	0.6
HELIUM	TRACE	0.06	0.05
HEATING VALUE*	1398	4	1217
SPECIFIC GRAVITY	0.821	0.973	0.757

	INDEX 4099 SAMPLE 15634	INDEX 4100 SAMPLE 10534	INDEX 4101 SAMPLE 10948
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	MCKENZIE
FIELD	CHERRY CREEK	CLEAR CREEK	CLEAR CREEK
WELL NAME	PETERSON NO. 1	UNIT NO. 3	UNIT NO. 3
LOCATION	SEC. 10, T149N, R99W	SEC. 23, T152N, R96W	SEC. 23, T152N, R96W
OWNER	ALPAR RESOURCES INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	09/29/78	10/15/65	10/15/65
SAMPLED	05/29/79	04/19/66	04/24/67
FORMATION	ORDO-RED RIVER	PENN-MINNELUSA	PENN-MINNELUSA
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	14034	7184	7184
WELLHEAD PRESSURE,PSIG	5000	2650	2100
OPEN FLOW, MCFD	7200	45000	2000
COMPONENT, MOLE PCT			
METHANE	83.0	0.5	0.4
ETHANE	7.1	0.1	0.0
PROPANE	2.0	0.2	TRACE
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.4	96.0	95.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	4.1	0.0	0.0
CARBON DIOXIDE	1.5	3.0	3.7
HELIUM	0.03	0.06	0.06
HEATING VALUE*	1114	12	4
SPECIFIC GRAVITY	0.682	0.982	0.986

	INDEX 4102 SAMPLE 6831	INDEX 4103 SAMPLE 15619	INDEX 4104 SAMPLE 15623
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	RENVILLE	RENVILLE
FIELD	NOT GIVEN	NEWPORTE	NEWPORTE
WELL NAME	SIGNALNESS NO. 1	MOTT NO. 32-3	LARSON NO. 23X-9
LOCATION	SEC. 2, T150N, R96W	NOT GIVEN	NOT GIVEN
OWNER	CALVERT DRILLING CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	05/26/58	09/01/78	06/01/78
SAMPLED	10/09/58	05/09/79	05/09/79
FORMATION	MISS-MADISON	CAMB-DEADWOOD	CAMB-DEADWOOD
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	9386	9146	9574
WELLHEAD PRESSURE,PSIG	1100	NOT GIVEN	600
OPEN FLOW, MCFD	36	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.3	28.4	20.3
ETHANE	14.9	11.5	6.2
PROPANE	5.8	7.8	2.9
N-BUTANE	1.6	2.9	1.3
ISOBUTANE	0.9	1.0	0.4
N-PENTANE	0.6	0.9	0.4
ISOPENTANE	0.5	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.5	0.2
NITROGEN	0.9	45.3	67.0
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	0.3	0.4
HYDROGEN	TRACE	TRACE	0.4
HYDROGEN SULFIDE**	5.9	0.0	0.0
CARBON DIOXIDE	2.9	0.7	0.1
HELIUM	0.02	0.07	0.17
HEATING VALUE*	1272	913	487
SPECIFIC GRAVITY	0.827	0.983	0.936

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4105 SAMPLE 15624	INDEX 4106 SAMPLE 5068	INDEX 4107 SAMPLE 5089
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	RENVILLE	WILLIAMS	WILLIAMS
FIELD	NEWPORTE	BEAVER LODGE	BEAVER LODGE
WELL NAME	QUERRE NO. 43-5	IVERSON NO. 1	CLARENCE IVERSON NO. 1
LOCATION	NOT GIVEN	SEC. 6, T155N, R95W	SEC. 6, T155N, R95W
OWNER	SHELL OIL CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	09/01/78	NOT GIVEN	07/15/51
SAMPLED	05/09/79	04/25/51	08/05/51
FORMATION	CAMB-DEADWOOD	DEVO-& SILU	DEVO-
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	9516	11630	10490
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	4690
OPEN FLOW, MCFD	NOT GIVEN	3800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	15.7	79.4	70.0
ETHANE	3.9	8.5	14.6
PROPANE	2.1	3.4	8.7
N-BUTANE	1.2	1.0	2.2
ISOBUTANE	0.4	0.6	1.3
N-PENTANE	0.6	0.5	0.6
ISOPENTANE	0.2	0.0	0.6
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.6
NITROGEN	74.4	5.6	1.3
OXYGEN	0.0	0.1	0.1
ARGON	0.3	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.6	0.0	0.6
HELIUM	0.17	0.07	0.01
HEATING VALUE*	391	1156	1370
SPECIFIC GRAVITY	0.958	0.705	0.805

	INDEX 4108 SAMPLE 10495	INDEX 4109 SAMPLE 10496	INDEX 4110 SAMPLE 10497
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	WILLIAMS	WILLIAMS	WILLIAMS
FIELD	BEAVER LODGE	BEAVER LODGE	BEAVER LODGE
WELL NAME	BLOU NO. 1	BLOU I-315	BLSU O-408
LOCATION	SEC. 2, T155N, R96W	SEC. 17, T156N, R95W	SEC. 2, T155N, R96W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	02/01/63	02/05/64	09/12/63
SAMPLED	03/01/66	03/01/66	03/01/66
FORMATION	ORDO-WINNIPEG	DEVO-	SILU-
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	13390	10650	11767
WELLHEAD PRESSURE,PSIG	4200	408	3455
OPEN FLOW, MCFD	11000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	58.7	80.6
ETHANE	3.0	19.4	7.3
PROPANE	1.4	13.0	2.8
N-BUTANE	0.5	4.1	0.9
ISOBUTANE	TRACE	1.8	0.6
N-PENTANE	0.2	0.7	0.3
ISOPENTANE	0.1	1.2	0.3
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	12.8	0.1	5.3
OXYGEN	0.0	0.1	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.0
CARBON DIOXIDE	2.9	0.3	0.5
HELIUM	0.20	0.01	0.09
HEATING VALUE*	926	1588	1113
SPECIFIC GRAVITY	0.683	0.924	0.691

	INDEX 4111 SAMPLE 10498	INDEX 4112 SAMPLE 10499	INDEX 4113 SAMPLE 478
STATE	NORTH DAKOTA	NORTH DAKOTA	OHIO
COUNTY	WILLIAMS	WILLIAMS	ASHLAND
FIELD	BEAVER LODGE	BEAVER LODGE	ASHLAND
WELL NAME	BLOU NO. 1	BLMU O-25	SLOAN NO. 1
LOCATION	SEC. 2, T155N, R96W	SEC. 17, T156N, R95W	SEC. 16, MONTGOMERY TWP.
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	02/01/63	09/12/63	--/--/11
SAMPLED	03/01/66	03/01/66	09/01/20
FORMATION	ORDO-RED RIVER	MISS-MADISON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	395	395	160
DEPTH, FEET	12496	8525	2504
WELLHEAD PRESSURE,PSIG	4200	NOT GIVEN	950
OPEN FLOW, MCFD	18000	NOT GIVEN	790
COMPONENT, MOLE PCT			
METHANE	78.7	61.7	78.4
ETHANE	4.8	17.7	18.1
PROPANE	1.9	9.5	---
N-BUTANE	0.7	3.4	---
ISOBUTANE	0.3	1.1	---
N-PENTANE	0.3	0.6	---
ISOPENTANE	0.2	0.9	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	6.4	1.2	2.8
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.6	0.0	---
HYDROGEN SULFIDE**	3.7	1.6	---
CARBON DIOXIDE	1.9	1.6	0.1
HELIUM	0.13	0.02	0.16
HEATING VALUE*	1032	1431	1119
SPECIFIC GRAVITY	0.696	0.876	0.658

	INDEX 4114 SAMPLE 541	INDEX 4115 SAMPLE 4131	INDEX 4116 SAMPLE 9394
STATE	OHIO	OHIO	OHIO
COUNTY	ASHLAND	ASHLAND	ASHLAND
FIELD	ASHLAND	MOUNT VERNON	NOT GIVEN
WELL NAME	J. L. CRONE NO. 1, S-1575	O. S. VANCE NO. 1-8116	TROXEL NO. 1
LOCATION	SEC. 1, T BREEN	SEC. 29, T19N, R16W	SEC. 3, CLEAR CREEK TWP.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL GAS CO.	B. A. PLATA ASSOC.
COMPLETED	--/--/16	02/04/46	02/09/64
SAMPLED	11/22/20	09/30/46	04/03/64
FORMATION	NOT GIVEN	SILU-CLINTON	CAMB-COPPER RIDGE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2855	2746	NOT GIVEN
WELLHEAD PRESSURE,PSIG	430	1120	NOT GIVEN
OPEN FLOW, MCFD	195	700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	79.9	89.7
ETHANE	11.3	9.4	4.9
PROPANE	---	---	1.6
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	6.6	10.1	2.1
OXYGEN	0.3	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.29	0.25	0.06
HEATING VALUE*	1029	978	1096
SPECIFIC GRAVITY	0.639	0.644	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4117 SAMPLE 9048	INDEX 4118 SAMPLE 12272	INDEX 4119 SAMPLE 12505
STATE	OHIO	OHIO	OHIO
COUNTY	ASHTABULA	ASHTABULA	ASHTABULA
FIELD	BUSHNELL	JEFFERSON	LENOX
WELL NAME	EDWARD & JESSIE SIMAK NO. 1	J + E REMELIUS NO. 1	HUBERT RHODES NO. 1
LOCATION	SEC. 12, MONROE TWP.	LENOX TOWNSHIP	LENOX TOWNSHIP
OWNER	UNION CARBIDE OLEFINS CO.	MANSFIELD DRILLING CO.	KINGWOOD OIL CO.
COMPLETED	05/04/63	09/25/69	08/12/70
SAMPLED	07/16/63	05/29/70	11/04/70
FORMATION	SILU-CLINTON, RED	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3148	3500	3535
WELLHEAD PRESSURE,PSIG	1000	1275	1225
OPEN FLOW, MCFD	620	12288	4400
COMPONENT, MOLE PCT			
METHANE	85.3	89.4	89.3
ETHANE	3.7	6.6	4.4
PROPANE	1.1	0.9	1.4
N-BUTANE	0.5	0.3	0.3
ISOBUTANE	TRACE	0.5	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	8.5	1.5	3.8
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.20	0.12	0.12
HEATING VALUE*	994	1102	1260
SPECIFIC GRAVITY	0.639	0.628	0.618

	INDEX 4120 SAMPLE 12524	INDEX 4121 SAMPLE 7742	INDEX 4122 SAMPLE 15050
STATE	OHIO	OHIO	OHIO
COUNTY	ASHTABULA	ASHTABULA	COLUMBIANA
FIELD	LENOX	WILDCAT	ADAIR
WELL NAME	KANANEN-SUPPLEE NO. 1	CLARK D NO. 1	ELLYSON NO. 1
LOCATION	LENOX TOWNSHIP	LOT 1, WINDSOR TERR., R9	SEC. 19, HANOVER TWP.
OWNER	UNION OIL CO. OF CALIFORNIA	NORTHERN NATURAL GAS PROD.	POMINEX, INC.
COMPLETED	09/09/70	07/20/60	08/17/76
SAMPLED	11/05/70	10/23/60	07/01/77
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3304	3816	5708
WELLHEAD PRESSURE,PSIG	1220	1230	1400
OPEN FLOW, MCFD	2806	194	2400
COMPONENT, MOLE PCT			
METHANE	89.5	82.9	92.9
ETHANE	4.4	9.4	2.9
PROPANE	1.4	3.1	0.4
N-BUTANE	0.4	0.8	0.2
ISOBUTANE	0.3	0.5	0.0
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	3.7	2.3	3.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.12	0.10	0.00
HEATING VALUE*	1055	1169	1020
SPECIFIC GRAVITY	0.620	0.680	0.595

	INDEX 4123 SAMPLE 12850	INDEX 4124 SAMPLE 14378	INDEX 4125 SAMPLE 3999
STATE	OHIO	OHIO	OHIO
COUNTY	COLUMBIANA	COLUMBIANA	COLUMBIANA
FIELD	GUILFORD LAKE	HOMEWORTH	NOT GIVEN
WELL NAME	F. MURRAY NO. 1A	HOFFMAN NO. 1-2601	J. F. BARNETT NO. 1
LOCATION	SEC. 18, CENTER TWP.	SEC. 33, KNOX TOWNSHIP	SEC. 14, KNOX TWP.
OWNER	MANAGEMENT CONTROL CORP.	EAST OHIO GAS CO.	OHIO OIL CO.
COMPLETED	05/--/70	08/25/71	12/20/44
SAMPLED	06/--/71	05/29/75	03/29/45
FORMATION	SILU-CLINTON	ORDO- BEEKMANTOWN	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5750	8083	3544
WELLHEAD PRESSURE,PSIG	1600	2214	110
OPEN FLOW, MCFD	3000	NOT GIVEN	6
COMPONENT, MOLE PCT			
METHANE	91.6	91.3	83.1
ETHANE	3.4	4.9	16.0
PROPANE	0.7	1.6	---
N-BUTANE	TRACE	0.4	---
ISOBUTANE	0.2	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	3.7	0.8	0.3
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.07	0.03	0.08
HEATING VALUE*	1023	1108	1129
SPECIFIC GRAVITY	0.600	0.624	0.640

	INDEX 4126 SAMPLE 10207	INDEX 4127 SAMPLE 11646	INDEX 4128 SAMPLE 4225
STATE	OHIO	OHIO	OHIO
COUNTY	COLUMBIANA	COLUMBIANA	COSHOCTON
FIELD	WELLSVILLE	WILDCAT	COSHOCTON
WELL NAME	TURK NO. 444	ELDON P. DENNY NO. 1	LEE NO. 1
LOCATION	MADISON TOWNSHIP	SEC. 12, KNOX TOWNSHIP	SEC. 16, T5N, R8W
OWNER	MANUFACTURERS LT. & HEAT CO.	EAST OHIO GAS CO.	BENEDUM-TREES OIL CO.
COMPLETED	09/29/24	07/21/68	11/10/46
SAMPLED	10/12/65	09/18/68	02/08/47
FORMATION	MISS-BEREA	ORDO-BEEKMANTOWN	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	786	8089	3392
WELLHEAD PRESSURE,PSIG	300	2894	840
OPEN FLOW, MCFD	72	14500	350
COMPONENT, MOLE PCT			
METHANE	74.9	94.4	81.7
ETHANE	12.6	3.2	3.1
PROPANE	6.4	0.6	---
N-BUTANE	1.7	0.0	---
ISOBUTANE	0.8	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.6	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	2.1	0.8	13.8
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.9	0.9
HELIUM	0.15	0.01	0.31
HEATING VALUE*	1280	1029	883
SPECIFIC GRAVITY	0.747	0.588	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4129 SAMPLE 3885	INDEX 4130 SAMPLE 3926	INDEX 4131 SAMPLE 454
STATE	OHIO	OHIO	OHIO
COUNTY	COSHOCTON	COSHOCTON	CUYAHOGA
FIELD	MOUNT VERNON	NOT GIVEN	BROOKLYN
WELL NAME	STELLA LANDIS NO. 1	LOWERS NO. 1	LAMBWIER NO. 1
LOCATION	SEC. 5, JACKSON TWP.	CLARK TWP.	6 MI S CLEVELAND
OWNER	OHIO FUEL GAS CO.	H. K. PORTER	EAST OHIO GAS CO.
COMPLETED	07/29/43	08/28/44	--/--/15
SAMPLED	09/11/44	09/14/44	09/25/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3562	3608	2740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	875	80
OPEN FLOW, MCFD	184	90	200
COMPONENT, MOLE PCT			
METHANE	81.7	88.3	78.1
ETHANE	0.4	7.9	20.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.9	3.2	1.3
OXYGEN	0.3	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	0.38	0.23	0.00
HEATING VALUE*	835	1036	1150
SPECIFIC GRAVITY	0.629	0.609	0.661

	INDEX 4132 SAMPLE 10261	INDEX 4133 SAMPLE 1165	INDEX 4134 SAMPLE 10399
STATE	OHIO	OHIO	OHIO
COUNTY	CUYAHOGA	CUYAHOGA	CUYAHOGA
FIELD	NEWBURG HEIGHTS	NOT GIVEN	PARK S
WELL NAME	HARSHAW CHEMICAL CO. NO. 1	NOT GIVEN	HEINTZ NO. 1, E.O.G. NO. 488
LOCATION	CLEVELAND TOWNSHIP	NOT GIVEN	SEC. 33, INDEPENDENCE TWP.
OWNER	THE EAST OHIO GAS CO.	STADLER PRODUCTS CO.	THE EAST OHIO GAS CO.
COMPLETED	NOT GIVEN	--/--/15	NOT GIVEN
SAMPLED	11/01/65	10/13/25	02/08/66
FORMATION	SILU-NEWBURG	SILU-NEWBURG	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2450	3036
WELLHEAD PRESSURE,PSIG	NOT GIVEN	30	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	40	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.3	84.3	85.6
ETHANE	4.5	13.1	6.5
PROPANE	1.6	---	2.3
N-BUTANE	0.4	---	0.7
ISOBUTANE	0.3	---	0.4
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	2.4	2.2	3.6
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.09	0.17
HEATING VALUE*	1074	1089	1106
SPECIFIC GRAVITY	0.620	0.631	0.653

	INDEX 4135 SAMPLE 10222	INDEX 4136 SAMPLE 10220	INDEX 4137 SAMPLE 475
STATE	OHIO	OHIO	OHIO
COUNTY	CUYAHOGA	CUYAHOGA	FAIRFIELD
FIELD	PARK W	STRONGSVILLE	BALTIMORE
WELL NAME	GRANDALL NO.2-EOG NO. 377	L. BETER NO.4 - EOG NO.371	MILLER NO. 1
LOCATION	LAKEWOOD TOWNSHIP	SEC. 15, MIDDLEBURG TOWNSHIP	1 MI S BALTIMORE
OWNER	THE EAST OHIO GAS CO.	THE EAST OHIO GAS CO.	OHIO FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	NOT GIVEN	--/--/08
SAMPLED	10/05/65	10/05/65	10/06/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2825	1985
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	80
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	87.7	85.0	75.4
ETHANE	5.7	6.9	18.5
PROPANE	1.8	2.9	---
N-BUTANE	0.5	0.9	---
ISOBUTANE	0.3	0.7	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	3.4	2.7	5.3
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.13	0.10	0.28
HEATING VALUE*	1020	1460	1095
SPECIFIC GRAVITY	0.636	0.669	0.668

	INDEX 4138 SAMPLE 2323	INDEX 4139 SAMPLE 3	INDEX 4140 SAMPLE 463
STATE	OHIO	OHIO	OHIO
COUNTY	FAIRFIELD	FAIRFIELD	FAIRFIELD
FIELD	BERNE TWP	BUCKEYE LAKE	MILLERSPORT
WELL NAME	HARTMAN NO. 2	NOT GIVEN	BRISON NO. 1
LOCATION	SEC. 23, PLEASANTS TWP.	NOT GIVEN	1/2 MI S MILLERSPORT
OWNER	CITY NATURAL GAS WORKS	OHIO FUEL GAS CO.	OHIO FUEL SUPPLY CO.
COMPLETED	07/15/38	--/--/09	--/--/12
SAMPLED	05/04/31	05/03/19	10/07/20
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2351	NOT GIVEN	2116
WELLHEAD PRESSURE,PSIG	700	125	100
OPEN FLOW, MCFD	5000	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	68.7	73.4	70.5
ETHANE	24.7	16.9	22.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.1	7.9	6.8
OXYGEN	0.6	1.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.8	0.0
HELIUM	0.17	0.10	0.26
HEATING VALUE*	1139	1046	1112
SPECIFIC GRAVITY	0.705	0.681	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4141 SAMPLE 9557	INDEX 4142 SAMPLE 466	INDEX 4143 SAMPLE 11271
STATE	OHIO	OHIO	OHIO
COUNTY	FAIRFIELD	FAIRFIELD	FAIRFIELD
FIELD	PICKERINGTON	SUGAR GROVE	WILDCAT
WELL NAME	LOUISE CAMDEN NO. 1	LEWIS KULL NO. 1	H. THOMAS NO. 2A
LOCATION	SEC. 8, T15N, R20W	BERNE TWP.	SEC. 8, RUSH CREEK TOWNSHIP
OWNER	STEWART OIL CO.	LOGAN NATURAL GAS & FUEL CO.	HUNTING OIL CO.
COMPLETED	04/18/64	--/--/00	06/15/67
SAMPLED	09/10/64	10/07/20	01/24/68
FORMATION	CAMB-TREMPEALEAU	SILU-CLINTON	ORDO-BEEKMANTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3184	2179	4470
WELLHEAD PRESSURE,PSIG	1125	350	1420
OPEN FLOW, MCFD	4800	5000	200
COMPONENT, MOLE PCT			
METHANE	82.6	78.9	89.0
ETHANE	4.5	15.0	4.1
PROPANE	1.3	---	1.4
N-BUTANE	0.4	---	0.5
ISOBUTANE	0.2	---	0.2
N-PENTANE	0.1	---	0.4
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	10.3	5.9	3.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.31	0.18	0.11
HEATING VALUE*	981	1068	1080
SPECIFIC GRAVITY	0.645	0.652	0.635

	INDEX 4144 SAMPLE 13635	INDEX 4145 SAMPLE 13636	INDEX 4146 SAMPLE 469
STATE	OHIO	OHIO	OHIO
COUNTY	GEAUGA	GEAUGA	GUERNSEY
FIELD	AUBURN	AUBURN	BYERSVILLE-CAMBRIDGE
WELL NAME	TIMMONS NO. 1	ORAVEC NO. 1	S. R. NICKELSON NO. 1
LOCATION	LOT 2, SEC. 3, AUBURN TWP.	LOT 38, NEWBURY TWP.	LOT 27, JACKSON TWP.
OWNER	QUAKER STATE OIL REF. CORP.	QUAKER STATE OIL REF. CORP.	NONE GIVEN
COMPLETED	12/30/71	01/26/72	NOT GIVEN
SAMPLED	07/--/73	07/--/73	NOT GIVEN
FORMATION	SILU-CLINTON	SILU-CLINTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3723	3775	1100
WELLHEAD PRESSURE,PSIG	1500	1575	580
OPEN FLOW, MCFD	600	3072	25
COMPONENT, MOLE PCT			
METHANE	86.5	88.9	76.5
ETHANE	5.6	4.9	18.5
PROPANE	2.5	1.8	---
N-BUTANE	0.7	0.4	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	3.5	3.0	4.5
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.13	0.12	0.26
HEATING VALUE*	1108	1076	1106
SPECIFIC GRAVITY	0.652	0.626	0.664

	INDEX 4147 SAMPLE 464	INDEX 4148 SAMPLE 471	INDEX 4149 SAMPLE 12406
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	GUERNSEY
FIELD	CAMBRIDGE	CAMBRIDGE	CLAYSVILLE
WELL NAME	WILSON NO. 1	TURNBAUGH NO. 1	QINGEY COMMUNITY NO. 1
LOCATION	CAMBRIDGE SCHOOL DIST. & TWP	CAMBRIDGE SCHOOL DIST. & TWP	SEC. 21, WESTLAND TOWNSHIP
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL SUPPLY CO.	WISER OIL CO.
COMPLETED	--/--/90	--/--/10	08/13/69
SAMPLED	10/06/20	10/--/20	09/03/70
FORMATION	MISS-BEREA	MISS-BEREA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1100	1100	5134
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	1275
OPEN FLOW, MCFD	100	150	1000
COMPONENT, MOLE PCT			
METHANE	80.5	77.5	86.0
ETHANE	17.0	19.3	6.5
PROPANE	---	---	2.0
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.8	2.5	3.9
OXYGEN	1.2	0.2	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.44	0.27	0.13
HEATING VALUE*	1120	1131	1080
SPECIFIC GRAVITY	0.646	0.660	0.639

	INDEX 4150 SAMPLE 12529	INDEX 4151 SAMPLE 12530	INDEX 4152 SAMPLE 472
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	GUERNSEY
FIELD	CLAYSVILLE	CLAYSVILLE	MOUNT LION
WELL NAME	KING NO. 1	ED KOVAL NO. 1	MCCARTNEY NO. 2
LOCATION	SEC. 4, ADAMS TOWNSHIP	SEC. 16, JACKSON TOWNSHIP	LOT 30, JACKSON TWP.
OWNER	NATIONAL TREASURE MINES CO.	NATIONAL TREASURE MINES CO.	OHIO FUEL SUPPLY CO.
COMPLETED	09/02/70	04/--/69	--/--/12
SAMPLED	11/07/70	11/04/70	10/06/20
FORMATION	SILU-CLINTON	SILU-CLINTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4962	5020	1093
WELLHEAD PRESSURE,PSIG	1490	1450	560
OPEN FLOW, MCFD	8630	3600	20
COMPONENT, MOLE PCT			
METHANE	87.6	86.2	0.0
ETHANE	5.5	6.1	0.0
PROPANE	1.7	1.9	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	3.7	4.3	0.0
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.12	0.12	0.27
HEATING VALUE*	1079	1074	0
SPECIFIC GRAVITY	0.635	0.639	0.000

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4153 SAMPLE 899	INDEX 4154 SAMPLE 12058	INDEX 4155 SAMPLE 10353
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	HARDIN
FIELD	NOT GIVEN	WILDCAT	BLANCHARD
WELL NAME	NO. 1956	HARRY KAHN NO. 1	BLANCHARD QUARRY NO. 1
LOCATION	KNOX	SEC. 14, MONROE TOWNSHIP	SEC. 5, PLEASANT TOWNSHIP
OWNER	OHIO FUEL GAS CO.	CHIEF DRILLING, INC.	THE SHELDON GAS CO.
COMPLETED	NOT GIVEN	06/23/69	01/01/30
SAMPLED	07/01/24	09/15/69	01/05/66
FORMATION	NOT GIVEN	SILU-CLINTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	160	160	300
DEPTH, FEET	3151	4978	1325
WELLHEAD PRESSURE,PSIG	1275	1480	NOT GIVEN
OPEN FLOW, MCFD	18000	3800	250
COMPONENT, MOLE PCT			
METHANE	75.8	87.9	75.5
ETHANE	22.1	5.8	8.7
PROPANE	---	1.6	4.7
N-BUTANE	---	0.4	1.2
ISOBUTANE	---	0.1	0.7
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	1.7	3.5	8.0
OXYGEN	0.0	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.07	0.11	0.23
HEATING VALUE*	1164	1076	1143
SPECIFIC GRAVITY	0.672	0.632	0.723

	INDEX 4156 SAMPLE 10354	INDEX 4157 SAMPLE 10352	INDEX 4158 SAMPLE 10459
STATE	OHIO	OHIO	OHIO
COUNTY	HARDIN	HARDIN	HENRY
FIELD	KENTON	PATTERSON	HAMLER NO. 1
WELL NAME	STEINMAN NO. 1	LAPENSE NO. 1	E. LANGE NO. 1
LOCATION	CESSNA TOWNSHIP, SEC. 24	SEC. 23, JACKSON TOWNSHIP	SEC. 2, T3N, R7E
OWNER	THE SHELDON GAS CO.	FOREST GAS & OIL CO.	DR. MAURICE M. WEIKEL
COMPLETED	01/01/34	01/01/40	10/15/65
SAMPLED	01/05/66	01/05/66	03/11/66
FORMATION	ORDO-TRENTON	ORDO-TRENTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	300	300	305
DEPTH, FEET	1365	1320	1546
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	535
OPEN FLOW, MCFD	500	750	700
COMPONENT, MOLE PCT			
METHANE	77.0	76.6	73.3
ETHANE	7.9	6.5	8.9
PROPANE	4.1	2.9	2.9
N-BUTANE	1.0	0.9	0.6
ISOBUTANE	0.5	0.7	0.2
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	8.3	10.4	13.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.3
HELIUM	0.17	0.24	0.22
HEATING VALUE*	1110	1053	1022
SPECIFIC GRAVITY	0.706	0.700	0.704

	INDEX 4159 SAMPLE 10	INDEX 4160 SAMPLE 4009	INDEX 4161 SAMPLE 9046
STATE	OHIO	OHIO	OHIO
COUNTY	HOCKING	HOCKING	HOCKING
FIELD	HOCKING COUNTY	NOT GIVEN	NOT GIVEN
WELL NAME	NOT GIVEN	SUNDAY CREEK COAL CO.	JOHN C. SHARP NO. 10
LOCATION	NOT GIVEN	SEC. 2, STARR TWP.	SEC. 2, SALT CREEK TWP.
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	--/--/11	02/24/45	05/08/63
SAMPLED	05/12/19	04/17/45	07/11/63
FORMATION	SILU-CLINTON	MISS-BEREA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	1157	2238
WELLHEAD PRESSURE,PSIG	90	370	640
OPEN FLOW, MCFD	NOT GIVEN	1240	3020
COMPONENT, MOLE PCT			
METHANE	69.5	82.5	78.2
ETHANE	11.6	15.5	3.5
PROPANE	---	---	1.0
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	16.5	1.5	15.8
OXYGEN	1.9	0.3	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	TRACE	0.14	0.40
HEATING VALUE*	913	1113	905
SPECIFIC GRAVITY	0.691	0.640	0.662

	INDEX 4162 SAMPLE 543	INDEX 4163 SAMPLE 3A27	INDEX 4164 SAMPLE 9068
STATE	OHIO	OHIO	OHIO
COUNTY	HOCKING	HOCKING	HOLMES
FIELD	SUGAR GROVE	WARD TOWNSHIP	FRYBURG
WELL NAME	NELSON DELONG NO. 1	SUNDAY CREEK COAL CO. 231	BOWMAN NO. 1
LOCATION	SEC. 8, SALT CREEK TWP.	SEC. 8	LOT 4, SALT CREEK SUR.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL GAS CO.	KIN-ARK OIL CO.
COMPLETED	--/--/16	09/12/43	05/10/63
SAMPLED	11/13/20	05/04/44	08/01/63
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1902	3570	3871
WELLHEAD PRESSURE,PSIG	440	1065	1100
OPEN FLOW, MCFD	400	789	7500
COMPONENT, MOLE PCT			
METHANE	79.7	71.2	84.9
ETHANE	8.8	12.7	6.2
PROPANE	---	---	1.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	11.1	15.2	6.0
OXYGEN	0.2	0.4	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.04	0.27	0.20
HEATING VALUE*	956	949	1048
SPECIFIC GRAVITY	0.662	0.682	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4165 SAMPLE 900	INDEX 4166 SAMPLE 3938	INDEX 4167 SAMPLE 10308
STATE	OHIO	OHIO	OHIO
COUNTY	HOLMES	HOLMES	HOLMES
FIELD	NOT GIVEN	NOT GIVEN	WILDCAT
WELL NAME	NO. 4161	S. C. CRITCHFIELD NO. 1	RUBEN S. ERB NO. 1
LOCATION	SEC. 12-13, T MONROE	SEC. 28, RIPLEY TWP.	SEC. 23, CLARK TOWNSHIP
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	KIN-ARK OIL CO.
COMPLETED	04/03/24	09/28/44	11/10/65
SAMPLED	07/03/24	12/07/44	11/30/65
FORMATION	SILU-CLINTON	NOT GIVEN	-ROSE RUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3082	6464
WELLHEAD PRESSURE,PSIG	1020	1085	2400
OPEN FLOW, MCFD	3154	1180	2100
COMPONENT, MOLE PCT			
METHANE	70.3	1.2	92.2
ETHANE	19.4	64.7	4.5
PROPANE	---	---	1.4
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	9.2	33.6	0.7
OXYGEN	0.5	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.18	0.21	0.03
HEATING VALUE*	1060	1172	1092
SPECIFIC GRAVITY	0.696	1.015	0.613

	INDEX 4168 SAMPLE 4384	INDEX 4169 SAMPLE 5238	INDEX 4170 SAMPLE 10350
STATE	OHIO	OHIO	OHIO
COUNTY	HOLMES	HOLMES	HURON
FIELD	WOOSTER	WOOSTER	WILDCAT
WELL NAME	MYRTLE LAKE	CRITCHFIELD NO. 1	JOPLAND-CHAPMAN UNIT NO. 1
LOCATION	SEC. 32, RIPLEY TWP.	SEC. 28, RIPLEY TWP.	SEC. 1, NEW HAVEN TOWNSHIP
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	STOCKER & SITLER, INC.
COMPLETED	05/29/47	09/28/44	01/11/65
SAMPLED	11/13/47	05/13/52	12/30/65
FORMATION	SILU-	SILU-CLINTON	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3165	3082	3488
WELLHEAD PRESSURE,PSIG	1000	550	1175
OPEN FLOW, MCFD	1290	1180	1970
COMPONENT, MOLE PCT			
METHANE	83.0	85.2	88.3
ETHANE	11.7	5.3	3.6
PROPANE	---	1.7	1.4
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	4.8	6.4	5.0
OXYGEN	0.2	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.19	0.18	0.20
HEATING VALUE*	1050	1036	1049
SPECIFIC GRAVITY	0.633	0.639	0.632

	INDEX 4171 SAMPLE 10129	INDEX 4172 SAMPLE 10568	INDEX 4173 SAMPLE 4134
STATE	OHIO	OHIO	OHIO
COUNTY	KNOX	KNOX	KNOX
FIELD	ESTA	FREDERICKTOWN S	MOUNT VERNON
WELL NAME	ZORA MCLORNAN	ISABELL E. DARLING NO. 1	D. R. CULLER NO. 1-8031
LOCATION	SEC. 22, BUTLER TOWNSHIP	LOT 15, WAYNE TOWNSHIP	SEC. 3, T22N, R17W
OWNER	MASK OIL CO.	BRINKERHOFF DRILLING CO.	OHIO FUEL GAS CO.
COMPLETED	04/01/61	09/01/65	09/24/45
SAMPLED	09/08/65	05/10/66	09/30/46
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2999	2054	2628
WELLHEAD PRESSURE,PSIG	NOT GIVEN	920	1030
OPEN FLOW, MCFD	NOT GIVEN	2800	962
COMPONENT, MOLE PCT			
METHANE	81.3	72.8	76.8
ETHANE	9.2	8.0	14.0
PROPANE	3.7	2.6	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.7	0.5	---
N-PENTANE	TRACE	0.3	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.4	---
NITROGEN	3.7	13.7	8.3
OXYGEN	0.0	0.2	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.10	0.26	0.22
HEATING VALUE*	1153	1041	1029
SPECIFIC GRAVITY	0.684	0.719	0.662

	INDEX 4174 SAMPLE 10108	INDEX 4175 SAMPLE 10109	INDEX 4176 SAMPLE 3781
STATE	OHIO	OHIO	OHIO
COUNTY	KNOX	KNOX	LAKE
FIELD	MOUNT VERNON	MOUNT VERNON	NOT GIVEN
WELL NAME	O-C-16 JAMES M. BERRY	O-C-49, W. M. MCMARA	NELLIE HAWGOOD NO. 1
LOCATION	NEAR HOWARD OHIO	NEAR DANVILLE OHIO	MENTOR TOWNSHIP, LOT 10
OWNER	OHIO CUMBERLAND GAS CO.	OHIO CUMBERLAND GAS CO.	BENEDUM-TREES OIL CO.
COMPLETED	10/22/22	12/22/15	01/21/44
SAMPLED	09/08/65	09/08/65	04/05/44
FORMATION	SILU-CLINTON	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2626	2772	2936
WELLHEAD PRESSURE,PSIG	1070	NOT GIVEN	690
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	110
COMPONENT, MOLE PCT			
METHANE	79.5	80.7	80.0
ETHANE	8.0	7.9	13.2
PROPANE	4.0	3.1	---
N-BUTANE	1.2	1.1	---
ISOBUTANE	0.7	0.8	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	5.8	5.2	6.2
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.12	0.15	0.08
HEATING VALUE*	1148	1145	1047
SPECIFIC GRAVITY	0.701	0.694	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4177 SAMPLE 12814	INDEX 4178 SAMPLE 10134	INDEX 4179 SAMPLE 8
STATE	OHIO	OHIO	OHIO
COUNTY	LAWRENCE	LICKING	LICKING
FIELD	UNNAMED	FALLSBURY	HOMER
WELL NAME	ROSE EVERHART NO. 1	C. E. VAN WINKLE	NOT GIVEN
LOCATION	SEC. 17, LAWRENCE TOWNSHIP	SEC. 1, FALLSBURY TOWNSHIP	NOT GIVEN
OWNER	COTTON PETROLEUM CO.	WAVERLY OIL WORKS	OHIO FUEL GAS CO.
COMPLETED	09/--/70	03/01/62	--/--/02
SAMPLED	05/01/71	09/08/65	05/05/19
FORMATION	PENN-MARTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	800	2849	NOT GIVEN
WELLHEAD PRESSURE,PSIG	220	NOT GIVEN	200
OPEN FLOW, MCFD	3000	250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	75.7	53.8
ETHANE	2.5	7.8	15.4
PROPANE	TRACE	4.6	---
N-BUTANE	0.0	1.4	---
ISOBUTANE	0.0	0.9	---
N-PENTANE	0.0	0.3	---
ISOPENTANE	0.0	0.4	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	8.7	8.3	27.8
OXYGEN	0.0	TRACE	3.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.47	0.12	0.00
HEATING VALUE*	937	1153	821
SPECIFIC GRAVITY	0.601	0.732	0.762

	INDEX 4180 SAMPLE 474	INDEX 4181 SAMPLE 3841	INDEX 4182 SAMPLE 3881
STATE	OHIO	OHIO	OHIO
COUNTY	LICKING	LORAIN	LORAIN
FIELD	JOHNSTOWN	EATON	GRAFTON
WELL NAME	H. JOHNSON NO. 1	PAULINE SCHNEIDER NO. 1-7582	JOHN MOHLER NO. 1
LOCATION	6 MI NE JOHNSTOWN	SEC. 1-9B	SEC. 24, GRAFTON TWP.
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL GAS CO.	BELMONT QUADRANGLE DRG. CORP
COMPLETED	--/--/02	11/09/43	06/23/44
SAMPLED	10/04/20	NOT GIVEN	09/27/44
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1465	2421	2386
WELLHEAD PRESSURE,PSIG	60	935	NOT GIVEN
OPEN FLOW, MCFD	85	235	1335
COMPONENT, MOLE PCT			
METHANE	75.4	76.2	77.4
ETHANE	18.5	11.6	13.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.4	11.4	7.8
OXYGEN	0.2	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.21	0.28	0.25
HEATING VALUE*	1095	980	1033
SPECIFIC GRAVITY	0.670	0.661	0.660

	INDEX 4183 SAMPLE 3806	INDEX 4184 SAMPLE 4287	INDEX 4185 SAMPLE 4377
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	LAGRANGE	NORTHERN	NORTHERN
WELL NAME	JESSIE MILLER NO. 1	WM. GILGENBACH NO. 8310	E. I. MILLER NO. 1
LOCATION	SEC. 8A	LOT 26, T6N, R16W	LOT 9B, PITTSFIELD TWP.
OWNER	MANLEY & BIRD	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	01/11/44	12/30/46	06/25/47
SAMPLED	04/12/44	03/17/47	11/07/47
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2365	2477	2190
WELLHEAD PRESSURE,PSIG	1160	1150	1040
OPEN FLOW, MCFD	2500	1010	1950
COMPONENT, MOLE PCT			
METHANE	89.0	81.8	77.4
ETHANE	4.4	13.2	11.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.8	4.3	10.0
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.29	0.22	0.26
HEATING VALUE*	980	1065	992
SPECIFIC GRAVITY	0.602	0.641	0.657

	INDEX 4186 SAMPLE 4378	INDEX 4187 SAMPLE 5125	INDEX 4188 SAMPLE 4133
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	NORTHERN	NORTHERN	NOT GIVEN
WELL NAME	NO. A600	G. C. KRUECK NO. 1	PHILLIP BOBEL NO. 2-8212
LOCATION	LOT 103, PITTSFIELD TWP.	LOT 10, T17	LOT 48
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	06/19/47	02/07/51	07/22/46
SAMPLED	11/07/47	11/12/51	10/16/46
FORMATION	SILU-	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2206	2583	2547
WELLHEAD PRESSURE,PSIG	1130	975	1120
OPEN FLOW, MCFD	1780	302	4370
COMPONENT, MOLE PCT			
METHANE	76.9	77.7	73.6
ETHANE	12.8	4.3	12.1
PROPANE	---	1.1	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	9.6	16.0	13.1
OXYGEN	0.2	0.1	0.7
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.26	0.36	0.27
HEATING VALUE*	1008	912	962
SPECIFIC GRAVITY	0.659	0.663	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4189 SAMPLE 4671	INDEX 4190 SAMPLE 4537	INDEX 4191 SAMPLE 3943
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	NOT GIVEN	PENFIELD TOWNSHIP	WELLINGTON
WELL NAME	E. L. PIERCE NO. 8670	NO. 8521	L. W. MCCONNELL NO. 1
LOCATION	LOT 10, PENFIELD TWP.	SEC. 1, LOT 25	LOTS 18 & 19, LAGRANGE TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	HANLEY & BIRD
COMPLETED	12/10/48	01/13/48	10/02/44
SAMPLED	02/15/49	06/03/48	12/08/44
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2438	2458	2269
WELLHEAD PRESSURE,PSIG	1125	1170	1090
OPEN FLOW, MCFD	407	1330	830
COMPONENT, MOLE PCT			
METHANE	76.1	72.4	78.1
ETHANE	6.3	14.2	10.5
PROPANE	2.0	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	13.4	12.6	10.5
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.23	0.25	0.28
HEATING VALUE*	1001	988	979
SPECIFIC GRAVITY	0.690	0.679	0.649

	INDEX 4192 SAMPLE 11677	INDEX 4193 SAMPLE 13086	INDEX 4194 SAMPLE 9725
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MAHONING	MAHONING
FIELD	BESS	CANFIELD	ELLSWORTH
WELL NAME	WILCOX NO. 1	J & C CENTOFANTI NO. 1	E & M SAYBE NO. 1 - 409
LOCATION	SEC. 18, GOSHEN TOWNSHIP	SEC. 15, ELLSWORTH TWP.	SEC. 19, ELLSWORTH TOWNSHIP
OWNER	DORFMAN PRODUCTION CO.	LIBERTY PETROLEUM CORP.	BELDEN & BLAKE CO.
COMPLETED	06/26/69	06/07/71	11/10/64
SAMPLED	02/22/68	10/16/71	02/05/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5149	5362	5009
WELLHEAD PRESSURE,PSIG	1450	1450	1450
OPEN FLOW, MCFD	1058	1040	426
COMPONENT, MOLE PCT			
METHANE	89.8	87.8	90.0
ETHANE	4.8	5.6	4.7
PROPANE	1.4	1.9	1.1
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.7	3.5	3.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.07	0.10	0.09
HEATING VALUE*	1067	1080	1058
SPECIFIC GRAVITY	0.617	0.634	0.617

	INDEX 4195 SAMPLE 9839	INDEX 4196 SAMPLE 10195	INDEX 4197 SAMPLE 14854
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MAHONING	MAHONING
FIELD	ELLSWORTH	ELLSWORTH N	LIMA N
WELL NAME	NO. 1-417	STEISKAL NO. 1-EOG NO. 2333	RICHARD CALVIN NO. 1
LOCATION	SEC. 22, ELLSWORTH TOWNSHIP	SEC. 22, ELLSWORTH TOWNSHIP	SEC. 9, BEAVER TOWNSHIP
OWNER	RELOEN & BLAKE OIL PROD. CO.	THE EAST OHIO GAS CO.	POMINEX, INC.
COMPLETED	12/16/64	07/25/64	06/20/75
SAMPLED	04/06/65	10/04/65	11/03/76
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4988	4981	5510
WELLHEAD PRESSURE,PSIG	1450	1400	1375
OPEN FLOW, MCFD	476	711	1400
COMPONENT, MOLE PCT			
METHANE	91.4	91.0	94.2
ETHANE	4.0	4.2	2.4
PROPANE	1.0	0.9	0.3
N-BUTANE	0.3	0.3	TRACE
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	2.8	3.0	2.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1046	1047	1008
SPECIFIC GRAVITY	0.605	0.609	0.582

	INDEX 4198 SAMPLE 4055	INDEX 4199 SAMPLE 11962	INDEX 4200 SAMPLE 7027
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MEDINA	MEDINA
FIELD	WILDCAT	BONETA	HINCKLEY
WELL NAME	D. B. MCCUNE NO. 1	RODENBUCHER A NO. 1	FRANK SMITH NO. 1-A
LOCATION	SEC. 11, GOSHEN TWP.	LOT 102, MONTVILLE TOWNSHIP	LOT 69
OWNER	OHIO OIL CO.	KING DRILLING CO.	OHIO FUEL GAS CO.
COMPLETED	07/23/45	04/24/69	01/16/59
SAMPLED	09/04/45	07/10/69	04/10/59
FORMATION	DEVO-	SILU-CLINTON	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3608	3320	5775
WELLHEAD PRESSURE,PSIG	1380	1250	2060
OPEN FLOW, MCFD	3	4070	1210
COMPONENT, MOLE PCT			
METHANE	79.3	85.4	86.3
ETHANE	20.7	5.5	5.3
PROPANE	---	2.4	1.9
N-BUTANE	---	0.5	0.8
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.2	0.8
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.2	1.5
NITROGEN	0.0	5.0	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.03	0.17	0.10
HEATING VALUE*	1174	1080	1211
SPECIFIC GRAVITY	0.657	0.649	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4201 SAMPLE 9311	INDEX 4202 SAMPLE 3840	INDEX 4203 SAMPLE 3859
STATE	OHIO	OHIO	OHIO
COUNTY	MEDINA	MEDINA	MEDINA
FIELD	HINCKLEY-GRANGER	LITCHFIELD TOWNSHIP	LODI
WELL NAME	F. L. SMITH ESTATE NO. 1	EDGAR J. YOST NO. 1-7747	W. A. SHAW NO. 1
LOCATION	LOT 69, HINCKLEY TWP.	LOT 22, T3N, R16W	SEC. 13, CHATHAM TWP.
OWNER	WISER OIL CO., ET AL.	OHIO FUEL GAS CO.	E. R. ENSON & SON CO.
COMPLETED	01/03/59	04/06/44	05/23/44
SAMPLED	04/03/64	NOT GIVEN	07/24/44
FORMATION	CAMB-TREMPEALEAU	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5764	2717	2696
WELLHEAD PRESSURE,PSIG	2100	1270	NOT GIVEN
OPEN FLOW, MCFD	1200	6580	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	71.0	85.1
ETHANE	5.4	12.9	4.5
PROPANE	2.0	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	1.2	15.4	9.6
OXYGEN	0.1	0.4	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.06	0.26	0.34
HEATING VALUE*	1123	950	943
SPECIFIC GRAVITY	0.639	0.683	0.619

	INDEX 4204 SAMPLE 4601	INDEX 4205 SAMPLE 3884	INDEX 4206 SAMPLE 487
STATE	OHIO	OHIO	OHIO
COUNTY	MEDINA	MEDINA	MEDINA
FIELD	MEDINA	NOT GIVEN	SALEM W
WELL NAME	AGNES MCMICHAEL	EDGAR J. YOST NO. 2-7778	TOWSLES NO. 1
LOCATION	LOT 6	LOT 22, LITCHFIELD TWP.	LOT 141, HARRISVILLE TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	OHIO FUEL SUPPLY CO.
COMPLETED	05/18/48	05/18/44	--/--/18
SAMPLED	10/26/48	08/02/44	09/01/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2662	2697	2850
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	320
OPEN FLOW, MCFD	504	1870	5000
COMPONENT, MOLE PCT			
METHANE	73.5	72.9	78.8
ETHANE	13.3	13.5	15.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.3	12.3	5.5
OXYGEN	0.3	0.8	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	TRACE
HELIUM	0.24	0.24	0.24
HEATING VALUE*	983	980	1069
SPECIFIC GRAVITY	0.676	0.679	0.651

	INDEX 4207 SAMPLE 4328	INDEX 4208 SAMPLE 11889	INDEX 4209 SAMPLE 1276
STATE	OHIO	OHIO	OHIO
COUNTY	MEIGS	MEIGS	MEIGS
FIELD	ATHENS DISTRICT	GROUND HOG CREEK	MEIGS COUNTY
WELL NAME	H. W. RITCHIE NO. 8342	WM. MCKELVEY NO. 1-A	OFG NO. 4
LOCATION	SEC. 1, CHESTER TWP.	SEC. 16, LEBANON TOWNSHIP	SEC. 30, SUTTON TWP.
OWNER	OHIO FUEL GAS CO.	QUAKER STATE OIL REFINING	OHIO FUEL GAS CO.
COMPLETED	04/22/47	03/20/69	11/--/25
SAMPLED	06/19/47	04/01/69	06/11/26
FORMATION	DEVO-	SILU-NEWBURG	PENN-COWRUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2831	4880	512
WELLHEAD PRESSURE,PSIG	730	1855	160
OPEN FLOW, MCFD	79	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	88.6	91.5
ETHANE	22.4	5.4	0.3
PROPANE	---	2.6	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	1.2	1.5	6.4
OXYGEN	0.2	0.0	0.5
ARGON	---	0.0	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.09	0.08	0.98
HEATING VALUE*	1172	1129	932
SPECIFIC GRAVITY	0.672	0.644	0.585

	INDEX 4210 SAMPLE 11245	INDEX 4211 SAMPLE 11536	INDEX 4212 SAMPLE 11535
STATE	OHIO	OHIO	OHIO
COUNTY	MONROE	MONROE	MONROE
FIELD	BETHEL	GRAYSVILLE	LEWISVILLE
WELL NAME	C.D. HERCHER NO. 1	EMMA MCHUGH NO. 1	FRANCIS REISCHMAN NO. 1
LOCATION	SYCAMORE VALLEY DISTRICT	SEC. 7, WASHINGTON TOWNSHIP	SEC. 27, MALAGA TOWNSHIP
OWNER	PETROLEUM SPECIALTIES, INC.	LIBERTY PETROLEUM CORP.	LIBERTY PETROLEUM CORP.
COMPLETED	10/01/67	03/04/68	02/08/68
SAMPLED	12/14/67	06/05/68	06/05/68
FORMATION	DEVO-OHIO	MISS-DEVO	DEVO-OHIO SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1734	1288	2240
WELLHEAD PRESSURE,PSIG	800	440	775
OPEN FLOW, MCFD	1256	460	230
COMPONENT, MOLE PCT			
METHANE	82.4	69.3	63.1
ETHANE	9.2	12.1	11.5
PROPANE	3.4	5.3	5.7
N-BUTANE	1.0	1.5	1.7
ISOBUTANE	0.3	0.5	0.6
N-PENTANE	0.2	0.6	0.6
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	2.6	8.5	13.0
OXYGEN	0.0	1.7	2.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.17	0.07	0.07
HEATING VALUE*	1168	1174	1116
SPECIFIC GRAVITY	0.682	0.764	0.794

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4213 SAMPLE 3925	INDEX 4214 SAMPLE 1100	INDEX 4215 SAMPLE 12667
STATE	OHIO	OHIO	OHIO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	BLOOM	MORGAN COUNTY	NOT GIVEN
WELL NAME	RICHARDSON NO. 1	J. LONGSTRETH NO. 1	E. D. PARKS NO. 1
LOCATION	BLOOM TWP.	SEC. 29, YORK TOWNSHIP	SEC. 9, MANCHESTER TOWNSHIP
OWNER	H. K. PORTER	SUN OIL CO.	LIBERTY PETROLEUM CORP.
COMPLETED	01/27/44	05/--/25	05/09/70
SAMPLED	09/14/44	08/03/25	02/12/71
FORMATION	SILU-CLINTON	MISS-BEREA	SILU-CLINTON & MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4325	1255	5230
WELLHEAD PRESSURE,PSIG	1190	450	1400
OPEN FLOW, MCFD	1	1500	3781
COMPONENT, MOLE PCT			
METHANE	84.6	85.0	86.5
ETHANE	9.8	13.0	4.9
PROPANE	---	---	1.3
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.3
NITROGEN	4.7	0.5	6.0
OXYGEN	0.1	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.9	TRACE
HELIUM	0.18	0.21	0.14
HEATING VALUE*	1033	1094	1041
SPECIFIC GRAVITY	0.628	0.632	0.635

	INDEX 4216 SAMPLE 10550	INDEX 4217 SAMPLE 3927	INDEX 4218 SAMPLE 4302
STATE	OHIO	OHIO	OHIO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	PORTERSVILLE	YORK	YORK TOWNSHIP
WELL NAME	GLEN TAYLOR NO. 1	HARRY PLETCHER NO. 1	D. L. JADWIN NO. 2-8307
LOCATION	SEC. 19, DEERFIELD TWP.	YORK TWP.	SEC. 26
OWNER	CARCO OIL, INC.	H. K. PORTER	OHIO FUEL GAS CO.
COMPLETED	03/01/66	08/01/44	04/09/47
SAMPLED	05/05/66	09/14/44	05/01/47
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4070	4031	3928
WELLHEAD PRESSURE,PSIG	980	1125	1130
OPEN FLOW, MCFD	9520	1	713
COMPONENT, MOLE PCT			
METHANE	86.0	89.3	85.8
ETHANE	4.8	6.2	10.1
PROPANE	1.1	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	6.6	3.7	3.5
OXYGEN	0.0	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.20	0.19	0.20
HEATING VALUE*	1032	1016	1050
SPECIFIC GRAVITY	0.638	0.605	0.621

	INDEX 4219 SAMPLE 9395	INDEX 4220 SAMPLE 9884	INDEX 4221 SAMPLE 9396
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	CHESTERFIELD W	EDISON N	EDISON W
WELL NAME	MORROW ELEC. CO-OP NO. 2	ATHA-RAND NO. 1	OLDS NO. 1
LOCATION	LOT 19, FRANKLIN TWP.	LOT 27, GILEAD TOWNSHIP	CANNON TWP.
OWNER	TRI-STATE PRODUCING CO., INC	HOWARD D. ATHA OIL PRODUCER	PERRY FULK OIL PRODUCER
COMPLETED	03/21/64	04/29/65	02/13/64
SAMPLED	04/03/64	05/01/65	06/--/64
FORMATION	CAMB-TREMPEALEAU	CAMB-TREMPEALEAU	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3652	3126	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1260	1060	NOT GIVEN
OPEN FLOW, MCFD	675	1105	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.0	71.6	70.7
ETHANE	5.7	6.7	11.7
PROPANE	2.0	3.9	7.2
N-BUTANE	0.4	1.1	3.3
ISOBUTANE	0.2	0.9	1.5
N-PENTANE	TRACE	0.5	1.0
ISOPENTANE	0.1	TRACE	1.0
CYCLOPENTANE	TRACE	0.7	0.2
HEXANES PLUS	TRACE	TRACE	0.8
NITROGEN	6.2	14.0	2.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.35	0.04
HEATING VALUE*	1040	1062	1409
SPECIFIC GRAVITY	0.639	0.737	0.830

	INDEX 4222 SAMPLE 8869	INDEX 4223 SAMPLE 9754	INDEX 4224 SAMPLE 9398
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	NOT GIVEN	NOT GIVEN	WOODBURY S
WELL NAME	A. C. WINDBIGLER NO. 1	EASH NO. 1	BARBER UNIT NO. 1
LOCATION	SEC. 18, T20N, R19W	SEC. 18, PERRY TOWNSHIP	LOT 14, PERU TWP.
OWNER	PAN AMERICAN PETROLEUM CORP.	SOHIO PETROLEUM CO.	KIN-ARK OIL CO.
COMPLETED	12/03/62	01/06/65	12/15/63
SAMPLED	12/03/62	02/13/65	06/10/64
FORMATION	SILU-NIAGARA	SILU-NIAGARA	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1443	1550	3112
WELLHEAD PRESSURE,PSIG	390	450	NOT GIVEN
OPEN FLOW, MCFD	1120	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	76.4	51.4
ETHANE	4.3	4.8	18.1
PROPANE	1.1	1.2	16.0
N-BUTANE	0.4	0.4	5.2
ISOBUTANE	0.0	0.4	2.2
N-PENTANE	TRACE	0.1	0.8
ISOPENTANE	0.2	0.1	1.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	6.0	15.6	4.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.30	0.60	0.04
HEATING VALUE*	1020	9320	1624
SPECIFIC GRAVITY	0.624	0.672	0.987

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4225 SAMPLE 12230	INDEX 4226 SAMPLE 10128	INDEX 4227 SAMPLE 4132
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	ADAMSVILLE	BROOKOVER	BRUSHCREEK
WELL NAME	DALE LANE NO. 1	C. F. & A. CARTER	ESTELLA BUCHANAN NO. 8231
LOCATION	SEC. 20, ADAMS TOWNSHIP	SEC. 19, WAYNE TOWNSHIP	SEC. 15, BRUSHCREEK TWP.
OWNER	CURTIS MINERALS	OXFORD OIL CO.	OHIO FUEL GAS CO.
COMPLETED	03/19/69	05/01/48	08/16/46
SAMPLED	03/27/70	09/09/65	10/08/46
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4375	3900	3687
WELLHEAD PRESSURE,PSIG	1300	300	1125
OPEN FLOW, MCFD	3600	20	396
COMPONENT, MOLE PCT			
METHANE	82.7	84.2	83.0
ETHANE	6.5	6.0	9.7
PROPANE	2.7	1.6	---
N-BUTANE	0.7	0.4	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	6.1	6.6	6.3
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.17	0.22	0.21
HEATING VALUE*	1089	1057	1015
SPECIFIC GRAVITY	0.667	0.653	0.633

	INDEX 4228 SAMPLE 10139	INDEX 4229 SAMPLE 10137	INDEX 4230 SAMPLE 9629
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	COALDALE	FULTONHAM	GRATIOT
WELL NAME	V & E IDEN	ROBERTS	HARKNESS UNIT NO. 2
LOCATION	SEC. 5, HOPEWELL TOWNSHIP	SEC. 18, NEWTON TOWNSHIP	SEC. 6, T1AN, R15W
OWNER	ROYAL OIL & GAS CORP.	OXFORD OIL CO.	OXFORD OIL CO.
COMPLETED	04/01/63	01/01/37	08/31/64
SAMPLED	09/09/65	09/09/65	11/07/64
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3214	3300	3080
WELLHEAD PRESSURE,PSIG	970	250	900
OPEN FLOW, MCFD	500	25	1200
COMPONENT, MOLE PCT			
METHANE	81.9	87.9	84.6
ETHANE	8.6	5.0	4.7
PROPANE	2.8	1.7	1.1
N-BUTANE	0.9	0.8	0.4
ISOBUTANE	0.8	0.3	0.2
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	3.7	3.4	7.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.08	0.13	0.26
HEATING VALUE*	1160	1094	1013
SPECIFIC GRAVITY	0.688	0.643	0.643

	INDEX 4231 SAMPLE 4144	INDEX 4232 SAMPLE 4135	INDEX 4233 SAMPLE 9834
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	MUSKINGUM COUNTY	NEWTON	NOT GIVEN
WELL NAME	H. M. VERNON NO. 1	MARY BUTLER NO. 1-7961	R & L BEATTY NO. 2
LOCATION	SEC. 19, T3N, R6W	SEC. 5	SEC. 36, SALT CREEK TOWNSHIP
OWNER	WITTMER OIL & GAS CORP.	OHIO FUEL GAS CO.	PETROC CO.
COMPLETED	06/27/45	06/05/46	01/15/65
SAMPLED	12/06/46	10/15/46	04/01/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4180	3457	4500
WELLHEAD PRESSURE,PSIG	960	740	610
OPEN FLOW, MCFD	230	332	325
COMPONENT, MOLE PCT			
METHANE	70.5	82.1	86.7
ETHANE	14.0	9.8	5.3
PROPANE	---	---	1.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	14.7	7.1	5.0
OXYGEN	0.3	0.6	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.26	0.20	0.18
HEATING VALUE*	965	1007	1049
SPECIFIC GRAVITY	0.687	0.637	0.633

	INDEX 4234 SAMPLE 10140	INDEX 4235 SAMPLE 10138	INDEX 4236 SAMPLE 3924
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	POVERTY RUN	ROSEVILLE	ZANESVILLE
WELL NAME	ZELLA F. DEWITT	SPRING COMMUNITY NO. 1	ARMCO NO. 1
LOCATION	SEC. 3, HOPEWELL TOWNSHIP	SEC. 26, NEWTON TOWNSHIP	ZANESVILLE TWP.
OWNER	PRESTON OIL CO.	NATIONAL GAS & OIL CORP.	H. K. PORTER
COMPLETED	08/01/60	09/02/59	06/26/44
SAMPLED	09/09/65	09/09/65	09/14/44
FORMATION	SILU-CLINTON	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3248	3610	3495
WELLHEAD PRESSURE,PSIG	NOT GIVEN	920	1150
OPEN FLOW, MCFD	NOT GIVEN	180	2
COMPONENT, MOLE PCT			
METHANE	72.2	86.1	87.4
ETHANE	15.3	5.8	9.6
PROPANE	7.2	1.7	---
N-BUTANE	2.2	0.6	---
ISOBUTANE	1.1	0.3	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.7	0.1	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	2.0	4.6	2.4
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.03	0.15	0.21
HEATING VALUE*	1369	1078	1057
SPECIFIC GRAVITY	0.801	0.644	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4237 SAMPLE 11753	INDEX 4238 SAMPLE 12281	INDEX 4239 SAMPLE 11940
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	NOBLE
FIELD	ZANESVILLE	ZANESVILLE	AVA
WELL NAME	JENKINS COMMUNITY NO. 1	ROGOVIN NO. 1	C. J. & J. A. BRYAN NO. 1
LOCATION	SEC. 10, NEWTON TOWNSHIP	MADISON TOWNSHIP	SEC. 1, NOBLE TOWNSHIP
OWNER	OXFORD OIL CO.	POINTER OIL CO.	LIBERTY PETROLEUM CORP.
COMPLETED	09/21/68	01/20/70	02/19/69
SAMPLED	02/03/69	05/27/70	06/14/69
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3472	4650	5155
WELLHEAD PRESSURE,PSIG	1200	1000	1325
OPEN FLOW, MCFD	3800	215000	1700
COMPONENT, MOLE PCT			
METHANE	85.6	84.6	87.1
ETHANE	5.0	5.8	4.7
PROPANE	1.2	1.8	1.6
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.0	0.4	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.6	6.2	5.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.4	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.00	0.21	0.16
HEATING VALUE*	1039	1051	1059
SPECIFIC GRAVITY	0.643	0.644	0.637

	INDEX 4240 SAMPLE 13292	INDEX 4241 SAMPLE 13293	INDEX 4242 SAMPLE 10500
STATE	OHIO	OHIO	OHIO
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	GUERNSEY	GUERNSEY	HEDDLESON
WELL NAME	HOMER GUILER NO. 1	CHARLES SNODE NO. 1	CLAIR HEDDLESON NO. 1
LOCATION	SEC. 25, CENTER TWP.	SEC. 35, BUFFALO TWP.	OLIVE TOWNSHIP
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	PERMIAN OIL AND GAS CO.
COMPLETED	NOT GIVEN	10/02/70	NOT GIVEN
SAMPLED	07/05/72	07/06/72	03/28/66
FORMATION	ORDO-QUEENSTON	ORDO-QUEENSTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5899	5732	1370
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1460	200
OPEN FLOW, MCFD	3009	3900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	86.3	74.6
ETHANE	2.2	6.5	13.8
PROPANE	0.0	2.2	7.2
N-BUTANE	0.3	0.5	1.5
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.8	0.2	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	7.9	3.6	1.5
OXYGEN	1.7	0.0	0.0
ARGON	1.9	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.0
HELIUM	0.12	0.11	0.10
HEATING VALUE*	969	1094	1292
SPECIFIC GRAVITY	0.665	0.644	0.747

	INDEX 4243 SAMPLE 12668	INDEX 4244 SAMPLE 12669	INDEX 4245 SAMPLE 10133
STATE	OHIO	OHIO	OHIO
COUNTY	NOBLE	NOBLE	PERRY
FIELD	NOT GIVEN	NOT GIVEN	BRISTOL
WELL NAME	SAMANTHA GROVES NO. 1	CHARLES STIERS NO. 1	KING/DENNIS
LOCATION	SEC. 19, BUFFALO TOWNSHIP	SEC. 12, NOBLE TOWNSHIP	SEC. 20, PIKE TOWNSHIP
OWNER	LIBERTY PETROLEUM CORP.	LIBERTY PETROLEUM CORP.	LANDA OIL CO.
COMPLETED	12/03/69	12/06/69	09/01/60
SAMPLED	02/12/71	02/12/71	09/09/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5192	5230	3329
WELLHEAD PRESSURE,PSIG	1400	1425	NOT GIVEN
OPEN FLOW, MCFD	2019	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	83.8	80.2
ETHANE	5.3	4.9	3.4
PROPANE	1.2	1.5	3.6
N-BUTANE	0.4	0.4	1.4
ISOBUTANE	0.3	0.4	0.9
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	4.8	7.7	3.6
OXYGEN	0.2	0.8	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.11	0.13	0.07
HEATING VALUE*	1047	1021	1207
SPECIFIC GRAVITY	0.629	0.650	0.717

	INDEX 4246 SAMPLE 10178	INDEX 4247 SAMPLE 10551	INDEX 4248 SAMPLE 10552
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	CLAYTON	CORNING	CORNING
WELL NAME	CLYDE WYER	KEIFER-MARSHALL UNIT NO. 5	C. & V. WEAVER
LOCATION	SEC. 2, CLAYTON TOWNSHIP	SEC. 10, MONROE TOWNSHIP	SEC. 3, MONROE TOWNSHIP
OWNER	HOGAN & LEONARD OIL CO.	JOHN ALTIER, SR.	GALION PROSPECTORS
COMPLETED	08/01/62	02/01/66	08/01/65
SAMPLED	09/26/65	05/05/66	05/05/66
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3321	3893	3922
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	1050
OPEN FLOW, MCFD	870	3160	3500
COMPONENT, MOLE PCT			
METHANE	86.1	80.4	80.2
ETHANE	4.6	4.5	4.6
PROPANE	1.2	2.1	1.9
N-BUTANE	0.3	0.7	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.8	11.2	11.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.20	0.32	0.28
HEATING VALUE*	1025	1003	1009
SPECIFIC GRAVITY	0.635	0.667	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4249 SAMPLE 10132	INDEX 4250 SAMPLE 4099	INDEX 4251 SAMPLE 10131
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	MOUNT PERRY	NOT GIVEN	PHERSON
WELL NAME	J. THOMPSON	SUNDAY CREEK COAL CO. NO.259	J. SCHOFIELD
LOCATION	SEC.4, MADISON TOWNSHIP	SEC. 1, MONROE TWP.	SEC. 24, HOPEWELL TOWNSHIP
OWNER	C. E. SMITH & A. W. YENNE	OHIO FUEL GAS CO.	OXFORD OIL CO.
COMPLETED	11/01/59	04/25/45	01/01/48
SAMPLED	09/09/65	05/28/45	09/08/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3198	3983	3250
WELLHEAD PRESSURE,PSIG	900	1120	225
OPEN FLOW, MCFD	2190	757	30
COMPONENT, MOLE PCT			
METHANE	86.3	79.1	87.4
ETHANE	5.6	13.1	5.6
PROPANE	1.4	---	1.8
N-BUTANE	0.4	---	0.6
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.2	7.4	3.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.19	0.28	0.10
HEATING VALUE*	1057	1036	1089
SPECIFIC GRAVITY	0.639	0.649	0.641

	INDEX 4252 SAMPLE 10130	INDEX 4253 SAMPLE 10135	INDEX 4254 SAMPLE 4370
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	SOMERSET	SOMERSET S	SOUTHERN
WELL NAME	IVA FISHER	NANCE	J. A. WELLS NO. 8390
LOCATION	SEC. 32, HOPEWELL TOWNSHIP	SEC. 13, READING TOWNSHIP	SEC. 11, BEARFIELD TWP.
OWNER	GEO. HAUB, ET AL.	NATIONAL GAS & OIL CORP.	OHIO FUEL GAS CO.
COMPLETED	05/01/51	06/27/55	06/20/47
SAMPLED	09/09/65	09/08/65	10/21/47
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3080	2741	3815
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1190
OPEN FLOW, MCFD	800	1554	798
COMPONENT, MOLE PCT			
METHANE	86.7	85.9	75.5
ETHANE	5.5	5.9	15.0
PROPANE	1.5	1.7	---
N-BUTANE	0.4	0.6	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	4.7	4.4	8.8
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.16	0.12	0.23
HEATING VALUE*	1066	1090	1034
SPECIFIC GRAVITY	0.639	0.652	0.668

	INDEX 4255 SAMPLE 5111	INDEX 4256 SAMPLE 6079	INDEX 4257 SAMPLE 467
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	SUGAR GROVE	SUGAR GROVE	THORNSVILLE
WELL NAME	A. M. PASKELL NO. 1-8929	LOLA M. NOYES NO. 1	FINK NO. 1
LOCATION	SEC. 17, T13N, R14W	SEC. 9, HOPEWELL TWP.	1 MI N THORNSVILLE
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	06/04/51	01/26/56	--/--/08
SAMPLED	10/08/51	06/04/56	10/07/20
FORMATION	SILU-NIAGARA	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3548	2830	2580
WELLHEAD PRESSURE,PSIG	860	855	50
OPEN FLOW, MCFD	203	272	400
COMPONENT, MOLE PCT			
METHANE	84.4	85.5	72.2
ETHANE	4.1	5.2	23.1
PROPANE	1.3	2.0	---
N-BUTANE	0.4	0.8	---
ISOBUTANE	0.1	0.5	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	9.2	4.2	3.7
OXYGEN	0.1	TRACE	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.3	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.29	0.08	0.18
HEATING VALUE*	993	1106	1145
SPECIFIC GRAVITY	0.645	0.658	0.686

	INDEX 4258 SAMPLE 10193	INDEX 4259 SAMPLE 10194	INDEX 4260 SAMPLE 9779
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	PORTAGE
FIELD	BEST DEERFIELD - SMITH	BRIMFIELD	RANDOLPH
WELL NAME	OLIVE NO. 1 - EOG NO.2225	C. STEWART NO.1-EOG NO.2057	J.R. FREEMAN NO. 1 - 413
LOCATION	LOT 37, DEERFIELD TOWNSHIP	SEC. 14, BRIMFIELD TOWNSHIP	LOT 71, RANDOLPH TOWNSHIP
OWNER	THE EAST OHIO GAS CO.	THE EAST OHIO GAS CO.	BELDEN & BLAKE OIL PROD. CO.
COMPLETED	09/10/61	08/21/57	12/15/64
SAMPLED	10/04/65	10/04/65	03/02/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4792	4204	4674
WELLHEAD PRESSURE,PSIG	1440	1265	1400
OPEN FLOW, MCFD	2949	760	2370
COMPONENT, MOLE PCT			
METHANE	88.3	90.7	90.2
ETHANE	5.4	4.3	5.1
PROPANE	1.6	1.2	1.3
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.3	2.6	2.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.09	0.10	0.10
HEATING VALUE*	1073	1066	1074
SPECIFIC GRAVITY	0.633	0.617	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4261 SAMPLE 9780	INDEX 4262 SAMPLE 8970	INDEX 4263 SAMPLE 9061
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	PORTAGE
FIELD	RANDOLPH	RAVENNA	RAVENNA
WELL NAME	JAMES SPELLMAN NO. 1 - 407	J. H. PARSONS NO. 1-2287	H. H. MILLER NO. 1
LOCATION	LOT 62, RANDOLPH TOWNSHIP	LOT 25, ROOTSTOWN TWP.	LOT 95, RANDOLPH PORTAGE SUR
OWNER	BELDEN & BLAKE OIL PROD. CO	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	11/27/64	02/02/63	03/29/63
SAMPLED	01/02/65	05/22/63	07/29/63
FORMATION	SILU-CLINTON	SILU-MEDINA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4642	4370	4407
WELLHEAD PRESSURE,PSIG	1415	1370	1380
OPEN FLOW, MCFD	5130	1614	4080
COMPONENT, MOLE PCT			
METHANE	89.7	89.8	90.5
ETHANE	5.2	4.8	4.8
PROPANE	1.6	1.5	1.3
N-BUTANE	0.4	0.6	0.5
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.5	2.6	2.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.09	0.10	0.10
HEATING VALUE*	1073	1080	1074
SPECIFIC GRAVITY	0.619	0.626	0.620

	INDEX 4264 SAMPLE 9613	INDEX 4265 SAMPLE 7859	INDEX 4266 SAMPLE 10513
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	RICHLAND
FIELD	ROOTSTOWN	WILDCAT	WILDCAT
WELL NAME	ZICKEFOOSE METZNER NO. 2	MOORE E NO. 1	G. MILLER NO. 1
LOCATION	LOT 1, ROOTSTOWN TWP.	LOT 79, FREEDOM TWP.	SEC. 24, PLYMOUTH TOWNSHIP
OWNER	MIDLAND EXPLORATION CO.	NORTHERN NAT. GAS PROD. CO.	MCCLURE OIL CO.
COMPLETED	06/--/64	12/03/60	05/26/65
SAMPLED	10/16/64	02/11/61	03/29/66
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4555	4354	1324
WELLHEAD PRESSURE,PSIG	1400	1337	495
OPEN FLOW, MCFD	952	300	4300
COMPONENT, MOLE PCT			
METHANE	89.2	86.8	86.1
ETHANE	5.1	5.9	5.3
PROPANE	1.6	1.8	1.4
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	2.6	3.6	5.6
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.10	0.10	0.15
HEATING VALUE*	1090	1091	1034
SPECIFIC GRAVITY	0.631	0.645	0.635

	INDEX 4267 SAMPLE 11645	INDEX 4268 SAMPLE 10174	INDEX 4269 SAMPLE 10161
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	STARK
FIELD	BETHLEHEM - STARK	CANTON	CANTON SUBURBAN
WELL NAME	A & M FEUCHT NO. 1	BREINING COMM. NO. 1-EOG NO.	W. MILLER NO. 2-EOG NO. 2099
LOCATION	BETHLEHEM TOWNSHIP	SEC. 21, CANTON TOWNSHIP	SEC. 28, PERRY TOWNSHIP
OWNER	EAST OHIO GAS CO.	THE EAST OHIO GAS CO.	THE EAST OHIO GAS CO.
COMPLETED	02/09/68	01/04/47	09/01/58
SAMPLED	09/18/68	09/30/65	09/22/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4394	4640	4334
WELLHEAD PRESSURE,PSIG	1250	1210	1250
OPEN FLOW, MCFD	7310	1101	1637
COMPONENT, MOLE PCT			
METHANE	87.7	88.7	87.3
ETHANE	5.6	5.5	5.8
PROPANE	1.7	1.4	1.7
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.5	3.0	3.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.13	0.10	0.11
HEATING VALUE*	1086	1080	1086
SPECIFIC GRAVITY	0.638	0.630	0.640

	INDEX 4270 SAMPLE 10175	INDEX 4271 SAMPLE 10245	INDEX 4272 SAMPLE 10176
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	STARK
FIELD	LAKE	MARLBORO S	PIKE - STARK
WELL NAME	TROYER NO. 1-EOG NO. 2	CHENEVEY NO. 1 - 2300	WEAVER NO. 1-EOG 1780
LOCATION	SEC. 21, LAKE TOWNSHIP	SEC. 25, MARLBORO TOWNSHIP	SEC. 15, PIKE TOWNSHIP
OWNER	THE EAST OHIO GAS CO.	THE EAST OHIO GAS CO.	THE EAST OHIO GAS CO.
COMPLETED	07/29/58	05/24/63	12/30/43
SAMPLED	09/30/65	10/20/65	09/30/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4445	4814	4865
WELLHEAD PRESSURE,PSIG	1000	400	1340
OPEN FLOW, MCFD	459	25	1069
COMPONENT, MOLE PCT			
METHANE	88.0	83.4	88.8
ETHANE	5.8	7.6	5.6
PROPANE	1.8	2.9	1.7
N-BUTANE	0.5	1.0	0.5
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	3.0	3.2	2.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.11	0.11	0.10
HEATING VALUE*	1047	11570	1089
SPECIFIC GRAVITY	0.633	0.681	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4273 SAMPLE 9080		INDEX 4274 SAMPLE 9090		INDEX 4275 SAMPLE 3873	
STATE	OHIO		OHIO		OHIO	
COUNTY	STARK		STARK		STARK	
FIELD	RAVENNA		RAVENNA		SANDYVILLE	
WELL NAME	A&M CHENEVEY COMM. NO. 1		A&M CHENEVEY COMM. NO. 1		REAM NO. 1	
LOCATION	SEC. 25, MARLBORO STARK SUR.		SEC. 25, MARLBORO SUR.		SEC. 27, CANTON TWP.	
OWNER	EAST OHIO GAS CO.		EAST OHIO GAS CO.		HANLEY & BIRD	
COMPLETED	05/24/63		05/24/63		08/--/44	
SAMPLED	09/13/63		09/13/63		11/13/44	
FORMATION	SILU-CLINTON		SILU-CLINTON		SILU-CLINTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4844		4814		4685	
WELLHEAD PRESSURE,PSIG	400		400		NOT GIVEN	
OPEN FLOW, MCFD	25		25		1630	
COMPONENT, MOLE PCT						
METHANE	78.5		85.4		90.6	
ETHANE	6.9		7.1		8.2	
PROPANE	2.8		2.7		---	
N-BUTANE	0.7		1.0		---	
ISOBUTANE	0.3		0.6		---	
N-PENTANE	TRACE		0.2		---	
ISOPENTANE	0.4		0.3		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	TRACE		0.2		---	
NITROGEN	8.6		2.2		0.6	
OXYGEN	1.2		0.0		0.4	
ARGON	0.1		0.0		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.20		0.10		0.12	
HEATING VALUE*	1042		1148		1065	
SPECIFIC GRAVITY	0.683		0.665		0.600	

	INDEX 4276 SAMPLE 10155		INDEX 4277 SAMPLE 10156		INDEX 4278 SAMPLE 10244	
STATE	OHIO		OHIO		OHIO	
COUNTY	STARK		STARK		SUMMIT	
FIELD	STARK-SUMMIT		STARK-SUMMIT		GREENSBURG	
WELL NAME	JENKINS NO.1-EOG 2114		ROHRER NO 1-EOG. NO. 1719		GOODYEAR TIRE & RUBBER NO. 1	
LOCATION	SEC. 36 LAWRENCE TOWNSHIP		SEC. 1, JACKSON TOWNSHIP		SEC. 26, GREEN TOWNSHIP	
OWNER	THE EAST OHIO GAS CO.		THE EAST OHIO GAS CO.		THE EAST OHIO GAS CO.	
COMPLETED	08/04/59		05/18/39		NOT GIVEN	
SAMPLED	09/22/65		09/22/65		10/20/65	
FORMATION	SILU-CLINTON		DEVO-ORISKANY		SILU-CLINTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4186		2881		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1250		975		NOT GIVEN	
OPEN FLOW, MCFD	572		157		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	83.0		85.6		86.3	
ETHANE	6.7		8.7		5.5	
PROPANE	2.4		2.6		1.8	
N-BUTANE	0.9		1.8		0.5	
ISOBUTANE	0.4		0.2		0.3	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	5.7		1.4		4.5	
OXYGEN	0.0		0.0		0.3	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.20		0.06		0.12	
HEATING VALUE*	1094		1146		10730	
SPECIFIC GRAVITY	0.668		0.655		0.645	

	INDEX 4279 SAMPLE 10223		INDEX 4280 SAMPLE 10157		INDEX 4281 SAMPLE 4471	
STATE	OHIO		OHIO		OHIO	
COUNTY	SUMMIT		SUMMIT		SUMMIT	
FIELD	RICHFIELD W		STARK-SUMMIT		WILDCAT	
WELL NAME	E. MERTON NO.2 - EOG NO.969		KIMINECZ NO.1-EOG NO. 2022		J. G. MCCREADY NO. 1	
LOCATION	SEC. 19, RICHFIELD TOWNSHIP		SEC. 17, FRANKLIN TOWNSHIP		LOT 73, NORTHHAMPTON TWP.	
OWNER	THE EAST OHIO GAS CO.		THE EAST OHIO GAS CO.		WISER OIL CO.	
COMPLETED	NOT GIVEN		08/14/56		12/19/47	
SAMPLED	10/05/65		09/22/65		04/07/48	
FORMATION	SILU-CLINTON		SILU-CLINTON		SILU-NIAGARA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3509		3900		3645	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1340		825	
OPEN FLOW, MCFD	NOT GIVEN		2307		213	
COMPONENT, MOLE PCT						
METHANE	85.5		87.3		84.6	
ETHANE	6.8		5.8		13.4	
PROPANE	2.7		1.9		---	
N-BUTANE	0.9		0.7		---	
ISOBUTANE	0.4		0.3		---	
N-PENTANE	0.1		0.2		---	
ISOPENTANE	0.4		0.2		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	0.2		0.1		---	
NITROGEN	2.8		3.3		1.6	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.17		0.11		0.12	
HEATING VALUE*	11330		1094		1097	
SPECIFIC GRAVITY	0.662		0.642		0.629	

	INDEX 4282 SAMPLE 9741		INDEX 4283 SAMPLE 12707		INDEX 4284 SAMPLE 11845	
STATE	OHIO		OHIO		OHIO	
COUNTY	TUSCARAWAS		TUSCARAWAS		TUSCARAWAS	
FIELD	NEW CUMBERLAND		STONE CREEK		WAINWRIGHT	
WELL NAME	HARDWIDGE NO. 1		DEIBEL-SCHATZ NO. 1		P. REICHMAN NO. 1	
LOCATION	SEC. 36, WARREN TOWNSHIP		JEFFERSON TOWNSHIP		SEC. 13, WARWICK TOWNSHIP	
OWNER	MIDLAND EXPL. CO.		WESTERN EXPLORATION, INC.		MUTUAL OIL & GAS CO.	
COMPLETED	07/06/64		09/--/70		10/30/68	
SAMPLED	02/16/65		03/01/71		05/02/69	
FORMATION	SILU-CLINTON		SILU-CLINTON		SILU-CLINTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4923		4717		4980	
WELLHEAD PRESSURE,PSIG	1400		1400		1410	
OPEN FLOW, MCFD	3072		3692		1750	
COMPONENT, MOLE PCT						
METHANE	88.8		88.6		88.0	
ETHANE	5.6		6.7		6.1	
PROPANE	1.6		2.0		1.5	
N-BUTANE	0.6		0.6		0.4	
ISOBUTANE	0.2		0.4		0.2	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	TRACE		0.1		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	3.2		0.9		3.1	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.12		0.14		0.12	
HEATING VALUE*	1076		1089		1074	
SPECIFIC GRAVITY	0.628		0.655		0.627	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4285 SAMPLE 11724	INDEX 4286 SAMPLE 10177	INDEX 4287 SAMPLE 542
STATE	OHIO	OHIO	OHIO
COUNTY	TUSCARAWAS	TUSCARAWAS	VINTON
FIELD	WILDCAT	ZOARVILLE	SUGAR GROVE
WELL NAME	CROSS CREEK A-2	SPRING NO. 1-EOG NO. 1436	P. M. CLARK 4
LOCATION	GOSHEN TOWNSHIP	SEC. 49, SANDY TOWNSHIP	SEC. 7, ELK TWP.
OWNER	EAST OHIO GAS CO.	THE EAST OHIO GAS CO.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	06/17/68	10/15/37	--/--/18
SAMPLED	01/09/69	09/30/65	11/--/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4865	4728	2745
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1350	820
OPEN FLOW, MCFD	2271	2067	1410
COMPONENT, MOLE PCT			
METHANE	86.4	89.7	78.9
ETHANE	6.4	5.0	5.6
PROPANE	1.8	1.3	---
N-BUTANE	0.7	0.4	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	3.4	2.6	14.3
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.13	0.10	0.51
HEATING VALUE*	1104	1079	900
SPECIFIC GRAVITY	0.649	0.625	0.643

	INDEX 4288 SAMPLE 497	INDEX 4289 SAMPLE 498	INDEX 4290 SAMPLE 500
STATE	OHIO	OHIO	OHIO
COUNTY	VINTON	VINTON	VINTON
FIELD	VINTON	VINTON	VINTON
WELL NAME	TRAPHAGEN NO. 1 OFS NO. 617	WILLIAMS NO. 1, OFS NO. 2863	M. JOHNSON, OFS NO. 1592
LOCATION	SEC. 36, RICHLAND TWP.	SEC. 29, SWAN TWP.	SEC. 34, JACKSON TWP.
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL SUPPLY CO.	OHIO FUEL SUPPLY CO.
COMPLETED	--/--/02	03/01/20	--/--/20
SAMPLED	10/11/20	10/08/20	10/11/20
FORMATION	MISS-BEREA	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	700	2639	2400
WELLHEAD PRESSURE,PSIG	70	800	210
OPEN FLOW, MCFD	NOT GIVEN	1500	3500
COMPONENT, MOLE PCT			
METHANE	0.0	80.8	78.2
ETHANE	0.0	9.8	10.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	9.0	10.8
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.55	0.39	0.41
HEATING VALUE*	0	994	980
SPECIFIC GRAVITY	0.001	0.638	0.649

	INDEX 4291 SAMPLE 4	INDEX 4292 SAMPLE 9052	INDEX 4293 SAMPLE 480
STATE	OHIO	OHIO	OHIO
COUNTY	VINTON	WASHINGTON	WAYNE
FIELD	VINTON COUNTY	LOWELL	ASHLAND
WELL NAME	NOT GIVEN	HAAS NO. 1	HALEY NO. 1
LOCATION	NOT GIVEN	LOT 72, BEAR CREEK ALLOTMENT	SEC. 9, CONGRESS TWP.
OWNER	OHIO FUEL CO.	QUAKER STATE OIL REFG. CORP.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	--/--/10	05/21/63	--/--/15
SAMPLED	05/03/19	07/23/63	09/01/20
FORMATION	SILU-CLINTON	MISS-BEREA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	1819	3021
WELLHEAD PRESSURE,PSIG	155	735	110
OPEN FLOW, MCFD	NOT GIVEN	960	313
COMPONENT, MOLE PCT			
METHANE	74.5	82.6	89.1
ETHANE	7.5	10.0	7.2
PROPANE	---	4.0	---
N-BUTANE	---	1.1	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	16.3	1.6	1.9
OXYGEN	1.1	0.0	1.5
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.0
HELIUM	TRACE	0.10	0.21
HEATING VALUE*	889	1182	1032
SPECIFIC GRAVITY	0.665	0.679	0.605

	INDEX 4294 SAMPLE 10158	INDEX 4295 SAMPLE 6787	INDEX 4296 SAMPLE 10307
STATE	OHIO	OHIO	OHIO
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	CHIPPEWA	DALTON	HERMANSVILLE
WELL NAME	BRILLHART NO. 1-EOG NO. 2112	LOUIS WITHRICH NO. 1	HARVEY GASSER NO. 1
LOCATION	SEC. 4, BAUGHMAN TOWNSHIP	SEC. 13, SUGAR CREEK	SEC. 30, MILTON TOWNSHIP
OWNER	THE EAST OHIO GAS CO.	WISER OIL CO.	KIN-ARK OIL CO.
COMPLETED	07/09/59	NOT GIVEN	07/18/65
SAMPLED	09/22/65	--/--/58	11/30/65
FORMATION	SILU-CLINTON	SILU-CLINTON, RED	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3760	4118	3360
WELLHEAD PRESSURE,PSIG	1280	1320	965
OPEN FLOW, MCFD	519	2494	1300
COMPONENT, MOLE PCT			
METHANE	89.5	87.1	88.4
ETHANE	5.1	6.0	5.3
PROPANE	1.3	1.7	1.5
N-BUTANE	0.3	0.5	0.7
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.0	3.5	3.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.10	0.12
HEATING VALUE*	1066	1087	1078
SPECIFIC GRAVITY	0.621	0.640	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4297 SAMPLE 553	INDEX 4298 SAMPLE 7993	INDEX 4299 SAMPLE 3894
STATE	OHIO	OHIO	OHIO
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	LODI	NORTHERN	NOT GIVEN
WELL NAME	WM. NAFTZGER NO. 2, S-1667	NO. 10042	MARY MARTIN NO. 1
LOCATION	SEC. 7	SEC. 5, PLAIN TWP.	SEC. 3, GREEN TWP.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL GAS CO.	NORTHERN ORDNANCE INC.
COMPLETED	--/--/17	NOT GIVEN	09/04/44
SAMPLED	12/--/20	05/22/61	09/04/44
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3098	3174	3440
WELLHEAD PRESSURE,PSIG	200	980	1125
OPEN FLOW, MCFD	78	2460	800
COMPONENT, MOLE PCT			
METHANE	86.6	83.3	91.9
ETHANE	10.9	6.2	7.4
PROPANE	---	1.9	---
N-BUTANE	---	0.5	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.1	6.7	0.2
OXYGEN	0.0	0.1	0.4
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.2	0.0
HELIUM	0.21	0.20	0.10
HEATING VALUE*	1073	1052	1064
SPECIFIC GRAVITY	0.615	0.654	0.594

	INDEX 4300 SAMPLE 9043	INDEX 4301 SAMPLE 7148	INDEX 4302 SAMPLE 10340
STATE	OHIO	OHIO	OHIO
COUNTY	WAYNE	WAYNE	WOOD
FIELD	NOT GIVEN	WILDCAT	FREEPORT
WELL NAME	D. & E. WEYGANDT NO. 1	NO. 10042	ROSENDALE
LOCATION	SEC. 9, BAUGHMAN WAYNE CTY.	SEC. 7, GREEN TWP.	PERRY TOWNSHIP
OWNER	EAST OHIO GAS CO.	WARD J. RAMSEYER	W. H. DENNIS & SON NAT. GAS
COMPLETED	02/15/63	05/25/59	01/01/09
SAMPLED	07/15/63	07/14/59	12/22/65
FORMATION	SILU-CLINTON	SILU-CLINTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	160	160	300
DEPTH, FEET	3696	3424	1180
WELLHEAD PRESSURE,PSIG	1350	1340	20
OPEN FLOW, MCFD	1417	644	10
COMPONENT, MOLE PCT			
METHANE	81.9	87.8	71.6
ETHANE	5.4	5.0	10.0
PROPANE	2.0	1.3	5.6
N-BUTANE	0.7	0.0	2.5
ISOBUTANE	0.3	0.6	0.9
N-PENTANE	0.2	0.6	0.6
ISOPENTANE	0.1	0.0	0.9
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.0	0.6
NITROGEN	9.1	4.7	6.7
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.20	0.10	0.13
HEATING VALUE*	1028	1037	1267
SPECIFIC GRAVITY	0.660	0.624	0.789

	INDEX 4303 SAMPLE 10341	INDEX 4304 SAMPLE 6552	INDEX 4305 SAMPLE 6559
STATE	OHIO	OKLAHOMA	OKLAHOMA
COUNTY	WOOD	ALFALFA	ALFALFA
FIELD	FREEPORT	AMORITA S	CARMEN N
WELL NAME	DEWITT	STATE-HEATH NO. 1	MORGENSON-JENNINGS NO. 1
LOCATION	PERRY TOWNSHIP	SEC. 16, T28N, R10W	SEC. 15, T25N, R12W
OWNER	W. H. DENNIS&SON NAT. GAS CO	GULF OIL CORP. & B.M. HEALTH	AMERADA HESS CORP.
COMPLETED	01/01/42	01/01/58	04/13/58
SAMPLED	12/22/65	04/09/58	04/19/58
FORMATION	ORDO-TRENTON	PENN-CHEROKEE	MISS-LIME
GEOLOGIC PROVINCE CODE	300	360	360
DEPTH, FEET	1180	4914	5983
WELLHEAD PRESSURE,PSIG	20	1867	560
OPEN FLOW, MCFD	2	3500	115
COMPONENT, MOLE PCT			
METHANE	73.7	88.0	87.7
ETHANE	8.6	6.1	7.3
PROPANE	4.8	2.1	1.8
N-BUTANE	2.0	0.8	0.7
ISOBUTANE	0.9	0.4	0.2
N-PENTANE	0.6	0.2	0.3
ISOPENTANE	0.9	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.3	0.1
NITROGEN	7.2	1.4	1.3
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.14	0.10	0.10
HEATING VALUE*	1226	1136	1127
SPECIFIC GRAVITY	0.769	0.644	0.643

	INDEX 4306 SAMPLE 10765	INDEX 4307 SAMPLE 11272	INDEX 4308 SAMPLE 6547
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	CHEROKEE SW	CHEROKEE W	CHEROKITA TREND
WELL NAME	COLLINS NO. 1	TAYLOR-HEATH NO. 1	O. Z. SMITH A NO. 1
LOCATION	SEC. 21, T26N, R11W	SEC. 2, T26N, R12W	SEC. 21, T27N, R10W
OWNER	J. M. HUBER CORP.	GULF OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	12/19/65	12/06/57	NOT GIVEN
SAMPLED	10/26/66	02/05/68	03/24/58
FORMATION	DEVO-HUNTON	PENN-CHEROKEE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6082	5455	280
WELLHEAD PRESSURE,PSIG	2069	1292	NOT GIVEN
OPEN FLOW, MCFD	3450	2472	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	88.6	1.4
ETHANE	9.4	5.6	0.2
PROPANE	5.8	2.4	0.1
N-BUTANE	2.2	0.6	TRACE
ISOBUTANE	0.8	0.3	0.0
N-PENTANE	1.3	0.2	TRACE
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.7	0.1	TRACE
HEXANES PLUS	1.6	0.2	0.1
NITROGEN	4.0	1.2	97.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.11	0.05	0.80
HEATING VALUE*	1320	1157	25
SPECIFIC GRAVITY	0.796	0.648	0.957

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4309 SAMPLE 9820	INDEX 4310 SAMPLE 13224	INDEX 4311 SAMPLE 9632
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	CHEROKITA TREND	CHEROKITA TREND	DACOMA E
WELL NAME	GOEKAN A-1	W. E. LODGE A NO. 1	O. LEAMON NO. 1
LOCATION	SEC. 21, T27N, R11W	SEC. 19, T27N, R10W	SEC. 5, T25N, R12W
OWNER	PHILLIPS PETROLEUM CO.	CONTINENTAL OIL CO.	SUN OIL CO.
COMPLETED	12/29/64	03/13/72	05/22/63
SAMPLED	03/24/65	05/30/72	11/10/64
FORMATION	PENN-CHEROKEE	PENN-TONKAWA	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5203	4150	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1915	1600	1950
OPEN FLOW, MCFD	1290	2281	5950
COMPONENT, MOLE PCT			
METHANE	87.3	85.3	87.6
ETHANE	5.9	5.0	4.6
PROPANE	2.0	2.4	2.0
N-BUTANE	0.5	0.8	0.9
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.2	0.2	0.8
NITROGEN	3.0	5.1	2.3
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.08	0.16	0.09
HEATING VALUE*	1088	1092	1147
SPECIFIC GRAVITY	0.640	0.660	0.666

	INDEX 4312 SAMPLE 11676	INDEX 4313 SAMPLE 11362	INDEX 4314 SAMPLE 14242
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	DACOMA NE	DACOMA S	LAMBERT NW
WELL NAME	SHARE NO. 1-29	NEWLIN NO. 1	WEBB NO. 9-B
LOCATION	SEC. 29, T26N, R12W	SEC. 19, T25N, R12W	SEC. 9, T26N, R12W
OWNER	CLEARY PETROLEUM CORP.	CONTINENTAL OIL CO.	RAN RICKS, JR.
COMPLETED	08/12/68	NOT GIVEN	05/--/75
SAMPLED	10/09/68	03/04/69	12/--/74
FORMATION	DEVO-HUNTON	PENN-CHEROKEE	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6476	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2200	NOT GIVEN	1820
OPEN FLOW, MCFD	86000	10600	3100
COMPONENT, MOLE PCT			
METHANE	88.0	90.1	88.8
ETHANE	6.7	4.5	5.5
PROPANE	2.1	2.0	2.6
N-BUTANE	0.5	0.9	0.7
ISOBUTANE	0.2	0.2	0.5
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.8	1.2	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.06	0.04
HEATING VALUE*	1107	1127	1141
SPECIFIC GRAVITY	0.635	0.640	0.646

	INDEX 4315 SAMPLE 14243	INDEX 4316 SAMPLE 14704	INDEX 4317 SAMPLE 14705
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	LAMBERT NW	LAMBERT SE	LAMBERT SE
WELL NAME	WEBB NO. 9-B	RUTH NO. 1	SCHNITZER
LOCATION	SEC. 9, T26N, R12W	SEC. 15, T25N, R10W	SEC. 21, T25N, R10W
OWNER	RAN RICKS, JR.	L. R. FRENCH JR.	L. R. FRENCH JR.
COMPLETED	NOT GIVEN	11/02/75	NOT GIVEN
SAMPLED	12/--/74	06/15/76	06/15/76
FORMATION	NOT GIVEN	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5388	5483
WELLHEAD PRESSURE,PSIG	NOT GIVEN	750	950
OPEN FLOW, MCFD	NOT GIVEN	600	600
COMPONENT, MOLE PCT			
METHANE	88.9	87.2	86.2
ETHANE	5.5	5.3	5.7
PROPANE	2.6	2.8	3.2
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	2.3	2.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.08	0.09
HEATING VALUE*	1146	1131	1146
SPECIFIC GRAVITY	0.649	0.656	0.670

	INDEX 4318 SAMPLE 9845	INDEX 4319 SAMPLE 9965	INDEX 4320 SAMPLE 9966
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	LAMBERT, SOUTHEAST	RINGWOOD	RINGWOOD
WELL NAME	MCDANIEL NO. 1	MILACEK UNIT NO. 1-C	MILACEK UNIT NO. 1-T
LOCATION	SEC. 21, T25N, R11W	SEC. 10, T23N, R9W	SEC. 10, T23N, R9W
OWNER	NATURAL GAS & OIL PROD. CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	10/04/64	06/08/65	06/01/65
SAMPLED	04/15/65	07/09/65	07/09/65
FORMATION	MISS-MERAMEC	MISS-	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5810	6640	7078
WELLHEAD PRESSURE,PSIG	1942	2183	2524
OPEN FLOW, MCFD	1849	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.1	90.0	86.7
ETHANE	5.0	4.4	6.8
PROPANE	1.7	1.7	2.7
N-BUTANE	0.7	0.7	0.9
ISOBUTANE	0.3	0.2	0.5
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	0.2	0.0
HEXANES PLUS	0.2	0.5	0.8
NITROGEN	1.3	1.7	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.12	0.10	0.10
HEATING VALUE*	1107	1115	1183
SPECIFIC GRAVITY	0.631	0.638	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4321 SAMPLE 11005		INDEX 4322 SAMPLE 11006		INDEX 4323 SAMPLE 11274	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ALFALFA		ALFALFA		ALFALFA	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	PECHA NO. 1		PECHA NO. 1		JOHNSON LARIMORE UNIT NO. 1	
LOCATION	SEC. 9, T23N, R9W		SEC. 9, T23N, R9W		SEC. 1, T23N, R10W	
OWNER	ALADDIN PETROLEUM CORP.		ALADDIN PETROLEUM CORP.		CHAMPLIN PETROLEUM CO.	
COMPLETED	01/02/67		01/02/67		05/15/65	
SAMPLED	06/21/67		06/21/67		02/10/68	
FORMATION	MISS-		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6915		7123		7184	
WELLHEAD PRESSURE,PSIG	1350		1350		1142	
OPEN FLOW, MCFD	14174		7400		1133	
COMPONENT, MOLE PCT						
METHANE	87.0		87.8		83.6	
ETHANE	6.9		6.5		8.6	
PROPANE	2.1		2.0		3.0	
N-BUTANE	0.7		0.8		0.8	
ISOBUTANE	0.3		0.2		0.4	
N-PENTANE	0.3		0.1		0.3	
ISOPENTANE	0.2		0.4		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.3	
NITROGEN	1.8		1.5		2.7	
OXYGEN	0.1		0.1		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.57		0.05		0.08	
HEATING VALUE*	1125		1127		1155	
SPECIFIC GRAVITY	0.648		0.647		0.675	

	INDEX 4324 SAMPLE 11275		INDEX 4325 SAMPLE 12124		INDEX 4326 SAMPLE 12261	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ALFALFA		ALFALFA		ALFALFA	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	JOHNSON-LARIMORE UNIT NO. 1		MINNICK NO. 1		SIMON B. UNRUH UNIT NO. 1	
LOCATION	SEC. 1, T23N, R10W		SEC. 24, T24N, R24W		SEC. 2, T23N, R9W	
OWNER	CHAMPLIN PETROLEUM CO.		INTERNATIONAL NUCLEAR CORP.		CHAMPLIN PETROLEUM CO.	
COMPLETED	05/15/65		--/--/69		06/27/65	
SAMPLED	02/10/68		11/20/69		05/19/70	
FORMATION	MISS-		DEVO-MISENER		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6504		7120		6408	
WELLHEAD PRESSURE,PSIG	1337		950		2060	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		5207	
COMPONENT, MOLE PCT						
METHANE	86.9		68.9		87.6	
ETHANE	7.0		14.2		6.0	
PROPANE	2.5		7.7		2.5	
N-BUTANE	0.7		2.2		0.7	
ISOBUTANE	0.2		0.4		0.3	
N-PENTANE	0.3		0.8		0.3	
ISOPENTANE	0.1		0.5		0.2	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.1		0.3		0.3	
NITROGEN	1.8		4.8		1.9	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.0		0.1	
HELIUM	0.05		0.06		0.04	
HEATING VALUE*	1127		1310		1134	
SPECIFIC GRAVITY	0.650		0.793		0.652	

	INDEX 4327 SAMPLE 12262		INDEX 4328 SAMPLE 12263		INDEX 4329 SAMPLE 5974	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ALFALFA		ALFALFA		ALFALFA	
FIELD	RINGWOOD		RINGWOOD		WAKITA TREND	
WELL NAME	JULIUS J. SEVERIN UNIT NO. 1		L. V. MAHAFFEY UNIT NO. 1		J. E. MALTBIE NO. 1	
LOCATION	SEC. 12, T23N, R9W		SEC. 3, T23N, R9W		SEC. 8, T24N, R9W	
OWNER	CHAMPLIN PETROLEUM CO.		CHAMPLIN PETROLEUM CO.		CONTINENTAL OIL CO.	
COMPLETED	08/09/65		06/10/65		07/29/55	
SAMPLED	05/19/70		05/19/70		11/29/55	
FORMATION	MISS-		MISS-		PENN-BASAL	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6430		6398		4892	
WELLHEAD PRESSURE,PSIG	1475		2100		1779	
OPEN FLOW, MCFD	7255		7119		32800	
COMPONENT, MOLE PCT						
METHANE	88.1		77.9		81.1	
ETHANE	5.1		5.2		6.7	
PROPANE	2.1		2.3		3.0	
N-BUTANE	0.7		0.7		1.2	
ISOBUTANE	0.3		0.3		0.7	
N-PENTANE	0.3		0.3		1.2	
ISOPENTANE	TRACE		0.1		0.4	
CYCLOPENTANE	0.1		0.1		0.3	
HEXANES PLUS	0.3		0.2		1.1	
NITROGEN	2.6		10.5		4.0	
OXYGEN	0.3		2.3		TRACE	
ARGON	TRACE		0.1		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.03		0.03		0.08	
HEATING VALUE*	1104		1007		1219	
SPECIFIC GRAVITY	0.644		0.691		0.728	

	INDEX 4330 SAMPLE 10104		INDEX 4331 SAMPLE 6595		INDEX 4332 SAMPLE 12968	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ALFALFA		BEAVER		BEAVER	
FIELD	WAKITA TREND		BALKO S		BALKO S	
WELL NAME	USA NO. 1-18		HELEN BARBY NO. 1		HUMMER NO. 1	
LOCATION	SEC. 18, T27N, R9W		SEC. 10, T1N, R22ECM		SEC. 31, T1N, R23ECM	
OWNER	SHELL OIL CO.		TEXACO INC.		HERNDON DRILLING CO.	
COMPLETED	08/03/65		04/07/58		NOT GIVEN	
SAMPLED	09/07/65		05/14/58		08/23/71	
FORMATION	PENN-CHEROKEE		PENN-KANSAS CITY		PENN-MARMATON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5110		5998		6950	
WELLHEAD PRESSURE,PSIG	1555		380		NOT GIVEN	
OPEN FLOW, MCFD	1289		52		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.8		47.5		74.7	
ETHANE	5.2		14.1		7.5	
PROPANE	1.8		18.7		6.7	
N-BUTANE	0.5		6.5		3.0	
ISOBUTANE	0.3		3.4		1.1	
N-PENTANE	0.2		1.0		1.0	
ISOPENTANE	0.1		2.0		0.6	
CYCLOPENTANE	0.1		0.4		0.4	
HEXANES PLUS	0.1		0.4		0.7	
NITROGEN	1.6		5.3		4.0	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.2		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.07		0.04		0.19	
HEATING VALUE*	1098		1197		1323	
SPECIFIC GRAVITY	0.629		1.070		0.793	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4333 SAMPLE 12970	INDEX 4334 SAMPLE 12971	INDEX 4335 SAMPLE 12972
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	BALKO S	BALKO S	BALKO S
WELL NAME	FRY NO. 2-34	THRASHER NO. 1-B	SWAIM NO. 1
LOCATION	SEC. 34, T1N, R24ECM	SEC. 35, T1N, R22ECM	SEC. 36, T1N, R22ECM
OWNER	EXPLORATION VENTURES	PHILCON DEVELOPMENT CO.	PHILCON DEVELOPMENT CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/23/71	08/23/71	08/23/71
FORMATION	NOT GIVEN	PENN-MARMATON	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.4	44.0	68.9
ETHANE	7.9	15.9	10.5
PROPANE	4.7	22.9	9.9
N-BUTANE	1.4	8.3	3.2
ISOBUTANE	0.8	3.2	1.4
N-PENTANE	0.8	2.4	1.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.3	0.3	0.3
HEXANES PLUS	0.7	0.8	0.6
NITROGEN	2.4	1.8	3.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.11	0.02	0.10
HEATING VALUE*	1242	1881	1404
SPECIFIC GRAVITY	0.727	1.122	0.839

	INDEX 4336 SAMPLE 11410	INDEX 4337 SAMPLE 12854	INDEX 4338 SAMPLE 12855
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	BOYD S	CAMRICK DISTRICT	CAMRICK DISTRICT
WELL NAME	SARGENT NO. 1	SIMS NO. 1-36U	SIMS NO. 1-36L
LOCATION	SEC. 13, T2N, R20ECM	SEC. 36, T1N, R20ECM	SEC. 36, T1N, R20ECM
OWNER	SUN OIL CO.	SUNSET INTERNATIONAL PETRO.	SUNSET INTERNATIONAL PETRO.
COMPLETED	05/11/59	NOT GIVEN	NOT GIVEN
SAMPLED	03/26/68	06/21/71	06/21/71
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7223	7550	8400
WELLHEAD PRESSURE,PSIG	958	NOT GIVEN	540
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	48.5	87.6
ETHANE	5.5	10.8	5.1
PROPANE	3.2	17.1	3.4
N-BUTANE	1.3	8.4	0.9
ISOBUTANE	0.2	3.7	0.4
N-PENTANE	0.5	2.6	0.2
ISOPENTANE	0.5	3.5	0.2
CYCLOPENTANE	0.1	1.1	TRACE
HEXANES PLUS	0.3	2.3	0.1
NITROGEN	1.2	1.9	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.0	0.1
HELIUM	0.09	0.09	0.11
HEATING VALUE*	1172	1957	1133
SPECIFIC GRAVITY	0.673	1.165	0.650

	INDEX 4339 SAMPLE 12856	INDEX 4340 SAMPLE 12872	INDEX 4341 SAMPLE 12876
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK DISTRICT	CAMRICK DISTRICT	CAMRICK DISTRICT
WELL NAME	SIMS NO. 2-36	ANDERSON NO. 1	BRANSGROVE NO. 2
LOCATION	SEC. 36, T1N, R20ECM	SEC. 34, T1N, R20ECM	SEC. 33, T1N, R20ECM
OWNER	SUNSET INTERNATIONAL PETRO.	HUNT OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	NOT GIVEN	08/27/58	NOT GIVEN
SAMPLED	06/21/71	06/21/71	06/23/71
FORMATION	PENN-MORROW U	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7722	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.1	86.6	88.5
ETHANE	5.3	5.3	4.7
PROPANE	3.5	3.9	3.1
N-BUTANE	0.4	1.2	1.0
ISOBUTANE	0.9	0.6	0.4
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	1.1	0.2	0.3
CYCLOPENTANE	1.2	0.1	0.1
HEXANES PLUS	1.7	0.2	0.2
NITROGEN	2.9	1.4	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.0	0.1
HELIUM	0.13	0.03	0.10
HEATING VALUE*	1253	1174	1144
SPECIFIC GRAVITY	0.741	0.671	0.652

	INDEX 4342 SAMPLE 5703	INDEX 4343 SAMPLE 6097	INDEX 4344 SAMPLE 6352
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	F. L. HARRISON NO. 2	O. C. FLOWER GAS UNIT B 1	LEHMANN UNIT NO. 1
LOCATION	SEC. 30, T2N, R20ECM	SEC. 8, T1N, R20ECM	SEC. 30, T1N, R20ECM
OWNER	UNITED PRODUCING CO., INC.	RICHFIELD CO.	CARTER OIL CO.
COMPLETED	09/15/54	01/23/56	NOT GIVEN
SAMPLED	10/12/54	06/26/56	07/08/57
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6714	7202	7441
WELLHEAD PRESSURE,PSIG	1413	1461	2100
OPEN FLOW, MCFD	42800	2200	28750
COMPONENT, MOLE PCT			
METHANE	85.2	83.9	88.2
ETHANE	5.5	6.3	5.2
PROPANE	3.9	4.3	2.8
N-BUTANE	1.0	1.6	1.0
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.6	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.4	1.6	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.3
HELIUM	0.16	0.10	0.10
HEATING VALUE*	1145	1194	1150
SPECIFIC GRAVITY	0.673	0.690	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4345 SAMPLE 6924	INDEX 4346 SAMPLE 7484	INDEX 4347 SAMPLE 8007
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	O. JOLLIFFE ESTATE NO. 1	ANNIE L. MOUNTS NO. 1	FLOYD A. KERNS NO. 1-36
LOCATION	SEC. 30, T3N, R20ECM	SEC. 21, T1N, R21ECM	SEC. 36, T2N, R20ECM
OWNER	REPUBLIC NATURAL GAS CO	SUN OIL CO.	MAY EXPLORATION VENTURES
COMPLETED	01/14/59	12/17/59	11/18/60
SAMPLED	01/17/59	03/31/60	06/--/61
FORMATION	PENN-KEYES	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6728	7963	7690
WELLHEAD PRESSURE,PSIG	1230	1641	1547
OPEN FLOW, MCFD	2547	3000	6894
COMPONENT, MOLE PCT			
METHANE	84.6	83.6	92.5
ETHANE	3.6	6.9	3.6
PROPANE	3.0	4.3	1.6
N-BUTANE	0.8	1.3	0.5
ISOBUTANE	0.6	0.7	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.7	1.9	0.3
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.3	0.4
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1069	1189	1093
SPECIFIC GRAVITY	0.668	0.691	0.615

	INDEX 4348 SAMPLE 8377	INDEX 4349 SAMPLE 8483	INDEX 4350 SAMPLE 12864
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	T. O. WILSON	L. L. LEATHERMAN NO. 1	W. A. GRAY NO. 1
LOCATION	SEC. 26, T2N, R20ECM	SEC. 34, T2N, R20ECM	SEC. 34, T1N, R21ECM
OWNER	MAY EXPLORATION VENTURES	CABOT CORP.	EXXON CO. U.S.A.
COMPLETED	12/19/61	02/06/62	NOT GIVEN
SAMPLED	01/24/62	03/26/62	06/22/71
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7542	7350	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1708	1679	140
OPEN FLOW, MCFD	5800	26000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	83.5	83.0
ETHANE	5.1	6.6	6.6
PROPANE	1.4	4.2	5.2
N-BUTANE	0.5	1.2	1.3
ISOBUTANE	0.2	0.6	0.8
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	8.9	2.3	1.7
OXYGEN	1.8	TRACE	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.0
HELIUM	0.08	0.12	0.14
HEATING VALUE*	988	1179	1218
SPECIFIC GRAVITY	0.661	0.690	0.702

	INDEX 4351 SAMPLE 6225	INDEX 4352 SAMPLE 9006	INDEX 4353 SAMPLE 9026
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CLEAR LAKE	COMO	COMO
WELL NAME	E. ATKINS NO. 1	JAMES E. COOK NO. 2	JAMES E. COOK NO. 1
LOCATION	SEC. 25, T3N, R25ECM	SEC. 6, T1N, R25ECM	SEC. 6, T1N, R25ECM
OWNER	SHELL OIL CO.	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES
COMPLETED	12/06/56	07/06/62	05/26/62
SAMPLED	01/15/57	06/--/63	06/10/63
FORMATION	PENN-TONKAWA	PENN-MORROW U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5562	7834	7852
WELLHEAD PRESSURE,PSIG	1559	575	600
OPEN FLOW, MCFD	3573	70	70
COMPONENT, MOLE PCT			
METHANE	85.7	83.1	84.3
ETHANE	6.4	9.2	8.0
PROPANE	2.3	3.2	3.5
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.7	0.2	0.2
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.5	0.4
HEXANES PLUS	0.3	1.0	0.7
NITROGEN	2.6	1.0	1.1
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.0
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1134	1203	1186
SPECIFIC GRAVITY	0.664	0.697	0.675

	INDEX 4354 SAMPLE 12861	INDEX 4355 SAMPLE 12863	INDEX 4356 SAMPLE 12875
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	COMO SE	COMO SE	COMO SE
WELL NAME	MESSNER-LITTAU	MERCER NO. 1	HOUSE NO. 1
LOCATION	SEC. 33, T1N, R25ECM	SEC. 32, T1N, R25ECM	SEC. 32, T1N, R26ECM
OWNER	EXXON CO. U.S.A.	HUMBLE OIL & REFINING CO.	FALCON SEABOARD DRILLING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/22/71	06/22/71	06/24/71
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6300
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	77.5	84.3	81.4
ETHANE	6.2	6.7	9.0
PROPANE	7.1	3.6	4.8
N-BUTANE	1.1	1.1	1.4
ISOBUTANE	1.2	0.8	0.5
N-PENTANE	0.9	0.5	0.4
ISOPENTANE	0.5	0.6	0.4
CYCLOPENTANE	0.5	0.3	0.2
HEXANES PLUS	0.7	0.6	0.4
NITROGEN	1.1	1.3	1.4
OXYGEN	0.2	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	TRACE
HELIUM	0.05	0.04	0.07
HEATING VALUE*	1426	1220	1237
SPECIFIC GRAVITY	0.845	0.724	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4357 SAMPLE 7471	INDEX 4358 SAMPLE 7472	INDEX 4359 SAMPLE 9903
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	COMO SW	COMO SW	DOMBEY
WELL NAME	PERRY JENKINS NO. 1-9	PERRY JENKINS NO. 1-9	ELLEXSON A-1
LOCATION	SEC. 9, T1N, R24ECM	SEC. 9, T1N, R24ECM	SEC. 15, T4N, R20ECM
OWNER	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES	ANADARKO PRODUCTION CO.
COMPLETED	11/--/59	11/--/59	12/22/64
SAMPLED	03/30/60	03/30/60	05/26/65
FORMATION	PENN-MORROW U	PENN-MORROW L	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8037	8562	6454
WELLHEAD PRESSURE,PSIG	2331	2165	1625
OPEN FLOW, MCFD	21640	7490	2459
COMPONENT, MOLE PCT			
METHANE	95.9	86.0	82.0
ETHANE	0.2	6.5	4.7
PROPANE	0.1	3.2	2.4
N-BUTANE	0.1	1.2	0.9
ISOBUTANE	TRACE	0.5	0.6
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	3.5	1.1	8.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.2
HELIUM	0.20	0.10	0.29
HEATING VALUE*	901	1168	1068
SPECIFIC GRAVITY	0.572	0.670	0.677

	INDEX 4360 SAMPLE 11004	INDEX 4361 SAMPLE 14865	INDEX 4362 SAMPLE 8009
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	DOMBEY	DOMBY	ELMWOOD
WELL NAME	PYLE J NO. 1	DAVIS NO. 2-11	A. R. TURNER NO. 1-1
LOCATION	SEC. 26, T4N, R20ECM	SEC. 11, T3N, R21ECM	SEC. 1, T2N, R23ECM
OWNER	JAMES F. SMITH	WECO DEVELOPMENT CO.	MAY EXPLORATION VENTURES
COMPLETED	06/07/67	08/06/76	06/01/60
SAMPLED	NOT GIVEN	12/03/76	04/--/61
FORMATION	ORDO-VIOLA	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7885	6766	7182
WELLHEAD PRESSURE,PSIG	2021	1410	1554
OPEN FLOW, MCFD	9180	3318	2100
COMPONENT, MOLE PCT			
METHANE	73.8	90.2	82.9
ETHANE	9.1	4.4	7.5
PROPANE	3.9	2.2	4.8
N-BUTANE	1.5	0.7	1.3
ISOBUTANE	1.0	0.2	0.6
N-PENTANE	1.1	0.2	0.3
ISOPENTANE	1.0	0.3	0.2
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	1.1	0.2	0.1
NITROGEN	6.7	1.1	1.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	0.12	0.12	0.20
HEATING VALUE*	1253	1115	1189
SPECIFIC GRAVITY	0.777	0.635	0.690

	INDEX 4363 SAMPLE 11422	INDEX 4364 SAMPLE 11421	INDEX 4365 SAMPLE 5498
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	ELMWOOD	ELMWOOD SW	FLORIS
WELL NAME	SLEEPER NO. 1	MITCHELL NO. 1	DORMAN NO. 1
LOCATION	SEC. 25, T2N, R23ECM	SEC. 3, T1N, R23ECM	SEC. 30, T5N, R22ECM
OWNER	WESTERN OIL FIELDS, INC.	WESTERN OIL FIELDS, INC.	CARTER OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	11/--/52
SAMPLED	NOT GIVEN	NOT GIVEN	06/18/53
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6596
WELLHEAD PRESSURE,PSIG	763	869	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	83.7	71.8	93.4
ETHANE	8.1	8.1	3.1
PROPANE	4.4	6.7	1.3
N-BUTANE	1.2	1.6	0.4
ISOBUTANE	0.5	1.1	TRACE
N-PENTANE	0.4	0.6	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.9	7.4	0.6
OXYGEN	0.0	1.5	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.12	0.09	0.06
HEATING VALUE*	1195	1186	1076
SPECIFIC GRAVITY	0.686	0.766	0.607

	INDEX 4366 SAMPLE 15807	INDEX 4367 SAMPLE 7825	INDEX 4368 SAMPLE 11856
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	FORGAN	GRAND VALLEY EAST	GRAND VALLEY SE
WELL NAME	SIMMONS NO. 1	FRED JUST NO. 1	HEIERS NO. 1
LOCATION	SEC. 26, T6N, R23ECM	SEC. 1, T2N, R21ECM	SEC. 7, T2N, R22ECM
OWNER	ELDER & VAUGHN	KINGWOOD OIL CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	02/13/79	12/01/60	03/21/69
SAMPLED	10/22/79	01/03/61	05/08/69
FORMATION	PENN-MORROW	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6048	7077	7440
WELLHEAD PRESSURE,PSIG	1648	1100	1430
OPEN FLOW, MCFD	3701	1250	1540
COMPONENT, MOLE PCT			
METHANE	88.7	84.9	86.5
ETHANE	5.1	6.9	4.8
PROPANE	2.7	3.7	3.0
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.3	0.6	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.1	1.7	2.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.09	0.20	0.19
HEATING VALUE*	1140	1161	1119
SPECIFIC GRAVITY	0.649	0.671	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4369 SAMPLE 15640	INDEX 4370 SAMPLE 5497	INDEX 4371 SAMPLE 11411
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	GREENOUGH W	GRENNO	IVANHOE NE
WELL NAME	HUNT LIGHT NO. 2	TRETBAR NO. 1	DYCHE NO. 1
LOCATION	SEC. 9, T6N, R21ECM	SEC. 7, T5N, R22ECM	SEC. 7, T1N, R28ECM
OWNER	J. M. HUBER CORP.	CARTER OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	02/21/79	02/02/53	10/--/61
SAMPLED	06/11/79	06/18/53	03/27/68
FORMATION	PENN-MORROW & MISS-CHESTER	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6103	6315	8394
WELLHEAD PRESSURE,PSIG	1420	NOT GIVEN	1239
OPEN FLOW, MCFD	NOT GIVEN	10633	17986
COMPONENT, MOLE PCT			
METHANE	91.2	91.4	86.9
ETHANE	3.9	3.6	6.1
PROPANE	1.8	1.8	2.9
N-BUTANE	0.6	0.6	0.8
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.2	1.3	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.3	0.9
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.5
HELIUM	0.09	0.09	0.07
HEATING VALUE*	1090	1101	1140
SPECIFIC GRAVITY	0.620	0.625	0.651

	INDEX 4372 SAMPLE 5491	INDEX 4373 SAMPLE 15639	INDEX 4374 SAMPLE 11294
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LIBERAL SE	LIBERAL SE	LOGAN
WELL NAME	COBB NO. 1	DICKEY NO. 1	BALDWIN UNIT NO. 1
LOCATION	SEC. 16, T6N, R20ECM	SEC. 19, T6N, R21ECM	SEC. 10, T1N, R26ECM
OWNER	ALADDIN PETROLEUM CORP.	MAGUIRE OIL CO.	EXXON CO. U.S.A.
COMPLETED	04/03/53	NOT GIVEN	06/14/61
SAMPLED	05/20/53	06/05/79	02/19/68
FORMATION	PENN-MORROW	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6162	4300	8279
WELLHEAD PRESSURE,PSIG	1602	460	NOT GIVEN
OPEN FLOW, MCFD	4440	720	285
COMPONENT, MOLE PCT			
METHANE	84.3	79.6	85.0
ETHANE	5.3	7.0	7.3
PROPANE	3.2	3.3	3.7
N-BUTANE	1.0	1.0	1.2
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	4.1	7.3	1.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.7
HELIUM	0.17	0.28	0.07
HEATING VALUE*	1126	1114	1174
SPECIFIC GRAVITY	0.676	0.697	0.679

	INDEX 4375 SAMPLE 15633	INDEX 4376 SAMPLE 11311	INDEX 4377 SAMPLE 12964
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LOGAN	LOGAN S	LOGAN S
WELL NAME	BELL NO. 1-4	MOUSE NO. 1	SCHWAB NO. 2
LOCATION	SEC. 4, T1N, R27 ECM	SEC. 32, T1N, R26ECM	SEC. 33, T1N, R26ECM
OWNER	NORTHERN NATURAL GAS CO.	FALCON SEABOARD DRILLING CO.	APACHE CORP.
COMPLETED	NOT GIVEN	01/15/62	NOT GIVEN
SAMPLED	05/16/79	02/26/68	08/23/71
FORMATION	PENN-MORROW	PENN-TONKAWA	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8119	6073	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1855	600	NOT GIVEN
OPEN FLOW, MCFD	2750	1044	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.3	84.0	78.4
ETHANE	6.3	7.9	9.5
PROPANE	2.7	3.8	5.8
N-BUTANE	0.8	1.2	1.6
ISOBUTANE	0.4	0.4	1.0
N-PENTANE	0.2	0.4	0.9
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.2	0.3	0.9
NITROGEN	4.2	1.6	0.7
OXYGEN	0.9	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.3
HELIUM	0.06	0.10	0.08
HEATING VALUE*	1107	1186	1311
SPECIFIC GRAVITY	0.677	0.683	0.754

	INDEX 4378 SAMPLE 12965	INDEX 4379 SAMPLE 12966	INDEX 4380 SAMPLE 12974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LOGAN S	LOGAN S	LOGAN S
WELL NAME	TERRELL NO. 1 & 2	NICHOLSON UNIT	SCHWAB NO. 1
LOCATION	SEC. 33, T1N, R26ECM	SEC. 33, T1N, R26ECM	SEC. 34, T1N, R26ECM
OWNER	APACHE CORP.	APACHE CORP.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/31/58
SAMPLED	08/23/71	08/23/71	08/23/71
FORMATION	NOT GIVEN	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	8831
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1675
COMPONENT, MOLE PCT			
METHANE	79.0	73.7	85.4
ETHANE	9.8	11.6	6.9
PROPANE	6.0	7.3	4.3
N-BUTANE	1.7	2.2	1.0
ISOBUTANE	0.8	1.1	0.3
N-PENTANE	0.8	0.9	0.3
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.5	0.6	0.1
NITROGEN	0.9	1.5	1.2
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.4
HELIUM	0.07	0.06	0.06
HEATING VALUE*	1292	1348	1162
SPECIFIC GRAVITY	0.740	0.786	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4381 SAMPLE 10033	INDEX 4382 SAMPLE 11286	INDEX 4383 SAMPLE 5925
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LORENA	LORENA SE	MADISON
WELL NAME	STEPHENSON B-1	DICK NO. 1-31	ARMSTRONG NO. 1-3
LOCATION	SEC. 21, T5N, R20ECM	SEC. 31, T5N, R21ECM	SEC. 3, T2N, R27ECM
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPELINE	COLORADO OIL & GAS CORP.
COMPLETED	11/06/64	08/18/58	08/12/55
SAMPLED	08/03/65	02/15/68	08/29/55
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6675	6507	7686
WELLHEAD PRESSURE,PSIG	1637	561	1253
OPEN FLOW, MCFD	519	430	1628
COMPONENT, MOLE PCT			
METHANE	84.2	88.7	84.3
ETHANE	4.5	4.5	6.8
PROPANE	2.1	2.1	3.9
N-BUTANE	0.9	0.8	1.2
ISOBUTANE	0.6	TRACE	0.4
N-PENTANE	0.6	0.2	0.3
ISOPENTANE	TRACE	0.2	0.5
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	5.1	2.5	1.5
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.5
HELIUM	0.15	0.16	0.08
HEATING VALUE*	1124	1101	1179
SPECIFIC GRAVITY	0.684	0.642	0.684

	INDEX 4384 SAMPLE 14722	INDEX 4385 SAMPLE 5839	INDEX 4386 SAMPLE 14564
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE LAVERNE	MOCANE NW	MOCANE NW
WELL NAME	GREGG NO. 1	JUDY NO. A-1	GIRK B NO. 3
LOCATION	SEC. 26, T4N, R22ECM	SEC. 36, T5N, R24ECM	SEC. 35, T6N, R24ECM
OWNER	ARGONAUT ENERGY CORP.	CABOT CORP.	CITIES SERVICE OIL CO.
COMPLETED	01/23/76	04/25/55	07/08/75
SAMPLED	07/27/76	05/10/55	01/21/76
FORMATION	MISS-CHESTER	PENN-MORROW	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6884	6282	3247
WELLHEAD PRESSURE,PSIG	1710	1800	824
OPEN FLOW, MCFD	4546	4750	2547
COMPONENT, MOLE PCT			
METHANE	93.3	88.2	78.5
ETHANE	3.1	5.0	6.0
PROPANE	1.2	2.4	2.7
N-BUTANE	0.4	0.8	0.7
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.8	1.8	10.2
OXYGEN	0.1	TRACE	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.08	0.10	0.41
HEATING VALUE*	1070	1122	1028
SPECIFIC GRAVITY	0.605	0.646	0.677

	INDEX 4387 SAMPLE 14716	INDEX 4388 SAMPLE 14940	INDEX 4389 SAMPLE 15101
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE NW	MOCANE-LAVERNE	MOCANE-LAVERNE
WELL NAME	GIRK NO. B-3	ROCK NO. 1	HENNIGH-LOTSPEICH NO. 1
LOCATION	SEC. 26, T6N, R24ECM	SEC. 36, 4N, R22ECM	SEC. 15, T6N, R28ECM
OWNER	CITIES SERVICE OIL CO.	ARGONAUT ENERGY CORP.	AMERICAN PETROFINA CO.
COMPLETED	07/07/75	09/01/76	06/11/77
SAMPLED	06/30/76	03/17/77	09/13/77
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6240	6900	5818
WELLHEAD PRESSURE,PSIG	733	818	1779
OPEN FLOW, MCFD	450	2132	4592
COMPONENT, MOLE PCT			
METHANE	88.9	92.7	90.4
ETHANE	5.2	3.3	4.8
PROPANE	2.6	1.4	2.0
N-BUTANE	0.8	0.5	0.6
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.3	0.7	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.09	0.08	0.08
HEATING VALUE*	1134	1093	1115
SPECIFIC GRAVITY	0.646	0.619	0.633

	INDEX 4390 SAMPLE 4306	INDEX 4391 SAMPLE 5081	INDEX 4392 SAMPLE 5119
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	LIGHT EST. NO. 1	WALLACE NO. 1	HUNT-LIGHT NO. 1
LOCATION	SEC. 9, T6N, R21ECM	SEC. 15, T6N, R21ECM	SEC. 9, T6N, R21ECM
OWNER	HUNT OIL CO.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	01/15/46	04/18/51	03/12/47
SAMPLED	04/12/47	07/03/51	11/14/51
FORMATION	MISS-U	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6220	5974	6226
WELLHEAD PRESSURE,PSIG	1650	1579	1627
OPEN FLOW, MCFD	4000	91287	3948
COMPONENT, MOLE PCT			
METHANE	64.6	86.7	88.8
ETHANE	32.7	5.9	4.2
PROPANE	---	3.2	2.2
N-BUTANE	---	0.7	0.9
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	---	TRACE	0.3
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	2.0	2.6	2.7
OXYGEN	0.3	0.2	0.3
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.11	0.12	0.11
HEATING VALUE*	1240	1109	1094
SPECIFIC GRAVITY	0.729	0.648	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4393 SAMPLE 5153	INDEX 4394 SAMPLE 5176	INDEX 4395 SAMPLE 5308
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HEINTZ NO. 1	LIGHT	ALBERT NO. 1
LOCATION	SEC. 15, T6N, R21ECM	SEC. 16, T6N, R21ECM	SEC. 16, T5N, R26ECM
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	UNION OIL CO. OF CAL.
COMPLETED	11/15/51	12/10/51	05/13/52
SAMPLED	11/30/51	01/31/52	08/11/52
FORMATION	PENN-MORROW	MISS-CHESTER & PENN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6009	6360	6750
WELLHEAD PRESSURE,PSIG	1561	1502	1350
OPEN FLOW, MCFD	64795	1830	2070
COMPONENT, MOLE PCT			
METHANE	85.2	91.6	83.0
ETHANE	6.3	3.6	6.5
PROPANE	3.9	1.6	0.0
N-BUTANE	1.1	0.6	1.0
ISOBUTANE	0.3	0.0	1.6
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.0	1.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	2.3	1.4	5.8
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.13	0.09	0.22
HEATING VALUE*	1149	1073	1116
SPECIFIC GRAVITY	0.673	0.613	0.685

	INDEX 4396 SAMPLE 5646	INDEX 4397 SAMPLE 5704	INDEX 4398 SAMPLE 5857
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	L. J. BARBY A NO. 1	FRED HARBY NO. 1	SARGENT A NO. 1
LOCATION	SEC. 2, T4N, R25ECM	SEC. 36, T5N, R25ECM	SEC. 7, T5N, R27ECM
OWNER	TEXACO INC.	UNITED PRODUCING CO., INC.	TEXACO INC.
COMPLETED	05/10/54	08/24/54	02/26/55
SAMPLED	06/24/54	10/12/54	06/09/55
FORMATION	PENN-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6752	6894	6545
WELLHEAD PRESSURE,PSIG	1486	1760	1763
OPEN FLOW, MCFD	6000	NOT GIVEN	734
COMPONENT, MOLE PCT			
METHANE	89.7	88.4	87.9
ETHANE	4.5	4.9	5.7
PROPANE	2.6	2.8	2.7
N-BUTANE	0.7	1.0	0.8
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.0	1.0	1.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.11	0.10	0.01
HEATING VALUE*	1113	1152	1138
SPECIFIC GRAVITY	0.633	0.657	0.651

	INDEX 4399 SAMPLE 5866	INDEX 4400 SAMPLE 5883	INDEX 4401 SAMPLE 5962
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	MAY DIXON NO. 2	JUETT BENNETT NO. 1	LLOYD HARBY NO. A-1
LOCATION	SEC. 29, T5N, R26ECM	SEC. 2, T3N, R25ECM	SEC. 1, T4N, R25ECM
OWNER	UNION OIL CO. OF CAL.	WHITE EAGLE & OHIO OIL CO.	CABOT CORP.
COMPLETED	03/05/55	07/21/55	10/31/54
SAMPLED	06/21/55	07/22/55	11/06/55
FORMATION	PENN-MORROW	PENN-DOUGLAS	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6805	5412	6764
WELLHEAD PRESSURE,PSIG	1650	1485	1693
OPEN FLOW, MCFD	6500	1540	11000
COMPONENT, MOLE PCT			
METHANE	84.8	82.4	92.2
ETHANE	5.5	6.3	4.3
PROPANE	3.8	2.5	1.5
N-BUTANE	1.3	0.4	0.2
ISOBUTANE	0.6	0.2	0.1
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.4	TRACE	0.1
NITROGEN	2.3	7.4	1.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.15	0.23	0.10
HEATING VALUE*	1166	1037	1070
SPECIFIC GRAVITY	0.683	0.652	0.603

	INDEX 4402 SAMPLE 6011	INDEX 4403 SAMPLE 6098	INDEX 4404 SAMPLE 6105
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HUGHES NO. 1	BASS NO. 1	GULF COAST WESTERN NO. 1
LOCATION	SEC. 21, T6N, R24ECM	SEC. 14, T3N, R24ECM	SEC. 9, T5N, R24ECM
OWNER	LION OIL CO.	HARPER OIL CO.	TEXACO INC.
COMPLETED	04/10/55	04/26/56	12/21/55
SAMPLED	12/31/56	07/12/56	07/06/56
FORMATION	PERM-COUNCIL GROVE	PENN-DOUGLAS	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3102	5372	6410
WELLHEAD PRESSURE,PSIG	[illegible]	1500	1736
OPEN FLOW, MCFD	[illegible]	12500	7450
COMPONENT, MOLE PCT			
METHANE	76.2	84.0	90.0
ETHANE	[illegible]	7.3	5.1
PROPANE	[illegible]	2.7	2.3
N-BUTANE	1.0	1.0	0.7
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	14.0	2.6	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.39	0.15	0.09
HEATING VALUE*	[illegible]	1162	1112
SPECIFIC GRAVITY	0.697	0.679	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4405 SAMPLE 6108	INDEX 4406 SAMPLE 6109	INDEX 4407 SAMPLE 6114
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STATE RICARDS NO. 1	CAMPBELL GAS UNIT NO. 1	L. J. BARBY B-2
LOCATION	SEC. 16, T5N, R25ECM	SEC. 5, T2N, R24ECM	SEC. 27, T4N, R25ECM
OWNER	CARTER OIL CO.	STANOLIND OIL & GAS CO.	CABOT CORP.
COMPLETED	03/02/56	05/21/56	01/31/56
SAMPLED	07/17/56	07/18/56	08/03/56
FORMATION	MISS-CHESTER	PENN-MORROW U	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6993	7242	6936
WELLHEAD PRESSURE,PSIG	1385	1600	1540
OPEN FLOW, MCFD	4455	11396	4000
COMPONENT, MOLE PCT			
METHANE	87.8	83.1	90.4
ETHANE	5.4	7.3	4.5
PROPANE	2.6	4.5	2.1
N-BUTANE	0.9	1.2	0.7
ISOBUTANE	0.3	0.6	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	1.5	1.7	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.5
HELIUM	0.10	0.13	0.08
HEATING VALUE*	1143	1196	1117
SPECIFIC GRAVITY	0.655	0.696	0.634

	INDEX 4408 SAMPLE 6115	INDEX 4409 SAMPLE 6179	INDEX 4410 SAMPLE 6180
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	L. J. BARBY B-A	OTTO BARBY D-1	RYSER
LOCATION	SEC. 27, T4N, R25ECM	SEC. 25, T4N, R26ECM	SEC. 9, T3N, R28ECM
OWNER	CABOT CORP.	CABOT CORP.	CABOT CORP.
COMPLETED	01/31/56	07/13/56	09/23/56
SAMPLED	08/03/56	11/14/56	11/14/56
FORMATION	MISS-CHESTER	PENN-LOVELL	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7050	4870	4450
WELLHEAD PRESSURE,PSIG	1720	1400	NOT GIVEN
OPEN FLOW, MCFD	8000	4000	14000
COMPONENT, MOLE PCT			
METHANE	90.3	81.9	85.9
ETHANE	4.9	6.9	6.7
PROPANE	2.2	1.7	1.3
N-BUTANE	0.6	0.5	0.8
ISOBUTANE	0.5	0.6	1.3
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.0	0.3	0.9
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	7.0	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	0.08	0.25	0.16
HEATING VALUE*	1110	1048	1134
SPECIFIC GRAVITY	0.630	0.659	0.669

	INDEX 4411 SAMPLE 6181	INDEX 4412 SAMPLE 6195	INDEX 4413 SAMPLE 6215
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	RYSER NO. 1	W. A. LONKER UNIT NO. 1	BEARD A NO. 1
LOCATION	SEC. 9, T3N, R28ECM	SEC. 36, T6N, R21ECM	SEC. 8, T5N, R22ECM
OWNER	CABOT CORP.	UNITED PRODUCING CO.	CITIES SERVICE OIL CO.
COMPLETED	09/23/56	10/27/56	11/18/56
SAMPLED	11/14/56	11/25/56	12/11/56
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7319	6030	6665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1850	1662
OPEN FLOW, MCFD	2000	6470	8700
COMPONENT, MOLE PCT			
METHANE	66.6	87.4	91.2
ETHANE	7.0	5.4	3.8
PROPANE	2.3	1.3	1.3
N-BUTANE	0.7	0.4	0.6
ISOBUTANE	0.9	0.3	0.0
N-PENTANE	0.0	0.0	0.7
ISOPENTANE	1.0	0.3	0.5
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	20.2	4.1	0.7
OXYGEN	0.0	0.2	0.0
ARGON	0.2	0.1	TRACE
HYDROGEN	0.3	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.4
HELIUM	TRACE	0.12	0.08
HEATING VALUE*	948	1053	1121
SPECIFIC GRAVITY	0.746	0.633	0.635

	INDEX 4414 SAMPLE 6216	INDEX 4415 SAMPLE 6365	INDEX 4416 SAMPLE 6401
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BEARD A NO. 1	HARRY CARLISLE NO. 4	E. FICKEL NO. 1
LOCATION	SEC. 8, T5N, R22ECM	SEC. 15, T3N, R28ECM	SEC. 16, T3N, R25ECM
OWNER	CITIES SERVICE OIL CO.	UNITED PRODUCING CO., INC.	CARTER OIL CO.
COMPLETED	11/18/56	07/16/57	07/27/57
SAMPLED	12/11/56	08/19/57	09/18/57
FORMATION	PENN-MORROW	PENN-HOOVER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6305	4350	5514
WELLHEAD PRESSURE,PSIG	1413	1375	1580
OPEN FLOW, MCFD	110000	10600	21980
COMPONENT, MOLE PCT			
METHANE	79.8	87.1	87.4
ETHANE	7.1	5.9	6.4
PROPANE	3.1	2.3	2.4
N-BUTANE	2.3	0.6	0.7
ISOBUTANE	1.0	0.4	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	1.5	0.1	0.2
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	2.6	2.9	1.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.1	0.2
HELIUM	0.14	0.16	0.10
HEATING VALUE*	1246	1104	1131
SPECIFIC GRAVITY	0.744	0.645	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4417 SAMPLE 6417	INDEX 4418 SAMPLE 6418	INDEX 4419 SAMPLE 6740
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	SIZELOVE NO. 1	OTTO BARBY NO. E-1	QILLION NO. 1
LOCATION	SEC. 12, T3N, R27ECM	SEC. 31, T4N, R28ECM	SEC. 13, T6N, R26ECM
OWNER	CABOT CARBON CO.	CABOT CORP.	MONSANTO CO.
COMPLETED	05/02/57	08/18/56	01/--/58
SAMPLED	10/04/57	10/12/56	07/17/58
FORMATION	PENN-	PENN-HOOVER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4390	4318	6175
WELLHEAD PRESSURE,PSIG	1600	1500	1760
OPEN FLOW, MCFD	20000	32000	7153
COMPONENT, MOLE PCT			
METHANE	88.4	85.7	91.1
ETHANE	5.8	5.9	4.6
PROPANE	1.1	2.4	1.8
N-BUTANE	0.5	0.9	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.2	4.0	0.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.2
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1082	1095	1109
SPECIFIC GRAVITY	0.681	0.651	0.625

	INDEX 4420 SAMPLE 6772	INDEX 4421 SAMPLE 6828	INDEX 4422 SAMPLE 6843
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	WHITMARSH NO. 1	OYLER GAS UNIT B NO. 1	R. E. ADAMS NO. 12
LOCATION	SEC. 14, T5N, R25ECM	SEC. 22, T5N, R23ECM	SEC. 36, T6N, R24ECM
OWNER	T. N. BERRY & CO.	AMOCO PRODUCTION CO.	UNITED PRODUCING CO., INC.
COMPLETED	NOT GIVEN	05/16/58	06/16/58
SAMPLED	08/02/58	10/04/58	10/22/58
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PENN-HODGES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6705	3171	5286
WELLHEAD PRESSURE,PSIG	NOT GIVEN	821	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.0	85.7	77.4
ETHANE	6.1	6.7	1.2
PROPANE	3.3	2.6	0.6
N-BUTANE	1.0	0.8	0.2
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	1.5	2.8	19.4
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.10	0.20	0.30
HEATING VALUE*	1165	1131	861
SPECIFIC GRAVITY	0.671	0.659	0.664

	INDEX 4423 SAMPLE 6972	INDEX 4424 SAMPLE 7015	INDEX 4425 SAMPLE 7022
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	PICKLE BANK UNIT NO. 1	MIKE ALBERT NO. 1	MILLER NO. 1
LOCATION	SEC. 29, T3N, R25ECM	SEC. 10, T5N, R26ECM	SEC. 1, T3N, R23ECM
OWNER	CARTER OIL CO.	CHAMPLIN OIL & REFINING CO.	HARPER OIL CO.
COMPLETED	12/24/58	09/30/58	12/--/58
SAMPLED	02/15/59	03/30/59	04/11/59
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5479	6567	7116
WELLHEAD PRESSURE,PSIG	1520	1622	2000
OPEN FLOW, MCFD	5633	4975	7864
COMPONENT, MOLE PCT			
METHANE	88.2	81.0	93.0
ETHANE	6.3	6.2	2.7
PROPANE	2.3	4.8	0.8
N-BUTANE	0.6	1.5	0.3
ISOBUTANE	0.3	0.9	0.0
N-PENTANE	0.1	0.3	1.2
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	1.1	4.0	0.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1114	1177	1111
SPECIFIC GRAVITY	0.647	0.707	0.629

	INDEX 4426 SAMPLE 7154	INDEX 4427 SAMPLE 7164	INDEX 4428 SAMPLE 7165
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	LEON ALLEN NO. 1	MAHAFFEY NO. 1	HOWARD NO. 1
LOCATION	SEC. 25, T4N, R27ECM	SEC. 18, T1N, R25ECM	SEC. 13, T1N, R24ECM
OWNER	CABOT CORP.	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO., INC.
COMPLETED	03/11/57	04/26/59	05/11/59
SAMPLED	07/24/59	07/30/59	07/30/59
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW & MISS	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3217	NOT GIVEN	5543
WELLHEAD PRESSURE,PSIG	988	1600	1550
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.3	92.7	88.3
ETHANE	6.1	3.4	6.3
PROPANE	6.6	0.9	1.2
N-BUTANE	1.3	0.3	0.6
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	1.3	0.1	0.2
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	3.7	1.1	1.8
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.4
HELIUM	0.31	0.10	0.10
HEATING VALUE*	1091	1092	1114
SPECIFIC GRAVITY	0.687	0.614	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4429 SAMPLE 7179	INDEX 4430 SAMPLE 7181	INDEX 4431 SAMPLE 7322
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	NINE NO. 1	NELSON NO. 3	R. EADES NO. 1
LOCATION	SEC. 21, T3N, R27ECM	SEC. 28, T3N, R27ECM	SEC. 29, T3N, R27ECM
OWNER	REPUBLIC NATURAL GAS CO.	REPUBLIC NATURAL GAS CO.	ATLANTIC RICHFIELD CO.
COMPLETED	04/08/58	09/05/58	10/15/59
SAMPLED	08/25/59	08/25/59	12/31/59
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5619	7410	5638
WELLHEAD PRESSURE,PSIG	1568	1679	NOT GIVEN
OPEN FLOW, MCFD	3850	1900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	86.5	74.6
ETHANE	6.6	6.0	6.9
PROPANE	2.4	3.1	3.3
N-BUTANE	0.6	0.8	1.9
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.3	0.7	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	2.4	1.6	10.2
OXYGEN	TRACE	TRACE	1.8
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1129	1157	1078
SPECIFIC GRAVITY	0.656	0.667	0.727

	INDEX 4432 SAMPLE 7323	INDEX 4433 SAMPLE 7328	INDEX 4434 SAMPLE 7364
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	GEORGE S. LOWERY NO. 1	GOETZINGER TRUST NO. 1	ADAH E. SCHAFFTER
LOCATION	SEC. 9, T5N, R27ECM	SEC. 11, T3N, R24ECM	SEC. 10, T5N, R27ECM
OWNER	ATLANTIC-RICHFIELD CO.	ATLANTIC RICHFIELD CO.	SUN OIL CO.
COMPLETED	11/03/59	11/12/59	11/29/59
SAMPLED	12/31/59	12/31/59	01/30/60
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6354	5154	6318
WELLHEAD PRESSURE,PSIG	1657	1646	1700
OPEN FLOW, MCFD	7500	1650	17000
COMPONENT, MOLE PCT			
METHANE	86.6	93.4	88.4
ETHANE	5.8	3.0	5.0
PROPANE	3.1	0.7	2.4
N-BUTANE	0.9	0.2	0.7
ISOBUTANE	0.6	0.2	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.6	0.0	0.4
CYCLOPENTANE	0.2	TRACE	0.3
HEXANES PLUS	0.4	TRACE	0.5
NITROGEN	1.4	1.7	1.2
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1170	1032	1143
SPECIFIC GRAVITY	0.671	0.593	0.652

	INDEX 4435 SAMPLE 7390	INDEX 4436 SAMPLE 7391	INDEX 4437 SAMPLE 7446
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BORTH NO. 1-11	AMY PATTEN NO. 1-34	MARTIN-DIXON NO. 1
LOCATION	SEC. 11, T5N, R28ECM	SEC. 34, T5N, R28ECM	SEC. 28, T5N, R27ECM
OWNER	STEKOL PANHANDLE LTD.	STEKOL PANHANDLE LTD.	KERR-MCGEE OIL IND., INC.
COMPLETED	12/29/59	12/14/59	03/01/60
SAMPLED	02/13/60	02/13/60	03/12/60
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6267	6641	6702
WELLHEAD PRESSURE,PSIG	1759	1547	1700
OPEN FLOW, MCFD	11600	2400	30000
COMPONENT, MOLE PCT			
METHANE	86.5	89.3	84.8
ETHANE	5.9	4.9	6.6
PROPANE	3.5	2.4	3.7
N-BUTANE	1.0	0.7	1.2
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.5	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	1.2	1.2	1.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.09	0.13	0.10
HEATING VALUE*	1171	1117	1186
SPECIFIC GRAVITY	0.670	0.638	0.683

	INDEX 4438 SAMPLE 7486	INDEX 4439 SAMPLE 7558	INDEX 4440 SAMPLE 7579
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HAMILTON NO. 1	OSCAR B. KENNECK	WOLF NO. 1
LOCATION	SEC. 18, T5N, R27ECM	SEC. 17, T3N, R24ECM	SEC. 20, T4N, R28ECM
OWNER	CABOT CORP.	OKLAHOMA NATURAL GAS CO.	CABOT CARBON CO.
COMPLETED	NOT GIVEN	02/--/60	12/02/59
SAMPLED	03/22/60	05/17/60	06/08/60
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6636	7033	6853
WELLHEAD PRESSURE,PSIG	1738	1650	1786
OPEN FLOW, MCFD	12750	11150	20000
COMPONENT, MOLE PCT			
METHANE	86.3	81.3	87.0
ETHANE	6.0	8.0	6.7
PROPANE	3.4	5.2	3.1
N-BUTANE	1.0	1.5	0.9
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	1.6	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.6	1.8	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1151	1240	1161
SPECIFIC GRAVITY	0.662	0.719	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4441 SAMPLE 7580		INDEX 4442 SAMPLE 7625		INDEX 4443 SAMPLE 7633	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BEAVER		BEAVER		BEAVER	
FIELD	MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA	
WELL NAME	H. CARLISLE NO. 10		NELSON NO. 1-27		MEIER NO. 1	
LOCATION	SEC. 22, T3N, R21ECM		SEC. 27, T1N, R24ECM		SEC. 19, T1N, R25ECM	
OWNER	UNITED PRODUCING CO., INC.		STATEX PETROLEUM		PHILLIPS PETROLEUM CO.	
COMPLETED	05/07/59		05/18/59		05/27/60	
SAMPLED	06/10/60		07/27/60		08/02/60	
FORMATION	PENN-MORROW&MISS-CHESTER		PENN-TONKAWA		PENN-TONKAWA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7174		6106		6039	
WELLHEAD PRESSURE,PSIG	1364		1625		1637	
OPEN FLOW, MCFD	580		2530		3804	
COMPONENT, MOLE PCT						
METHANE	85.8		83.6		88.3	
ETHANE	7.5		6.6		6.4	
PROPANE	3.8		3.0		2.4	
N-BUTANE	0.8		1.0		0.8	
ISOBUTANE	0.6		0.3		0.3	
N-PENTANE	TRACE		0.2		0.2	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.3		0.3	
NITROGEN	0.7		4.0		0.4	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.2		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.2	
HELIUM	0.10		0.20		0.03	
HEATING VALUE*	1163		1007		1146	
SPECIFIC GRAVITY	0.662		0.666		0.645	

	INDEX 4444 SAMPLE 7656		INDEX 4445 SAMPLE 7686		INDEX 4446 SAMPLE 7687	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BEAVER		BEAVER		BEAVER	
FIELD	MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA	
WELL NAME	E. E. MILLER NO. 1		THOMPSON UNIT NO. 1		THOMPSON UNIT NO. 1	
LOCATION	SEC. 15, T5N, R23ECM		SEC. 36, T4N, R24ECM		SEC. 36, T4N, R24ECM	
OWNER	GULF OIL CO.-U.S.		KERR-MCGEE OIL IND., INC.		KERR-MCGEE CORP.	
COMPLETED	11/12/59		NOT GIVEN		NOT GIVEN	
SAMPLED	08/25/60		10/04/60		10/04/60	
FORMATION	PENN-MORROW & MISS-CHESTER		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6526		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1765		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	12700		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	91.3		89.9		81.8	
ETHANE	4.6		4.7		8.1	
PROPANE	1.8		2.2		5.0	
N-BUTANE	0.6		0.7		1.4	
ISOBUTANE	0.3		TRACE		0.7	
N-PENTANE	0.1		TRACE		0.2	
ISOPENTANE	0.2		0.6		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.6		0.9		1.7	
OXYGEN	TRACE		0.1		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.5		0.4	
HELIUM	0.10		0.10		0.10	
HEATING VALUE*	1102		1115		1210	
SPECIFIC GRAVITY	0.621		0.637		0.703	

	INDEX 4447 SAMPLE 7722		INDEX 4448 SAMPLE 7823		INDEX 4449 SAMPLE 7824	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BEAVER		BEAVER		BEAVER	
FIELD	MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA	
WELL NAME	WILLIAM GRAY NO. 1		MCCUNE NO. 1		MCCUNE NO. 1	
LOCATION	SEC. 15, T2N, R24 CM		SEC. 23, T4N, R24ECM		SEC. 23, T4N, R24ECM	
OWNER	MAY EXPLORATION VENTURES		KINGWOOD OIL CO.		KINGWOOD OIL CO.	
COMPLETED	10/01/60		12/16/60		12/16/60	
SAMPLED	10/12/60		01/03/61		01/03/61	
FORMATION	PENN-MORROW U		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7920		6910		6804	
WELLHEAD PRESSURE,PSIG	1587		1797		1739	
OPEN FLOW, MCFD	1500		20000		5800	
COMPONENT, MOLE PCT						
METHANE	80.8		91.8		90.9	
ETHANE	9.5		3.9		4.4	
PROPANE	5.1		1.4		1.9	
N-BUTANE	1.3		0.3		0.6	
ISOBUTANE	0.6		0.3		0.3	
N-PENTANE	0.2		TRACE		0.1	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		TRACE		0.1	
NITROGEN	1.6		1.4		0.8	
OXYGEN	0.0		0.2		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.5		0.6	
HELIUM	0.10		0.10		0.10	
HEATING VALUE*	1207		1061		1097	
SPECIFIC GRAVITY	0.704		0.610		0.626	

	INDEX 4450 SAMPLE 7973		INDEX 4451 SAMPLE 8006		INDEX 4452 SAMPLE 8008	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BEAVER		BEAVER		BEAVER	
FIELD	MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA		MOCANE-LAVERNE GAS AREA	
WELL NAME	B. FEE 1-34		FLOYD M. DYER NO. 1		B. R. SMYLIE NO. 1-17	
LOCATION	SEC. 34, T1N, R24ECM		SEC. 29, T5N, R27ECM		SEC. 17, T6N, R24ECM	
OWNER	MAY PETROLEUM INC.		MAY EXPLORATION VENTURES		MAY PETROLEUM INC.	
COMPLETED	12/28/60		01/15/61		11/12/60	
SAMPLED	05/19/61		06/--/61		06/--/61	
FORMATION	PENN-TONKAWA		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6076		6689		6404	
WELLHEAD PRESSURE,PSIG	1700		1608		1534	
OPEN FLOW, MCFD	2897		26353		4737	
COMPONENT, MOLE PCT						
METHANE	86.6		85.0		85.5	
ETHANE	6.8		6.7		6.1	
PROPANE	3.5		3.7		3.7	
N-BUTANE	0.8		1.1		1.1	
ISOBUTANE	0.6		0.7		0.8	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	1.2		1.5		1.8	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.3	
HELIUM	0.23		0.19		0.20	
HEATING VALUE*	1135		1177		1158	
SPECIFIC GRAVITY	0.649		0.677		0.670	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4453 SAMPLE 8365	INDEX 4454 SAMPLE 10172	INDEX 4455 SAMPLE 11412
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	WM. FLANNIGAN	ANSHUTZ NO. 1-20	JACKSON NO. 1
LOCATION	SEC. 27, T6N, R22ECM	SEC. 20, T6N, R26ECM	SEC. 7, T1N, R28ECM
OWNER	MAY EXPLORATION VENTURES	CLEARY PETROLEUM, INC.	EL PASO NATURAL GAS CO.
COMPLETED	09/24/61	07/01/65	06/--/59
SAMPLED	02/--/62	09/26/65	03/27/68
FORMATION	PENN-MORROW L	-W. W. JONES	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6290	3215	7442
WELLHEAD PRESSURE,PSIG	1692	1000	1530
OPEN FLOW, MCFD	6800	4900	354
COMPONENT, MOLE PCT			
METHANE	90.7	81.2	76.8
ETHANE	4.0	5.3	10.2
PROPANE	1.8	2.3	6.8
N-BUTANE	0.5	0.7	1.8
ISOBUTANE	0.3	0.3	0.9
N-PENTANE	0.1	0.2	0.8
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.6	8.9	2.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.09	0.32	0.10
HEATING VALUE*	1090	1042	1278
SPECIFIC GRAVITY	0.625	0.672	0.745

	INDEX 4456 SAMPLE 11485	INDEX 4457 SAMPLE 11683	INDEX 4458 SAMPLE 12278
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ROBERTSON NO. 1	BEN ALLEN UNIT NO. 1	GIRK NO. A-1
LOCATION	SEC. 16, T2N, R28ECM	SEC. 33, T4N, R24ECM	SEC. 33, T6N, R24ECM
OWNER	OKLAHOMA NATURAL GAS CO.	ATLANTIC RICHFIELD CO.	CITIES SERVICE OIL CO.
COMPLETED	09/14/60	NOT GIVEN	02/18/58
SAMPLED	05/10/68	11/15/68	06/05/70
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7646	3445	3212
WELLHEAD PRESSURE,PSIG	1320	601	439
OPEN FLOW, MCFD	7704	1954	2044
COMPONENT, MOLE PCT			
METHANE	81.5	87.0	77.1
ETHANE	8.3	6.4	5.9
PROPANE	5.1	2.4	3.2
N-BUTANE	1.3	0.8	0.9
ISOBUTANE	0.9	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	1.1	2.1	11.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.0
HELIUM	0.06	0.14	0.38
HEATING VALUE*	1231	1127	1051
SPECIFIC GRAVITY	0.711	0.650	0.695

	INDEX 4459 SAMPLE 12291	INDEX 4460 SAMPLE 12398	INDEX 4461 SAMPLE 12399
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EAGAN NO. 1	JESSIE ADAMS NO. 1-C	H. G. ADAMS III NO. 1-A
LOCATION	SEC. 32, T6N, R24ECM	SEC. 9, T6N, R24ECM	SEC. 12, T6N, R23ECM
OWNER	CALVERT EXPLORATION CO.	UNDERWOOD OIL CO.	UNDERWOOD OIL CO.
COMPLETED	12/01/62	08/24/70	06/30/70
SAMPLED	06/11/70	08/24/70	08/24/70
FORMATION	PERM-COUNCIL GROVE	MISS-CHESTER	MISS-STE. GENEVIEVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3030	6780	6112
WELLHEAD PRESSURE,PSIG	550	1250	1850
OPEN FLOW, MCFD	2055	12200	2663
COMPONENT, MOLE PCT			
METHANE	79.1	84.5	85.2
ETHANE	5.9	4.8	4.4
PROPANE	2.9	2.8	1.9
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	9.8	5.5	6.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.36	0.11	0.21
HEATING VALUE*	1055	1087	1052
SPECIFIC GRAVITY	0.685	0.664	0.651

	INDEX 4462 SAMPLE 12569	INDEX 4463 SAMPLE 12851	INDEX 4464 SAMPLE 12865
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ALBERT NO. 1	MENAGER NO. 1	BARBY NO. 1-A
LOCATION	SEC. 34, T6N, R26ECM	SEC. 27, T6N, R27ECM	SEC. 28, T4N, R26ECM
OWNER	AMAREX, INC.	TEXAS OIL & GAS CORP.	TEXAS OIL + GAS CORP.
COMPLETED	09/--/65	01/19/70	NOT GIVEN
SAMPLED	--/--/70	06/15/71	06/23/71
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3104	6180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	240	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1698	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	87.6	90.6
ETHANE	5.4	5.4	4.5
PROPANE	2.3	3.0	2.0
N-BUTANE	0.7	0.8	0.5
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.9	1.8	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.26	0.10	0.08
HEATING VALUE*	1046	1132	1104
SPECIFIC GRAVITY	0.653	0.651	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4465 SAMPLE 12866	INDEX 4466 SAMPLE 12874	INDEX 4467 SAMPLE 12877
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BARBY NO. 1	MILLER NO. 1	ALLEN-STATE NO. 1-27
LOCATION	SEC. 21, T4N, R26ECM	SEC. 1, T3N, R23ECM	SEC. 27, T4N, R27ECM
OWNER	TEXAS OIL & GAS CORP.	HARPER OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	12/--/58	06/05/61
SAMPLED	06/23/71	06/24/71	06/24/71
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7800	6921
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4800
COMPONENT, MOLE PCT			
METHANE	86.5	94.4	83.9
ETHANE	5.3	2.6	6.1
PROPANE	3.8	1.0	5.1
N-BUTANE	1.0	0.2	1.3
ISOBUTANE	0.6	0.2	0.8
N-PENTANE	0.3	TRACE	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.9	0.7	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.13	0.06	0.15
HEATING VALUE*	1146	1052	1193
SPECIFIC GRAVITY	0.662	0.594	0.690

	INDEX 4468 SAMPLE 12878	INDEX 4469 SAMPLE 12879	INDEX 4470 SAMPLE 12899
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	SIZELOVE NO. 3	ALLEN NO. 5	ALBERT NO. 1
LOCATION	SEC. 35, T4N, R27ECM	SEC. 23, T4N, R27ECM	SEC. 18, T6N, R27ECM
OWNER	CABOT CORP.	CABOT CORP.	GULF OIL CO. U.S.
COMPLETED	NOT GIVEN	NOT GIVEN	07/05/59
SAMPLED	06/24/71	06/24/71	07/20/71
FORMATION	PENN-HOOVER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6402
WELLHEAD PRESSURE,PSIG	600	980	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3210
COMPONENT, MOLE PCT			
METHANE	85.2	86.8	91.0
ETHANE	5.3	5.9	4.3
PROPANE	2.6	3.2	2.0
N-BUTANE	0.7	0.8	0.5
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	5.1	1.7	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.23	TRACE	0.09
HEATING VALUE*	1081	1151	1104
SPECIFIC GRAVITY	0.651	0.663	0.625

	INDEX 4471 SAMPLE 12901	INDEX 4472 SAMPLE 12902	INDEX 4473 SAMPLE 12973
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BLAKEMORE NO. J-1	BLAKEMORE NO. J-1	LAWSON NO. 1
LOCATION	SEC. 3, T4N, R22ECM	SEC. 3, T4N, R22ECM	SEC. 35, T1N, R24ECM
OWNER	BURK ROYALTY CORP.	BURK ROYALTY CORP.	SAMEDAN OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	07/20/71	07/20/71	08/23/71
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	400	400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	84.4	80.6
ETHANE	6.8	6.5	9.0
PROPANE	5.0	4.7	5.0
N-BUTANE	1.0	1.0	1.4
ISOBUTANE	0.4	0.2	0.6
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.0	0.3	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	2.4	2.3	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.13	0.13	0.09
HEATING VALUE*	1169	1165	1237
SPECIFIC GRAVITY	0.678	0.676	0.716

	INDEX 4474 SAMPLE 12873	INDEX 4475 SAMPLE 13053	INDEX 4476 SAMPLE 14941
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	SIX MILE S	SIX MILE S	UNION STAR N
WELL NAME	OVERTON NO. 4 LT	U.S.A. NO. 1	DRUM NO. 1-21
LOCATION	SEC. 23, T3N, R23ECM	SEC. 23, T3N, R23ECM	SEC. 21, T 3N, R23ECM
OWNER	HUNT PETROLEUM CORP.	HUNT PETROLEUM CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	02/21/61	04/15/69	08/05/76
SAMPLED	06/21/71	10/05/71	03/17/77
FORMATION	MISS-CHESTER	PENN-MARMATON	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7301	6114	7265
WELLHEAD PRESSURE,PSIG	290	NOT GIVEN	1046
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2294
COMPONENT, MOLE PCT			
METHANE	82.6	74.7	89.8
ETHANE	5.8	8.7	4.4
PROPANE	4.6	7.6	2.3
N-BUTANE	1.8	2.2	0.8
ISOBUTANE	0.8	1.0	0.2
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	1.0	0.4	0.3
CYCLOPENTANE	0.5	0.2	0.1
HEXANES PLUS	0.7	0.4	0.2
NITROGEN	2.0	4.2	1.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.4
HELIUM	0.16	0.09	0.12
HEATING VALUE*	1282	1284	1117
SPECIFIC GRAVITY	0.726	0.770	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4477 SAMPLE 11389	INDEX 4478 SAMPLE 15584	INDEX 4479 SAMPLE 15592
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BECKHAM	BECKHAM
FIELD	UNION STAR NW	CARPENTER	CARPENTER
WELL NAME	MORRIS NO. 1	WATKINS NO. 1	WATKINS NO. 2-21
LOCATION	SEC. 30, T3N, R23ECM	SEC. 21, T12N, R21W	SEC. 21, T12N, R21W
OWNER	READING & BATES OFFSHORE DR.	GHK CO.	GHK CO.
COMPLETED	NOT GIVEN	05/17/78	09/22/78
SAMPLED	03/19/68	03/21/79	03/29/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	16997	13989
WELLHEAD PRESSURE,PSIG	1260	11200	7790
OPEN FLOW, MCFD	NOT GIVEN	32600	15000
COMPONENT, MOLE PCT			
METHANE	89.5	97.2	92.5
ETHANE	4.4	0.6	4.4
PROPANE	2.5	0.1	0.8
N-BUTANE	0.8	0.0	0.2
ISOBUTANE	0.2	0.0	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	1.3	0.3	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.8	1.3
HELIUM	0.12	0.02	0.02
HEATING VALUE*	1119	998	1056
SPECIFIC GRAVITY	0.640	0.577	0.607

	INDEX 4480 SAMPLE 5167	INDEX 4481 SAMPLE 15971	INDEX 4482 SAMPLE 15301
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARPENTER SW	CARPENTER SW	CARPENTER W
WELL NAME	F. L. CLARK UNIT	FARRAR NO. 1-22	THURMOND NO. 1
LOCATION	SEC. 32, T12N, R21W	SEC. 22, T12N, R21W	SEC. 21, T12N, R22W
OWNER	UNITED CARBON CO., INC.	GHK CO.	NATOMAS NORTH AMERICA, INC.
COMPLETED	10/--/51	09/20/70	12/08/77
SAMPLED	02/26/52	05/31/80	06/07/78
FORMATION	PENN-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14660	17002	16060
WELLHEAD PRESSURE,PSIG	4500	12500	11337
OPEN FLOW, MCFD	200	4439	13382
COMPONENT, MOLE PCT			
METHANE	90.2	97.3	97.0
ETHANE	5.6	0.6	0.4
PROPANE	1.6	0.1	0.1
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.6	0.3	0.5
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.0	1.6	1.8
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1096	999	993
SPECIFIC GRAVITY	0.630	0.575	0.577

	INDEX 4483 SAMPLE 15789	INDEX 4484 SAMPLE 16143	INDEX 4485 SAMPLE 6396
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARPENTER W	CARPENTER W	CARTER N
WELL NAME	POTTER STATE NO. 1-20	THURMOND NO. 1	C. BOYD NO. 1
LOCATION	SEC. 20, T12N, R22W	SEC. 27, T12N, R27W	SEC. 15, T9N, R22W
OWNER	APACHE CORP.	GHK CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	08/21/80	08/19/57
SAMPLED	09/25/79	12/07/80	08/26/57
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14590	14806	10212
WELLHEAD PRESSURE,PSIG	4400	8660	4148
OPEN FLOW, MCFD	4100	12277	21000
COMPONENT, MOLE PCT			
METHANE	95.4	95.2	93.6
ETHANE	1.8	2.1	2.2
PROPANE	0.3	0.4	1.0
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	0.1	0.2	0.7
NITROGEN	0.7	0.3	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.3	0.4
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1023	1034	1102
SPECIFIC GRAVITY	0.590	0.591	0.622

	INDEX 4486 SAMPLE 11308	INDEX 4487 SAMPLE 11309	INDEX 4488 SAMPLE 11310
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARTER N	CARTER N	CARTER N
WELL NAME	C. BOYD NO. 1-15	M. PATTON NO. 1-9	COOPER NO. 1-9
LOCATION	SEC. 5, T9N, R22W	SEC. 9, T9N, R22W	SEC. 9, T9N, R22W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/19/57	09/08/58	08/18/59
SAMPLED	02/26/68	02/26/68	02/26/68
FORMATION	PENN-SPRINGER	PENN-DES MOINES B-1	PENN-DES MOINES A
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10841	9093
WELLHEAD PRESSURE,PSIG	1264	1504	1563
OPEN FLOW, MCFD	1552	276	12142
COMPONENT, MOLE PCT			
METHANE	94.7	87.5	84.3
ETHANE	2.1	5.2	8.1
PROPANE	0.9	2.6	3.4
N-BUTANE	0.4	0.9	1.1
ISOBUTANE	0.1	0.4	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	0.6	1.1	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.04	0.05	0.05
HEATING VALUE*	1065	1154	1185
SPECIFIC GRAVITY	0.601	0.659	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4489 SAMPLE 4650		INDEX 4490 SAMPLE 4677		INDEX 4491 SAMPLE 4678	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	ELK CITY		ELK CITY		ELK CITY	
WELL NAME	MUSIC NO. 1		O. L. KELLY NO. 1		LONG NO. 1	
LOCATION	SEC. 25, T10N, R21W		SEC. 23, T10N, R21W		SEC. 15, T10N, R21W	
OWNER	UNION PRODUCING CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	11/19/48		03/--/49		02/--/49	
SAMPLED	12/02/48		03/29/49		03/29/49	
FORMATION	PENN-		PENN-CONGLOMERATE		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9600		10130		9040	
WELLHEAD PRESSURE,PSIG	3123		4328		3853	
OPEN FLOW, MCFD	8000		4000		6500	
COMPONENT, MOLE PCT						
METHANE	77.8		81.0		61.2	
ETHANE	21.4		8.6		16.2	
PROPANE	---		4.7		13.9	
N-BUTANE	---		1.0		3.9	
ISOBUTANE	---		0.4		2.0	
N-PENTANE	---		0.1		0.6	
ISOPENTANE	---		0.3		0.9	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.0		0.4	
NITROGEN	0.2		3.2		0.3	
OXYGEN	0.3		0.2		0.1	
ARGON	---		TRACE		0.0	
HYDROGEN	---		0.1		0.1	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.4		0.4	
HELIUM	0.04		0.04		TRACE	
HEATING VALUE*	1172		1164		1553	
SPECIFIC GRAVITY	0.666		0.691		0.907	

	INDEX 4492 SAMPLE 4679		INDEX 4493 SAMPLE 4769		INDEX 4494 SAMPLE 11799	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	ELK CITY		ELK CITY		ELK CITY E	
WELL NAME	J. G. WALTERS NO. 1		E. B. YELTON		GREEN NO. 1-1	
LOCATION	SEC. 14, T10N, R21W		SEC. 15, T10N, R21W		SEC. 1, T10N, R21W	
OWNER	SHELL OIL CO.		SHELL OIL CO.		GLOVER HEFNER KENNEDY OIL CO	
COMPLETED	04/--/47		06/--/49		03/28/69	
SAMPLED	03/29/49		10/14/49		03/25/69	
FORMATION	PENN-CONGLOMERATE		PENN-CONGLOMERATE		PENN-SPRINGER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9260		9055		21604	
WELLHEAD PRESSURE,PSIG	3900		1850		15130	
OPEN FLOW, MCFD	NOT GIVEN		2204		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.6		83.9		94.8	
ETHANE	6.3		6.7		0.2	
PROPANE	4.1		4.3		TRACE	
N-BUTANE	1.4		1.4		0.0	
ISOBUTANE	0.8		0.6		0.0	
N-PENTANE	0.2		0.4		0.0	
ISOPENTANE	0.7		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.0		0.3		0.0	
NITROGEN	1.5		2.0		0.3	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3		0.3		4.6	
HELIUM	0.04		0.05		0.02	
HEATING VALUE*	1186		1185		964	
SPECIFIC GRAVITY	0.687		0.690		0.601	

	INDEX 4495 SAMPLE 3263		INDEX 4496 SAMPLE 3264		INDEX 4497 SAMPLE 10326	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	ERICK		ERICK		ERICK	
WELL NAME	DAVIDSON NO. 1		BALDWIN		DURAN NO. 1	
LOCATION	SEC. 2, T9N, R25W		SEC. 10, T9N, R25W		SEC. 15, T9N, R25W	
OWNER	WESTOAK GASOLINE CO.		WESTOAK GASOLINE CO.		T. K. HENDRICK	
COMPLETED	08/21/36		05/03/36		05/02/65	
SAMPLED	04/15/42		04/15/42		12/15/65	
FORMATION	PERM-WICHITA ALBANY		PERM-WICHITA ALBANY		-BRITTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	3362		3270		6452	
WELLHEAD PRESSURE,PSIG	495		745		2192	
OPEN FLOW, MCFD	11300		9730		17879	
COMPONENT, MOLE PCT						
METHANE	92.4		91.6		93.9	
ETHANE	6.6		7.0		2.9	
PROPANE	---		---		1.0	
N-BUTANE	---		---		0.3	
ISOBUTANE	---		---		0.3	
N-PENTANE	---		---		0.1	
ISOPENTANE	---		---		TRACE	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		0.1	
NITROGEN	0.3		0.7		1.1	
OXYGEN	0.4		0.4		0.0	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.08		0.07		0.05	
HEATING VALUE*	1054		1053		1059	
SPECIFIC GRAVITY	0.592		0.596		0.598	

	INDEX 4498 SAMPLE 13576		INDEX 4499 SAMPLE 4127		INDEX 4500 SAMPLE 6576	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	ERICK		ERICK GAS AREA		ERICK GAS AREA	
WELL NAME	POWELL NO 1-11		PENNINGTON NO. 1		SMITH NO. 1-B	
LOCATION	SEC. 11, T9N, R25W		SEC. 27, T8N, R25W		SEC. 1, T7N, R26W	
OWNER	MCCULLOCH OIL CORP.		STEPHENS PETROLEUM CO.		EL PASO NATURAL GAS CO.	
COMPLETED	11/15/72		05/04/46		09/16/57	
SAMPLED	04/10/73		10/11/46		05/06/58	
FORMATION	PERM-GRANITEWASH		PERM-L		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7000		1950		1936	
WELLHEAD PRESSURE,PSIG	1925		400		426	
OPEN FLOW, MCFD	30		1000		11900	
COMPONENT, MOLE PCT						
METHANE	96.0		91.0		93.7	
ETHANE	2.7		6.1		2.7	
PROPANE	1.1		---		1.2	
N-BUTANE	0.3		---		0.3	
ISOBUTANE	0.2		---		0.2	
N-PENTANE	0.1		---		TRACE	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	TRACE		---		TRACE	
HEXANES PLUS	0.1		---		0.1	
NITROGEN	1.1		1.9		1.6	
OXYGEN	0.0		0.7		TRACE	
ARGON	TRACE		---		0.0	
HYDROGEN	TRACE		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.3		0.2		0.0	
HELIUM	0.04		0.05		0.10	
HEATING VALUE*	1060		1031		1055	
SPECIFIC GRAVITY	0.600		0.598		0.598	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4501 SAMPLE 11762		INDEX 4502 SAMPLE 14411		INDEX 4503 SAMPLE 14412	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	MAYFIELD NE		MAYFIELD NE		MAYFIELD NE	
WELL NAME	BROWN UNIT NO. 1		PRICE NO. 1		ANNIE BAUNER NO. 1	
LOCATION	SEC. 5, T10N, R25W		SEC. 3, T10N, R25W		SEC. 33, T11N, R25W	
OWNER	PETROLEUM INTERNATIONAL, INC		UNION OIL CO. OF CALIF.		UNION OIL CO. OF CALIF.	
COMPLETED	11/08/68		06/26/74		04/08/72	
SAMPLED	02/13/69		07/07/75		07/07/75	
FORMATION	PENN-GRANITE WASH		PENN-MORROW		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	12240		19374		24065	
WELLHEAD PRESSURE,PSIG	2300		11236		5490	
OPEN FLOW, MCFD	4000		3650		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	81.8		96.9		97.2	
ETHANE	8.4		0.4		0.4	
PROPANE	3.9		TRACE		0.1	
N-BUTANE	1.1		0.0		0.0	
ISOBUTANE	0.7		0.0		0.0	
N-PENTANE	0.2		0.0		0.0	
ISOPENTANE	0.4		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	0.2		0.0		0.0	
NITROGEN	2.2		0.3		0.7	
OXYGEN	0.2		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		2.3		1.5	
HELIUM	0.05		0.01		0.02	
HEATING VALUE*	1177		989		995	
SPECIFIC GRAVITY	0.695		0.579		0.574	

	INDEX 4504 SAMPLE 15899		INDEX 4505 SAMPLE 14512		INDEX 4506 SAMPLE 14513	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	MAYFIELD NE		MAYFIELD SE		MAYFIELD SW	
WELL NAME	JOHN S BROWN NO. 1		CUPP NO. 1		CUPP HC" NO. 1	
LOCATION	SEC. 5, T10N, R25W		SEC. 27, T10N, R26W		SEC. 22, T10N, R26W	
OWNER	UNION OIL CO. OF CALIFORNIA		HELMERICH & PAYNE INC.		HELMERICH & PAYNE INC.	
COMPLETED	12/17/77		10/08/75		10/09/75	
SAMPLED	02/08/80		10/27/75		10/27/75	
FORMATION	PENN-ATOKA		CAMO-ARBUCKLE		CAMO-ARBUCKLE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14075		16850		17907	
WELLHEAD PRESSURE,PSIG	4624		6635		6620	
OPEN FLOW, MCFD	NOT GIVEN		42995		60348	
COMPONENT, MOLE PCT						
METHANE	90.7		97.5		97.6	
ETHANE	4.4		0.5		0.5	
PROPANE	1.5		0.1		0.1	
N-BUTANE	0.3		TRACE		TRACE	
ISOBUTANE	0.2		0.0		TRACE	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.1		TRACE		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		TRACE		TRACE	
NITROGEN	1.4		0.6		0.6	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		1.2		1.2	
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1067		999		1000	
SPECIFIC GRAVITY	0.618		0.571		0.572	

	INDEX 4507 SAMPLE 15227		INDEX 4508 SAMPLE 14992		INDEX 4509 SAMPLE 15979	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	MAYFIELD SW		MAYFIELD W		MAYFIELD W	
WELL NAME	WALLACE LEASE NO. 1		GREEN ESTATE NO. 1		MILLS NO. 2-19	
LOCATION	SEC. 18, T10N, R26W		SEC. 29, T10N, R26W		SEC. 19, T10N, R26W	
OWNER	CONTINENTAL OIL CO.		CONTINENTAL OIL CO.		NATOMAS NORTH AMERICA, INC.	
COMPLETED	10/18/77		12/--/76		02/25/80	
SAMPLED	03/14/78		04/28/77		06/12/80	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	18567		18192		17796	
WELLHEAD PRESSURE,PSIG	6050		6900		4423	
OPEN FLOW, MCFD	NOT GIVEN		34000		5850	
COMPONENT, MOLE PCT						
METHANE	95.6		96.7		96.4	
ETHANE	1.2		1.1		1.0	
PROPANE	0.2		0.2		0.1	
N-BUTANE	0.1		0.1		0.1	
ISOBUTANE	0.0		TRACE		0.0	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	TRACE		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	1.1		0.8		0.9	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.5		0.9		1.2	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1008		1017		1010	
SPECIFIC GRAVITY	0.587		0.580		0.581	

	INDEX 4510 SAMPLE 1212		INDEX 4511 SAMPLE 15970		INDEX 4512 SAMPLE 1922	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BECKHAM		BECKHAM		BECKHAM	
FIELD	MORAVIA DISTRICT NE		NEW LIBERTY SW		NOT GIVEN	
WELL NAME	MCGEE		D.L. SANDERS UNIT NO. 1		COREHOLE F189	
LOCATION	SEC. 25, T8N, R22W		SEC. 24, T10N, R25W		SEC. 3, T10N, R23W	
OWNER	OKLAHOMA SERVICE CO.		MISSISSIPPI RIVER TRANS. EXP		SHELL OIL CO.	
COMPLETED	02/--/24		02/20/79		NOT GIVEN	
SAMPLED	02/19/26		05/30/80		01/18/30	
FORMATION	NOT GIVEN		DEVO-HUNTON		PERM-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	1000		23920		937	
WELLHEAD PRESSURE,PSIG	300		3122		NOT GIVEN	
OPEN FLOW, MCFD	3000		7779		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.1		97.5		0.0	
ETHANE	10.5		0.1		0.0	
PROPANE	---		TRACE		---	
N-BUTANE	---		0.0		---	
ISOBUTANE	---		0.0		---	
N-PENTANE	---		0.0		---	
ISOPENTANE	---		0.0		---	
CYCLOPENTANE	---		0.0		---	
HEXANES PLUS	---		0.0		---	
NITROGEN	0.4		2.3		99.5	
OXYGEN	0.7		0.0		0.1	
ARGON	---		0.0		---	
HYDROGEN	---		0.0		---	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.3		TRACE		0.4	
HELIUM	0.07		0.05		0.14	
HEATING VALUE*	1081		989		0	
SPECIFIC GRAVITY	0.615		0.564		0.970	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4513 SAMPLE 1768	INDEX 4514 SAMPLE 14929	INDEX 4515 SAMPLE 9855
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BLAINE
FIELD	SAYRE DISTRICT	WILDCAT	CANTON S
WELL NAME	E. L. GRAY NO. 2	HARRISON ESTATE NO. 1	PAULSON NO. 1-A
LOCATION	SEC. 14, T9N, R23W	SEC. 14, T10N, R21W	SEC. 28, T18N, R13W
OWNER	MOBIL OIL CORP.	EL PASO NATURAL GAS CO.	GOFF OIL CO.
COMPLETED	03/10/29	04/18/76	01/00/65
SAMPLED	05/03/29	03/03/77	04/26/65
FORMATION	LIME	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2609	15816	8899
WELLHEAD PRESSURE,PSIG	815	11328	2650
OPEN FLOW, MCFD	12000	4575	14800
COMPONENT, MOLE PCT			
METHANE	84.0	95.3	84.1
ETHANE	13.6	2.9	6.9
PROPANE	---	0.5	4.1
N-BUTANE	---	0.1	1.0
ISOBUTANE	---	TRACE	0.7
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	2.2	0.2	1.8
OXYGEN	0.1	0.0	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.4
HELIUM	0.08	0.02	TRACE
HEATING VALUE*	1095	1038	1170
SPECIFIC GRAVITY	0.634	0.587	0.683

	INDEX 4516 SAMPLE 9917	INDEX 4517 SAMPLE 11009	INDEX 4518 SAMPLE 11010
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	CANTON S	CARLETON NE	CARLETON NE
WELL NAME	BENNIE V. TICE NO. 1	HAIGLER UNIT D NO. 1	WILEY UNIT NO. 1
LOCATION	SEC. 29, T18N, R13W	SEC. 32, T18N, R12W	SEC. 33, T18N, R12W
OWNER	EXXON CO. U.S.A.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/26/65	12/19/66	09/06/66
SAMPLED	06/05/65	06/21/67	06/21/67
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8884	8264	8590
WELLHEAD PRESSURE,PSIG	3200	5239	5423
OPEN FLOW, MCFD	3570	33812	43087
COMPONENT, MOLE PCT			
METHANE	82.9	83.8	79.5
ETHANE	7.0	7.2	6.8
PROPANE	4.3	4.2	3.5
N-BUTANE	1.5	1.2	1.1
ISOBUTANE	0.8	0.6	0.6
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.6	0.6	0.8
CYCLOPENTANE	0.3	0.3	0.2
HEXANES PLUS	0.7	0.5	0.5
NITROGEN	1.0	0.7	5.5
OXYGEN	0.0	TRACE	1.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1244	1230	1147
SPECIFIC GRAVITY	0.718	0.703	0.715

	INDEX 4519 SAMPLE 13167	INDEX 4520 SAMPLE 14586	INDEX 4521 SAMPLE 13156
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	CARLETON NE	EAGLE CITY N	ELM GROVE
WELL NAME	SHORT UNIT NO. 1	MEAT GOVERNMENT NO. 15-1	ANDY PAYNE NO. 1-21
LOCATION	SEC. 36, T18N, R12W	SEC. 15, T17N, R13W	SEC. 21, T13N, R12W
OWNER	PETROLEUM, INC.	WOODS PETROLEUM CORP.	UNION OIL CO. OF CALIF.
COMPLETED	04/--/71	05/28/75	08/21/71
SAMPLED	03/14/72	02/23/76	03/02/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8147	9063	11895
WELLHEAD PRESSURE,PSIG	5339	4700	7865
OPEN FLOW, MCFD	7834	2564	8800
COMPONENT, MOLE PCT			
METHANE	89.7	84.1	96.4
ETHANE	3.8	7.6	1.4
PROPANE	1.3	4.3	0.2
N-BUTANE	0.2	1.2	0.0
ISOBUTANE	0.3	0.5	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	3.4	1.2	0.8
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	1.0
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1059	1183	1007
SPECIFIC GRAVITY	0.635	0.681	0.577

	INDEX 4522 SAMPLE 11533	INDEX 4523 SAMPLE 13407	INDEX 4524 SAMPLE 9790
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	FAY E	FAY E	FAY SE
WELL NAME	[illegible]DORUFF NO. 1	STATE NO. 1-36	L. M. GODWIN NO. 1
LOCATION	SEC. 4, T15N, R13W	SEC. 36, T16N, R13W	SEC. 27, T15N, R13W
OWNER	TEXACO INC.	CLEARY PETROLEUM CORP.	SUN OIL CO.
COMPLETED	12/29/60	03/16/72	10/05/64
SAMPLED	06/10/68	09/30/72	03/05/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10220	10200	10705
WELLHEAD PRESSURE,PSIG	150	5557	6200
OPEN FLOW, MCFD	NOT GIVEN	4800	8000
COMPONENT, MOLE PCT			
METHANE	86.7	84.8	87.1
ETHANE	6.8	7.4	6.5
PROPANE	3.3	4.2	2.7
N-BUTANE	0.7	1.0	0.7
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.3	0.2	0.5
NITROGEN	0.6	0.4	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.2	0.3	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	0.05	0.03	0.04
HEATING VALUE*	1168	1189	1153
SPECIFIC GRAVITY	0.666	0.678	0.663

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4525 SAMPLE 9817	INDEX 4526 SAMPLE 12822	INDEX 4527 SAMPLE 13596
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GEARY N	GEARY N	GEARY SW
WELL NAME	LOTE FOSTER NO. 1	LOOSEN NO. 1	GILBERT PECK UNIT NO. 1
LOCATION	SEC. 33, T15N, R10W	SEC. 31, T16N, R10W	SEC. 30, T13N, R11W
OWNER	SKELLY OIL CO.	WOODS PETROLEUM CORP.	SUN OIL CO.
COMPLETED	12/16/64	11/21/70	11/16/72
SAMPLED	03/16/65	05/19/71	05/04/73
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	11760
WELLHEAD PRESSURE,PSIG	6400	NOT GIVEN	6470
OPEN FLOW, MCFD	4353	NOT GIVEN	790
COMPONENT, MOLE PCT			
METHANE	95.0	88.1	89.4
ETHANE	2.7	5.4	6.3
PROPANE	0.8	2.2	2.3
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	2.6	0.5
OXYGEN	TRACE	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.7
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1047	1084	1108
SPECIFIC GRAVITY	0.589	0.637	0.631

	INDEX 4528 SAMPLE 14953	INDEX 4529 SAMPLE 15713	INDEX 4530 SAMPLE 15326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GEARY W	GEARY W	GREEN NW
WELL NAME	GROENDYKE HALL NO. 1	TULSA ROYALTIES NO. 1	BRADFORD NO. 1
LOCATION	SEC. 10, T13N, R12W	SEC. 4, T14N, R12W	SEC. 18, T15N, R11W
OWNER	WOODS PETROLEUM CORP.	COTTON PETROLEUM CORP.	MUSTANG PRODUCTION CO.
COMPLETED	08/23/76	11/18/78	05/19/78
SAMPLED	03/24/77	07/26/79	07/27/78
FORMATION	PENN-MORROW	PENN-SPRINGER	PENN-ATOKA & MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11677	10883	10234
WELLHEAD PRESSURE,PSIG	4740	5670	5000
OPEN FLOW, MCFD	4295	9500	3500
COMPONENT, MOLE PCT			
METHANE	88.7	91.0	82.8
ETHANE	6.3	5.0	7.7
PROPANE	2.4	1.9	4.8
N-BUTANE	0.4	0.4	1.1
ISOBUTANE	0.4	0.2	0.7
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.4	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	1.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1127	1106	1211
SPECIFIC GRAVITY	0.644	0.628	0.702

	INDEX 4531 SAMPLE 10959	INDEX 4532 SAMPLE 10411	INDEX 4533 SAMPLE 10432
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GREENFIELD NE	HITCHCOCK	HITCHCOCK
WELL NAME	WOOLWORTH UNIT NO. 1	RED CLOUD UNIT NO. 1	PATTERSON UNIT D NO. 1
LOCATION	SEC. 14, T15N, R11W	SEC. 15, T17N, R11W	SEC. 16, T17N, R11W
OWNER	WOODS PETROLEUM CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	01/--/67	10/10/65	NOT GIVEN
SAMPLED	05/18/67	02/22/66	03/05/66
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9793	8345	8325
WELLHEAD PRESSURE,PSIG	6250	5300	5490
OPEN FLOW, MCFD	19131	15025	12000
COMPONENT, MOLE PCT			
METHANE	84.6	93.4	92.6
ETHANE	3.0	4.3	4.2
PROPANE	0.7	1.3	1.3
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	TRACE	TRACE	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.2	0.0	0.5
OXYGEN	2.2	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.3
HELIUM	0.03	0.03	0.04
HEATING VALUE*	945	1080	1091
SPECIFIC GRAVITY	0.638	0.602	0.613

	INDEX 4534 SAMPLE 10631	INDEX 4535 SAMPLE 10632	INDEX 4536 SAMPLE 14384
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	HITCHCOCK	HITCHCOCK	LONGDALE
WELL NAME	KLOEPPEL 1-14	SPAETH 1-23	SMITH NO. 1
LOCATION	SEC. 14, T17N, R11W	SEC. 23, T17N, R11W	SEC. 7, T19N, R12W
OWNER	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA	TENNECO OIL CO.
COMPLETED	05/14/65	08/10/65	11/12/74
SAMPLED	06/28/66	06/28/66	06/13/75
FORMATION	PENN-MORROW	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8273	8360	8819
WELLHEAD PRESSURE,PSIG	5800	5750	2202
OPEN FLOW, MCFD	31510	67568	864
COMPONENT, MOLE PCT			
METHANE	92.7	93.8	88.5
ETHANE	3.9	4.0	6.0
PROPANE	1.4	1.4	2.5
N-BUTANE	0.5	0.5	0.8
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.8	0.0	0.8
OXYGEN	0.2	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.6
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1062	1075	1127
SPECIFIC GRAVITY	0.605	0.599	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4537 SAMPLE 14008		INDEX 4538 SAMPLE 14399		INDEX 4539 SAMPLE 6182	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BLAINE		BLAINE		BLAINE	
FIELD	LONGDALE SE		LOYAL W		OKEENE NW	
WELL NAME	BOSTON NO. 1-20		LORENZ NO. 3		DOUGHERTY NO. 1	
LOCATION	SEC. 20, T19N, R12W		SEC. 12, T17N, R10W		SEC. 10, T19N, R11W	
OWNER	UNIVERSAL RESOURCES CORP.		UNIVERSAL RESOURCES CORP.		PERKINS PRODUCTION CO.	
COMPLETED	03/14/74		NOT GIVEN		NOT GIVEN	
SAMPLED	05/13/74		06/25/75		12/11/56	
FORMATION	MISS-CHESTER		MISS-CHESTER		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8032		9000		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	2950		2700		NOT GIVEN	
OPEN FLOW, MCFD	4768		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	86.3		83.9		87.9	
ETHANE	5.9		7.9		4.4	
PROPANE	3.1		4.3		1.1	
N-BUTANE	1.3		1.3		0.6	
ISOBUTANE	0.7		0.6		0.8	
N-PENTANE	0.4		0.3		0.0	
ISOPENTANE	0.5		0.3		1.8	
CYCLOPENTANE	0.2		0.1		0.3	
HEXANES PLUS	0.5		0.2		0.6	
NITROGEN	0.6		0.8		1.5	
OXYGEN	0.0		TRACE		0.2	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.3		0.5	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1199		1207		1164	
SPECIFIC GRAVITY	0.686		0.690		0.674	

	INDEX 4540 SAMPLE 7249		INDEX 4541 SAMPLE 11462		INDEX 4542 SAMPLE 13889	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BLAINE		BLAINE		BLAINE	
FIELD	OKEENE NW		OKEENE NW		OKEENE SW	
WELL NAME	OUTWIER NO. 1		WALTON-EWING NO. 1		OBLANDER NO. 1-18	
LOCATION	SEC. 8, T19N, R11W		SEC. 34, T20N, R11W		SEC. 18, T18N, R11W	
OWNER	AMOCO PRODUCTION CO.		EASON OIL CO.		ARKLA EXPLORATION CO.	
COMPLETED	12/13/57		10/--/62		09/16/73	
SAMPLED	10/15/59		04/24/68		12/18/73	
FORMATION	MISS-CHESTER		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7476		2342		7921	
WELLHEAD PRESSURE,PSIG	3330		950		5200	
OPEN FLOW, MCFD	2740		250		4250	
COMPONENT, MOLE PCT						
METHANE	91.9		91.7		93.1	
ETHANE	4.8		4.0		3.6	
PROPANE	1.6		1.8		1.2	
N-BUTANE	0.3		0.4		0.2	
ISOBUTANE	0.1		0.4		0.3	
N-PENTANE	0.0		0.2		0.0	
ISOPENTANE	0.3		TRACE		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.4		0.2	
NITROGEN	0.4		0.7		0.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.3	
HELIUM	0.04		0.03		0.03	
HEATING VALUE*	1099		1107		1082	
SPECIFIC GRAVITY	0.617		0.626		0.608	

	INDEX 4543 SAMPLE 8423		INDEX 4544 SAMPLE 7709		INDEX 4545 SAMPLE 13654	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BLAINE		BLAINE		BLAINE	
FIELD	RINGWOOD		SOONER TREND		SOUTHARD SE	
WELL NAME	FLESHMAN UNIT		S. D. HAWORTH NO. 1		WERER NO. 1-17	
LOCATION	SEC. 32, T20N, R10W		SEC. 9, T18N, R10W		SEC. 17, T18N, R11W	
OWNER	AMOCO PRODUCTION CO.		EXXON CO. U.S.A.		ARKLA EXPLORATION CO.	
COMPLETED	10/30/61		07/20/60		04/25/73	
SAMPLED	03/03/62		10/04/60		07/20/73	
FORMATION	MISS-CHESTER		-POPE DOUGHERTY LIME		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7301		7720		7872	
WELLHEAD PRESSURE,PSIG	2570		3650		5525	
OPEN FLOW, MCFD	2400		1450		7809	
COMPONENT, MOLE PCT						
METHANE	88.7		92.3		93.2	
ETHANE	5.7		4.3		3.8	
PROPANE	2.5		1.6		1.3	
N-BUTANE	0.7		0.4		0.2	
ISOBUTANE	0.4		0.3		0.3	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.3		0.1		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.3		0.2	
NITROGEN	0.8		0.2		0.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.4		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.4		0.2	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1135		1105		1085	
SPECIFIC GRAVITY	0.641		0.621		0.608	

	INDEX 4546 SAMPLE 14138		INDEX 4547 SAMPLE 8351		INDEX 4548 SAMPLE 15004	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	BLAINE		BLAINE		BLAINE	
FIELD	SOUTHARD SE		SQUAW CREEK		SQUAW CREEK	
WELL NAME	HOOKMAN NO. 1		A. O. BAKER NO. 1		TURTLE SITTING DOWN NO. 1	
LOCATION	SEC. 20, T18N, R11W		SEC. 36, T14N, R13W		SEC. 27, T14N, R13W	
OWNER	TEXAS OIL & GAS CORP.		SUN OIL CO.		HARPER OIL CO.	
COMPLETED	05/08/74		09/16/59		11/06/76	
SAMPLED	08/29/74		12/27/61		05/17/77	
FORMATION	PENN-MORROW		PENN-CHEROKEE		PENN-SPRINGER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7877		10777		11796	
WELLHEAD PRESSURE,PSIG	4450		5400		4400	
OPEN FLOW, MCFD	3036		19784		1550	
COMPONENT, MOLE PCT						
METHANE	92.3		80.7		87.6	
ETHANE	4.4		7.9		6.3	
PROPANE	1.7		3.0		2.9	
N-BUTANE	0.3		0.4		0.8	
ISOBUTANE	0.3		0.4		0.6	
N-PENTANE	TRACE		0.0		0.2	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	0.1		0.0		TRACE	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.4		5.5		0.3	
OXYGEN	0.0		1.2		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.6		0.7	
HELIUM	0.03		0.05		0.02	
HEATING VALUE*	1196		1077		1150	
SPECIFIC GRAVITY	0.619		0.677		0.655	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4549 SAMPLE 15792	INDEX 4550 SAMPLE 15327	INDEX 4551 SAMPLE 10731
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SQUAW CREEK	SQUAW CREEK W	STAR
WELL NAME	COWAN NO. 1-2	BARRINGER NO. 1	PHILLIPS NO. 1-13
LOCATION	SEC. 2, T14N, R13W	SEC. 12, T14N, R13W	SEC. 13, T19N, R10W
OWNER	MUSTANG PRODUCTION CO.	MUSTANG PRODUCTION CO.	CLEARY PETROLEUM, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	09/13/65
SAMPLED	09/27/79	07/27/78	09/27/66
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10323	11137	8437
WELLHEAD PRESSURE,PSIG	2000	7000	1884
OPEN FLOW, MCFD	2995	6000	14658
COMPONENT, MOLE PCT			
METHANE	93.9	93.8	81.8
ETHANE	3.3	3.3	10.3
PROPANE	0.8	0.9	3.3
N-BUTANE	0.2	0.2	0.8
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	0.4	2.4
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1055	1066	1155
SPECIFIC GRAVITY	0.599	0.604	0.680

	INDEX 4552 SAMPLE 15100	INDEX 4553 SAMPLE 15628	INDEX 4554 SAMPLE 15629
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	THOMAS E	THOMAS S	THOMAS S
WELL NAME	TWIN WOMAN NO. 1	LLOYD SCOT NO. 1	PERKINS NO. 1
LOCATION	SEC. 29, T18N, R13W	SEC. 6, T14N, R13W	SEC. 7, T14N, R13W
OWNER	ST. JOE PETROLEUM CORP.	READING & BATES PETROLEUM CO	READING & BATES PETROLEUM CO
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/12/77	05/18/79	05/22/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5614	3500	3500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	88.1	83.8
ETHANE	5.8	5.9	8.1
PROPANE	2.0	2.3	4.2
N-BUTANE	0.4	0.5	1.0
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	1.3	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.9	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1114	1115	1193
SPECIFIC GRAVITY	0.632	0.633	0.683

	INDEX 4555 SAMPLE 8262	INDEX 4556 SAMPLE 11011	INDEX 4557 SAMPLE 11650
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WATONGA NE	WATONGA NW	WATONGA NW
WELL NAME	C. W. SWANEGAN NO. 1	R. A. MADDUX NO. 1	MARTIN NO. 1
LOCATION	SEC. 11, T16N, R11W	SEC. 2, T16N, R12W	SEC. 8, T16N, R13W
OWNER	TEXACO INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	08/30/61	08/22/66	01/04/68
SAMPLED	11/01/61	06/21/67	09/16/68
FORMATION	PENN-CHEROKEE & ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9022	9046	9738
WELLHEAD PRESSURE,PSIG	6500	5569	1989
OPEN FLOW, MCFD	NOT GIVEN	25171	2875
COMPONENT, MOLE PCT			
METHANE	93.3	82.6	85.7
ETHANE	3.6	7.2	7.3
PROPANE	1.2	4.5	3.9
N-BUTANE	0.2	1.5	1.0
ISOBUTANE	0.1	0.8	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.8	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	0.9	0.9	0.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.03	0.02	0.04
HEATING VALUE*	1064	1240	1178
SPECIFIC GRAVITY	0.602	0.713	0.672

	INDEX 4558 SAMPLE 12315	INDEX 4559 SAMPLE 7663	INDEX 4560 SAMPLE 10022
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WATONGA NW	WATONGA SW	WATONGA SW
WELL NAME	CHAMBERS NO. 3	E. A. SALLSTROM	H. W. FORNEY ESTATE NO. 1
LOCATION	SEC. 18, T16N, R11W	SEC. 2, T15N, R12W	SEC. 21, T15N, R13W
OWNER	CONTINENTAL OIL CO.	TEXACO INC.	SUN OIL CO.
COMPLETED	11/20/69	06/21/60	04/10/65
SAMPLED	06/08/70	08/31/60	07/30/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9116	9752	10634
WELLHEAD PRESSURE,PSIG	5942	5788	6800
OPEN FLOW, MCFD	29300	5500	13300
COMPONENT, MOLE PCT			
METHANE	88.0	85.4	91.8
ETHANE	5.3	6.7	4.3
PROPANE	3.1	3.7	1.2
N-BUTANE	0.8	1.1	0.3
ISOBUTANE	0.6	0.8	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.5	0.5	TRACE
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.4	0.5	0.2
NITROGEN	0.5	0.5	0.9
OXYGEN	0.0	TRACE	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.00	0.03	0.04
HEATING VALUE*	1176	1203	1069
SPECIFIC GRAVITY	0.667	0.686	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4561 SAMPLE 11369	INDEX 4562 SAMPLE 14327	INDEX 4563 SAMPLE 6574
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BRYAN
FIELD	WATONGA SW	WATONGA TREND	AYLESWORTH DISTRICT SE
WELL NAME	MEADOWS NO. 1	WHEELER UNIT NO. 1	MARY HAYNIE NO. 1
LOCATION	SEC. 1, T15N, R11W	SEC. 31, T17N, R10W	SEC. 22, T6S, R7E
OWNER	SUN OIL CO.	CONTINENTAL OIL CO.	ANDERSON-PRICHARD OIL CORP.
COMPLETED	03/16/62	03/19/75	05/01/58
SAMPLED	03/11/68	05/08/75	05/02/58
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	400
DEPTH, FEET	9548	8714	4192
WELLHEAD PRESSURE,PSIG	1651	5620	1515
OPEN FLOW, MCFD	1876	12150	10
COMPONENT, MOLE PCT			
METHANE	93.3	92.5	61.2
ETHANE	3.2	4.0	6.6
PROPANE	0.9	1.6	6.3
N-BUTANE	0.5	0.4	7.3
ISOBUTANE	0.0	0.3	2.4
N-PENTANE	0.1	TRACE	5.3
ISOPENTANE	0.2	0.2	3.9
CYCLOPENTANE	0.1	TRACE	0.8
HEXANES PLUS	0.2	0.1	3.1
NITROGEN	0.9	0.5	2.7
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.2
HELIUM	0.02	0.03	0.10
HEATING VALUE*	1010	1087	1411
SPECIFIC GRAVITY	0.607	0.612	1.079

	INDEX 4564 SAMPLE 14157	INDEX 4565 SAMPLE 14529	INDEX 4566 SAMPLE 6765
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BRYAN	BRYAN	BRYAN
FIELD	AYLESWORTH SE	AYLESWORTH SE	DURANT E
WELL NAME	NEFF GODFREY NO. 2	GODFREY NO. 1	N. C. ANDERSON NO. 1
LOCATION	SEC. 22, T6S, R7E	SEC. 21, T6S, R7E	SEC. 2, T7S, R9E
OWNER	JAKE L. HAMON	CLEARY PETROLEUM CO.	ATLANTIC RICHFIELD
COMPLETED	05/03/74	07/22/75	05/22/56
SAMPLED	09/26/74	11/10/75	07/22/58
FORMATION	MISS-WOODFORD	ORDO-OIL CREEK	ORDO-MCLISH
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	3575	4171	7824
WELLHEAD PRESSURE,PSIG	798	1720	2038
OPEN FLOW, MCFD	6759	6955	3237
COMPONENT, MOLE PCT			
METHANE	84.0	86.5	95.3
ETHANE	7.7	4.8	1.7
PROPANE	3.6	3.1	0.8
N-BUTANE	0.7	1.0	0.3
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.5	TRACE
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.9	3.0	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.3
HELIUM	0.05	0.07	0.03
HEATING VALUE*	1130	1126	1053
SPECIFIC GRAVITY	0.664	0.665	0.594

	INDEX 4567 SAMPLE 7765	INDEX 4568 SAMPLE 12306	INDEX 4569 SAMPLE 12328
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BRYAN	BRYAN	BRYAN
FIELD	DURANT E	DURANT E	DURANT E
WELL NAME	ANDERSON-MAYHUE UNIT NO. 1	SMITH-EVITTS NO. 1	SMITH-EVITT NO. 1
LOCATION	SEC. 34, T6S, R9E	SEC. 1, T7S, R9E	SEC. 1, T7S, R9E
OWNER	ATLANTIC RICHFIELD	EARLSBORO OIL + GAS CO.,INC.	EARLSBORO OIL + GAS CO.,INC.
COMPLETED	08/31/60	12/05/69	12/05/69
SAMPLED	11/11/60	06/22/70	06/22/70
FORMATION	ORDO-BROMIDE	ORDO-MCLISH	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	7072	8080	7480
WELLHEAD PRESSURE,PSIG	1971	1815	2039
OPEN FLOW, MCFD	6600	1709	5727
COMPONENT, MOLE PCT			
METHANE	94.3	96.1	92.1
ETHANE	2.6	1.1	3.9
PROPANE	1.0	0.4	1.5
N-BUTANE	0.4	0.1	0.4
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	1.2	1.2
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.1
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1062	1025	1076
SPECIFIC GRAVITY	0.599	0.585	0.610

	INDEX 4570 SAMPLE 10102	INDEX 4571 SAMPLE 7134	INDEX 4572 SAMPLE 13566
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BRYAN	CADDO	CADDO
FIELD	WILDCAT	ALDEN NE	ALDEN NE
WELL NAME	PARK-COLLEGE UNIT NO. 1	NO. 1	BROMIDE UNIT NO. 1
LOCATION	SEC. 18, T6S, R9E	SEC. 2, T6N, R13W	SEC. 35, T7N, R13W
OWNER	AMOCO PRODUCTION CO.	ATLANTIC RICHFIELD CO.	JONES & PELLOW OIL CO.
COMPLETED	07/26/65	03/--/59	12/31/72
SAMPLED	09/02/65	06/23/59	03/15/73
FORMATION	ORDO-MCLISH	ORDO-BROMIDE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	400	360	360
DEPTH, FEET	9128	8880	9622
WELLHEAD PRESSURE,PSIG	2700	550	3242
OPEN FLOW, MCFD	2181	NOT GIVEN	7108
COMPONENT, MOLE PCT			
METHANE	83.3	71.2	84.6
ETHANE	4.5	10.4	7.2
PROPANE	2.2	7.8	3.9
N-BUTANE	2.9	3.5	0.9
ISOBUTANE	0.3	1.8	0.5
N-PENTANE	0.3	0.8	0.2
ISOPENTANE	2.9	1.7	0.2
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	0.1	0.8
NITROGEN	7.6	1.7	1.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.9	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.2	0.4	0.2
HELIUM	0.08	0.03	0.07
HEATING VALUE*	1242	1416	1157
SPECIFIC GRAVITY	0.668	0.833	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4573 SAMPLE 2801	INDEX 4574 SAMPLE 3265	INDEX 4575 SAMPLE 3266
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	APACHE	APACHE	APACHE
WELL NAME	SMITH NO. 1	Z. N. SMITH NO. 3	ACHILTA, B
LOCATION	SEC. 2, T5N, R12W	SEC. 2, T5N, R12W	SEC. 35, T6N, R12W
OWNER	TEXAS CO.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	09/22/41	01/15/42
SAMPLED	10/06/38	04/16/42	04/16/42
FORMATION	ORDO-SYLVAN	ORDO-WILCOX	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2403	3323	3709
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1615	1656
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.5	84.1	61.0
ETHANE	10.8	15.1	37.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	0.4	0.4
OXYGEN	0.8	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.1	0.3
HELIUM	0.03	0.06	TRACE
HEATING VALUE*	1070	1123	1297
SPECIFIC GRAVITY	0.626	0.632	0.749

	INDEX 4576 SAMPLE 14255	INDEX 4577 SAMPLE 13844	INDEX 4578 SAMPLE 16088
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	APACHE E	BINGER E	BINGER W
WELL NAME	A. O. BELCHER NO. 1	JOSHUA UNIT 29-1	WILLIAMS NO. 1
LOCATION	SEC. 23, T5N, R11W	SEC. 29, T10N, R10W	SEC. 33, T10N, R11W
OWNER	FOREST OIL CORP.	JONES & PELLOW OIL CO.	SANGUINE, LTD.
COMPLETED	10/01/73	10/31/73	08/--/80
SAMPLED	01/30/75	12/26/73	10/09/80
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	18695	13900	13100
WELLHEAD PRESSURE,PSIG	13473	8000	8100
OPEN FLOW, MCFD	7275	6400	3500
COMPONENT, MOLE PCT			
METHANE	96.7	93.6	81.4
ETHANE	1.7	1.0	10.7
PROPANE	0.2	0.2	4.1
N-BUTANE	0.0	0.0	0.9
ISOBUTANE	0.0	0.0	0.8
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.3	3.7	0.5
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.4	1.0
HELIUM	0.01	0.02	0.03
HEATING VALUE*	1015	971	1215
SPECIFIC GRAVITY	0.577	0.591	0.704

	INDEX 4579 SAMPLE 8015	INDEX 4580 SAMPLE 15112	INDEX 4581 SAMPLE 14632
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	BRIDGEPORT	BRIDGEPORT	CANYON CITY
WELL NAME	W. V. WEATHERS NO. 1	RANDAL FOSTER NO. 1	ARNOLD NO. 1
LOCATION	SEC. 8, T12N, R11W	SEC. 11, T12N, R12W	SEC. 23, T11N, R11W
OWNER	MOBIL OIL CORP.	DAVIS OIL CO.	MONSANTO CO.
COMPLETED	02/09/61	07/--/77	05/27/75
SAMPLED	06/12/61	09/16/77	04/09/76
FORMATION	PENN-CHEROKEE	PENN-SPRINGER	PENN-REDFORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11388	12950	12142
WELLHEAD PRESSURE,PSIG	5500	5600	6600
OPEN FLOW, MCFD	1284	1275	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.3	97.4	85.9
ETHANE	8.6	1.0	8.7
PROPANE	2.8	0.2	2.7
N-BUTANE	0.5	0.0	0.5
ISOBUTANE	0.8	0.0	0.4
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.5	0.0	0.2
CYCLOPENTANE	0.3	0.0	TRACE
HEXANES PLUS	1.0	0.0	0.1
NITROGEN	0.2	0.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.9
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1213	1010	1140
SPECIFIC GRAVITY	0.693	0.572	0.656

	INDEX 4582 SAMPLE 2313	INDEX 4583 SAMPLE 2464	INDEX 4584 SAMPLE 2645
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	CEMENT	CEMENT
WELL NAME	BERT LACKEY NO. 6	PRESTON COLP NO. 6	GARNER NO. 1
LOCATION	SEC. 11, T5N, R9W	SEC. 6, T5N, R9W	SEC. 26, T6N, R10W
OWNER	MID-KANSAS OIL & GAS CO.	MID-KANSAS OIL & GAS CO.	WILLARD L. MILLER
COMPLETED	NOT GIVEN	01/18/32	06/13/33
SAMPLED	04/01/31	01/29/32	09/--/33
FORMATION	PERM-FORTUNA	NOT GIVEN	PERM-BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6040	3382
WELLHEAD PRESSURE,PSIG	110	1500	1220
OPEN FLOW, MCFD	NOT GIVEN	10000	10000
COMPONENT, MOLE PCT			
METHANE	90.6	90.3	69.0
ETHANE	8.9	7.8	22.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	1.4	8.1
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.04	0.07	0.05
HEATING VALUE*	1077	1055	1100
SPECIFIC GRAVITY	0.602	0.601	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4585 SAMPLE 3314	INDEX 4586 SAMPLE 3543	INDEX 4587 SAMPLE 3563
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	CEMENT	CEMENT
WELL NAME	HEDLAND NO. 8	OAKS NO. 1	SAMES NO. 8
LOCATION	SEC. 11, T 5N, R 9W	SEC. 34, T6N, R10W	SEC. 35, T6N, R10W
OWNER	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.	MOBIL OIL CORP.
COMPLETED	04/05/38	01/24/40	07/11/40
SAMPLED	04/16/42	05/18/42	05/18/42
FORMATION	PENN-DEESE	PENN-MEDRANO	PENN-MEDRANO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5754	5085	4278
WELLHEAD PRESSURE,PSIG	1385	1542	1463
OPEN FLOW, MCFD	22500	100	100000
COMPONENT, MOLE PCT			
METHANE	89.8	92.5	91.8
ETHANE	9.6	6.7	7.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	TRACE	0.1	0.5
OXYGEN	0.4	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.07	0.06
HEATING VALUE*	1042	1057	1055
SPECIFIC GRAVITY	0.605	0.592	0.595

	INDEX 4588 SAMPLE 10401	INDEX 4589 SAMPLE 13528	INDEX 4590 SAMPLE 13989
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	COGAR	COGAR
WELL NAME	ROYSE-ORDOVICIAN UNIT NO. 1	W.G. GUSTAFSON NO. 1	STAHLMAN NO. 1
LOCATION	SEC. 12, T5N, R9W	SEC. 10, T10N, R9W	SEC. 9, T10N, R9W
OWNER	MOBIL OIL CORP.	AMOCO PRODUCTION CO.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	12/28/65	12/21/72	12/30/73
SAMPLED	02/18/66	02/09/73	05/03/74
FORMATION	PENN-SPRINGER	PENN-SKINNER	PENN-MORROW/SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12315	11918	12004
WELLHEAD PRESSURE,PSIG	4493	7935	7435
OPEN FLOW, MCFD	1606	20469	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	96.2	96.5
ETHANE	4.0	1.9	1.8
PROPANE	2.0	0.4	0.3
N-BUTANE	0.6	0.1	TRACE
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	1.4	0.1	0.0
CYCLOPENTANE	0.4	TRACE	TRACE
HEXANES PLUS	1.0	0.1	0.1
NITROGEN	0.6	0.2	0.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1184	1035	1023
SPECIFIC GRAVITY	0.673	0.583	0.577

	INDEX 4591 SAMPLE 14468	INDEX 4592 SAMPLE 14706	INDEX 4593 SAMPLE 14723
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	COGAR	COGAR	COGAR
WELL NAME	KUHLMAN UNIT NO. 1	BELT UNIT NO. 1	C. HENSLEY NO. 2-25
LOCATION	SEC. 26, T10N, R9W	SEC. 21, T10N, R9W	SEC. 25, T9N, R9W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	TENNECO OIL CO.
COMPLETED	09/16/75	04/19/76	NOT GIVEN
SAMPLED	09/17/75	06/21/76	07/28/76
FORMATION	PENN-MORROW	PERM-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12220	12682	13356
WELLHEAD PRESSURE,PSIG	6967	NOT GIVEN	7400
OPEN FLOW, MCFD	27640	4600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.7	92.5	91.8
ETHANE	1.6	4.4	4.3
PROPANE	0.2	1.2	1.1
N-BUTANE	TRACE	0.2	0.2
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.3	0.5	1.3
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1019	1061	1058
SPECIFIC GRAVITY	0.576	0.603	0.613

	INDEX 4594 SAMPLE 15116	INDEX 4595 SAMPLE 14579	INDEX 4596 SAMPLE 14728
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	COGAR N	COGAR S	COGAR SW
WELL NAME	TAPPER NO. 1	SHADID NO. 1	HUMPHREY NO. 1
LOCATION	SEC. 1, T10N, R10W	SEC. 16, T9N, R9W	SEC. 12, T10N, R9W
OWNER	WOODS PETROLEUM CORP.	TENNECO OIL CO.	FERGUSON OIL CO.
COMPLETED	12/15/76	NOT GIVEN	01/28/76
SAMPLED	03/--/77	02/10/76	08/02/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12374	13712	11812
WELLHEAD PRESSURE,PSIG	7650	6600	7501
OPEN FLOW, MCFD	2980	11289	70325
COMPONENT, MOLE PCT			
METHANE	86.9	96.3	97.6
ETHANE	3.6	1.8	1.2
PROPANE	1.7	0.2	0.2
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.6	TRACE	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.5	TRACE	0.0
NITROGEN	3.9	0.2	0.3
OXYGEN	0.9	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.3	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1090	1013	1015
SPECIFIC GRAVITY	0.665	0.578	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4597 SAMPLE 15933	INDEX 4598 SAMPLE 14445	INDEX 4599 SAMPLE 14372
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	EAKLY	NOT GIVEN	ONEY NE
WELL NAME	ALMA BARBEE NO. 1	MARTIN NO. 1	CAREY NO. 1
LOCATION	SEC. 31, T10N, R12W	SEC. 4, T12N, R12W	SEC. 9, T9N, R11W
OWNER	HELMRICH & PAYNE, INC.	MAY PETROLEUM, INC.	ARKLA EXPLORATION CO.
COMPLETED	04/25/79	12/02/74	04/15/75
SAMPLED	03/26/80	08/26/75	05/15/75
FORMATION	PENN-RED FORK	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12456	11484	15309
WELLHEAD PRESSURE,PSIG	7625	3760	9000
OPEN FLOW, MCFD	17553	2200	4400
COMPONENT, MOLE PCT			
METHANE	85.9	85.2	92.9
ETHANE	7.5	8.6	0.9
PROPANE	3.4	3.2	0.1
N-BUTANE	0.8	0.5	0.0
ISOBUTANE	0.6	0.5	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.4	0.8	3.7
OXYGEN	0.0	0.0	0.8
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	1.5
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1175	1147	960
SPECIFIC GRAVITY	0.671	0.661	0.594

	INDEX 4600 SAMPLE 15360	INDEX 4601 SAMPLE 14947	INDEX 4602 SAMPLE 14949
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	ONEY S	SCOTT	SCOTT
WELL NAME	OPITZ NO. 1	SHOOK NO. 1	SAH-HAH-NIN NO. 1
LOCATION	SEC. 13, T8N, R12W	SEC. 6, T9N, R9W	SEC. 31, T10N, R9W
OWNER	J. M. HUBER CORP.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	12/22/77	10/01/76	12/08/76
SAMPLED	08/--/78	03/24/77	03/24/77
FORMATION	PENN-MELTON	PENN-MORROW & SPRINGER	PENN-MORROW & SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10213	12941	13184
WELLHEAD PRESSURE,PSIG	4600	6587	8600
OPEN FLOW, MCFD	3682	200000	640000
COMPONENT, MOLE PCT			
METHANE	85.3	92.3	96.8
ETHANE	7.8	4.6	1.7
PROPANE	3.7	1.3	0.3
N-BUTANE	0.8	0.2	0.0
ISOBUTANE	0.5	0.1	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.6	0.3	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.9	1.0
HELIUM	0.04	0.02	0.02
HEATING VALUE*	1176	1071	1019
SPECIFIC GRAVITY	0.670	0.609	0.576

	INDEX 4603 SAMPLE 13792	INDEX 4604 SAMPLE 14819	INDEX 4605 SAMPLE 8375
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CANADIAN
FIELD	SICKLES N	WATONGA TREND	CALUMET
WELL NAME	BUELL NO. 1	STANDIFER UNIT NO. 1	PAINT YELLOW NO. 1
LOCATION	SEC. 11, T11N, R12W	SEC. 1, T10N, R9W	SEC. 28, T14N, R9W
OWNER	APEXCO, INC.	DONALD C. SLAWSON	GETTY OIL CO.
COMPLETED	NOT GIVEN	09/02/76	11/27/61
SAMPLED	NOT GIVEN	10/27/76	01/19/62
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13094	11643	9668
WELLHEAD PRESSURE,PSIG	9755	7436	6150
OPEN FLOW, MCFD	6200	NOT GIVEN	4350
COMPONENT, MOLE PCT			
METHANE	96.6	95.3	91.0
ETHANE	1.3	2.6	2.9
PROPANE	0.2	0.7	1.0
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	0.3	0.4	3.5
OXYGEN	TRACE	0.0	0.8
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.7	TRACE
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1007	1041	1019
SPECIFIC GRAVITY	0.575	0.588	0.604

	INDEX 4606 SAMPLE 9039	INDEX 4607 SAMPLE 10615	INDEX 4608 SAMPLE 10616
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	CALUMET	CALUMET	CALUMET
WELL NAME	BLACK OWL UNIT NO. 1	JACKSON UNIT NO. 1	E. L. LOWDER NO. 1
LOCATION	SEC. 33, T14N, R9W	SEC. 11, T13N, R10W	SEC. 22, T13N, R9W
OWNER	SUN OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/04/63	04/18/66	03/28/66
SAMPLED	07/12/63	06/17/66	06/17/66
FORMATION	NOT GIVEN	PENN-ATOKA & MORROW	PENN-ATOKA & MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9A00	10610	10210
WELLHEAD PRESSURE,PSIG	6519	6700	NOT GIVEN
OPEN FLOW, MCFD	13000	7100	69500
COMPONENT, MOLE PCT			
METHANE	96.5	95.6	91.3
ETHANE	2.1	2.6	4.9
PROPANE	0.5	0.9	1.9
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.1	TRACE	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1036	1051	1101
SPECIFIC GRAVITY	0.577	0.587	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4609 SAMPLE 11986	INDEX 4610 SAMPLE 12314	INDEX 4611 SAMPLE 15975
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	CALUMET	CALUMET	CANYON CITY SW
WELL NAME	C. A. RHODES NO. 1	HADLOCK NO. 1	MILLARD NO. 1
LOCATION	SEC. 6, T13N, R10W	SEC. 30, T13N, R9W	SEC. 30, T11N, R10W
OWNER	SUN OIL CO.	CONTINENTAL OIL CO.	COTTON PETROLEUM CO.
COMPLETED	11/08/68	12/29/69	NOT GIVEN
SAMPLED	07/25/69	06/08/70	06/--/80
FORMATION	PENN-CHEROKEE	ORDO-VIOLA	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10368	12902	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4200	4541	NOT GIVEN
OPEN FLOW, MCFD	2700	15100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	96.2	94.3
ETHANE	11.9	1.6	2.7
PROPANE	5.6	0.1	0.7
N-BUTANE	0.8	0.1	0.1
ISOBUTANE	0.6	0.0	0.1
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	1.3	0.4	0.6
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.1	1.0
HELIUM	0.01	0.10	TRACE
HEATING VALUE*	1228	1027	1051
SPECIFIC GRAVITY	0.713	0.585	0.602

	INDEX 4612 SAMPLE 15333	INDEX 4613 SAMPLE 15027	INDEX 4614 SAMPLE 11160
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	EL RENO SW	FORT RENO S	FORT RENO SW
WELL NAME	BOLLINGER NO. 1	CRYSTAL BARNHART NO. 27-1	ROYCE UNIT NO. 1
LOCATION	SEC. 16, T11N, R8W	SEC. 27, T12N, R8W	SEC. 23, T12N, R9W
OWNER	SARKEYS, INC.	JONES & PELLOW OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	12/30/77	10/18/76	12/16/66
SAMPLED	08/02/78	06/--/77	10/13/67
FORMATION	DEVO-HUNTON	PENN-RED FORK	PENN-SKINNER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11798	9680	10120
WELLHEAD PRESSURE,PSIG	3050	2264	3169
OPEN FLOW, MCFD	NOT GIVEN	277	1497
COMPONENT, MOLE PCT			
METHANE	78.7	84.3	82.0
ETHANE	11.5	7.4	8.2
PROPANE	5.1	3.4	4.7
N-BUTANE	1.2	0.6	1.2
ISOBUTANE	0.9	0.2	0.8
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	0.9	2.4	1.4
OXYGEN	TRACE	0.5	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.6
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1261	1128	1207
SPECIFIC GRAVITY	0.727	0.668	0.701

	INDEX 4615 SAMPLE 11680	INDEX 4616 SAMPLE 11881	INDEX 4617 SAMPLE 12563
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	FORT RENO SW	FORT RENO SW	FORT RENO SW
WELL NAME	FOWLKES UNIT NO. 1	C. L. EATON NO. 1	THOMAS UNIT NO. 1
LOCATION	SEC. 12, T12N, R10W	SEC. 22, T12N, R9W	SEC. 16, T11N, R9W
OWNER	SAMEDAN OIL CORP.	SUN OIL CO.	WOOD PETROLEUM CORP.
COMPLETED	04/30/68	02/26/69	04/17/70
SAMPLED	11/11/68	05/13/69	12/03/70
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11098	10661	11850
WELLHEAD PRESSURE,PSIG	6529	4320	7058
OPEN FLOW, MCFD	3700	7500	15400
COMPONENT, MOLE PCT			
METHANE	95.8	91.0	97.5
ETHANE	2.1	4.2	1.0
PROPANE	0.4	2.0	0.2
N-BUTANE	0.3	0.4	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.4	0.0
NITROGEN	0.3	0.7	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1049	1110	1011
SPECIFIC GRAVITY	0.589	0.632	0.572

	INDEX 4618 SAMPLE 13079	INDEX 4619 SAMPLE 13103	INDEX 4620 SAMPLE 13873
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	FORT RENO SW	FORT RENO SW	FORT RENO SW
WELL NAME	THOMAS NO. 2	BESSIE HAMBY UNIT NO. 1-4	DENWALT NO. 1
LOCATION	SEC. 16, T11N, R9W	SEC. 4, T11N, R9W	SEC. 1, T12N, R10W
OWNER	WOOD PETROLEUM CORP.	TENNECO OIL CO.	TEXAS OIL & GAS CORP.
COMPLETED	09/15/71	07/29/71	06/01/73
SAMPLED	12/11/71	11/11/71	01/24/74
FORMATION	PENN-MORROW	DEVO-HUNTON	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11339	11084	11019
WELLHEAD PRESSURE,PSIG	5913	7342	6125
OPEN FLOW, MCFD	44297	3057	7400
COMPONENT, MOLE PCT			
METHANE	97.6	97.3	91.5
ETHANE	1.1	1.3	4.5
PROPANE	0.2	0.3	2.0
N-BUTANE	0.1	0.0	0.4
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.3	0.3	0.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.6
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1017	1017	1100
SPECIFIC GRAVITY	0.571	0.573	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4621 SAMPLE 10519	INDEX 4622 SAMPLE 10860	INDEX 4623 SAMPLE 11159
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	GEARY N	GEARY N	GEARY N
WELL NAME	G. STOVER UNIT NO. 1	A. W. STOVER NO. 1-10	LYON UNIT NO. 1
LOCATION	SEC. 4, T14N, R10W	SEC. 10, T14N, R10W	SEC. 19, T14N, R10W
OWNER	TIDEWATER OIL CO.	UNION OIL CO. OF CALIFORNIA	AMOCO PRODUCTION CO.
COMPLETED	08/02/65	01/27/67	09/30/66
SAMPLED	04/10/66	02/07/67	10/11/67
FORMATION	PENN-ATOKA & MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9839	10075	10500
WELLHEAD PRESSURE,PSIG	6395	6670	6485
OPEN FLOW, MCFD	23378	15000	9526
COMPONENT, MOLE PCT			
METHANE	92.4	95.0	88.6
ETHANE	3.2	2.8	5.8
PROPANE	1.1	0.7	2.4
N-BUTANE	0.2	0.1	0.5
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.7	0.4	0.6
OXYGEN	0.2	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1050	1051	1121
SPECIFIC GRAVITY	0.609	0.590	0.644

	INDEX 4624 SAMPLE 11880	INDEX 4625 SAMPLE 12157	INDEX 4626 SAMPLE 12288
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	GEARY N	LOCKRIDGE W	MUSTANG N
WELL NAME	VIRGIAL REICHERT NO. 1	SHORNEY NO. 4	THIEMER NO. 1
LOCATION	SEC. 13, T14N, R10W	SEC. 4, T14N, R5W	SEC. 21, T11N, R5W
OWNER	SUN OIL CO.	RODMAN PETROLEUM CORP.	HALL-JONES OIL CORP.
COMPLETED	10/15/68	NOT GIVEN	05/12/69
SAMPLED	05/13/69	12/--/69	06/05/70
FORMATION	PENN-MORROW & MISS-CHESTER	PENN-PRUE & BARTLESVILLE	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9910	6883	8258
WELLHEAD PRESSURE,PSIG	6400	NOT GIVEN	2527
OPEN FLOW, MCFD	7200	NOT GIVEN	5634
COMPONENT, MOLE PCT			
METHANE	95.5	78.9	88.2
ETHANE	2.5	6.7	6.0
PROPANE	0.5	5.5	2.5
N-BUTANE	0.2	1.5	0.6
ISOBUTANE	0.0	0.8	0.3
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.1	0.7	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	0.4	5.0	1.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.4
HELIUM	0.02	0.10	0.04
HEATING VALUE*	1051	1202	1114
SPECIFIC GRAVITY	0.592	0.727	0.639

	INDEX 4627 SAMPLE 14259	INDEX 4628 SAMPLE 14614	INDEX 4629 SAMPLE 14405
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	NILES E	NILES S E	NILES SW
WELL NAME	DELANA NO. 1	GODDARD UNIT NO. 1	ALICE JOHNSON NO. 1
LOCATION	SEC. 2, T12N, R10W	SEC. 28, T11N, R10W	SEC. 26, T11N, R10W
OWNER	TENNECO OIL CO.	MOBIL OIL CORP.	SAMEDAN OIL CORP.
COMPLETED	01/06/74	01/13/76	12/17/74
SAMPLED	02/15/75	03/17/76	06/30/75
FORMATION	PENN-MORROW	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11018	13000	12314
WELLHEAD PRESSURE,PSIG	6272	7800	6222
OPEN FLOW, MCFD	33800	2924	6000
COMPONENT, MOLE PCT			
METHANE	92.7	96.9	88.7
ETHANE	3.7	1.2	5.0
PROPANE	1.5	0.2	2.9
N-BUTANE	0.3	TRACE	1.0
ISOBUTANE	0.3	TRACE	0.4
N-PENTANE	TRACE	TRACE	0.3
ISOPENTANE	0.2	TRACE	0.6
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	TRACE	0.4
NITROGEN	0.5	0.2	0.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1087	1008	1177
SPECIFIC GRAVITY	0.616	0.573	0.662

	INDEX 4630 SAMPLE 15982	INDEX 4631 SAMPLE 9840	INDEX 4632 SAMPLE 12185
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	OKARCHE	OKARCHE N	PIEDMONT N
WELL NAME	BOMHOFF "C" NO. 1	GRELLNER	HAMMOND NO. 1
LOCATION	SEC. 23, T14N, R8W	SEC. 5, T14N, R7W	SEC. 5, T14N, R5W
OWNER	PHILLIPS PETROLEUM CO.	ASHLAND OIL AND REFINING CO.	W. C. PAYNE
COMPLETED	NOT GIVEN	01/07/65	08/08/69
SAMPLED	06/07/80	04/06/65	02/05/70
FORMATION	NOT GIVEN	PENN-RED FORK	PENN-PRUE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7988	6900
WELLHEAD PRESSURE,PSIG	2000	3550	1000
OPEN FLOW, MCFD	NOT GIVEN	1538	500
COMPONENT, MOLE PCT			
METHANE	77.2	87.4	76.7
ETHANE	12.7	5.8	7.0
PROPANE	5.6	2.5	6.0
N-BUTANE	1.7	0.7	1.6
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.3	0.2	0.9
CYCLOPENTANE	0.1	0.2	0.4
HEXANES PLUS	0.2	0.8	0.7
NITROGEN	1.0	1.3	5.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.03	0.04	0.07
HEATING VALUE*	1276	1164	1245
SPECIFIC GRAVITY	0.736	0.668	0.755

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4633 SAMPLE 14753		INDEX 4634 SAMPLE 15082		INDEX 4635 SAMPLE 15042	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CANADIAN		CANADIAN		CANADIAN	
FIELD	RICHLAND N		RICHLAND N		RICHLAND NW	
WELL NAME	N. J. KRUGER NO. 15-1		MCLAIN NO. 1		SMITH NO. 1	
LOCATION	SEC. 15, T13N, R6W		SEC. 14, T13N, R 6W		SEC. 18, T13N, R6W	
OWNER	JONES & PELLOW OIL CO.		R.P. LAMMERTS OIL CO.		MACK OIL CO.	
COMPLETED	06/23/76		08/13/76		06/10/77	
SAMPLED	09/13/76		08/26/77		06/29/77	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		MISS-DEVO-BOIS D'ARC&SILU-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8451		8336		8807	
WELLHEAD PRESSURE,PSIG	1888		2700		2700	
OPEN FLOW, MCFD	3905		500000		5283	
COMPONENT, MOLE PCT						
METHANE	81.4		41.1		81.1	
ETHANE	11.0		23.2		11.2	
PROPANE	4.2		18.4		4.1	
N-BUTANE	1.1		8.5		1.2	
ISOBUTANE	0.4		2.9		0.4	
N-PENTANE	0.2		2.1		0.4	
ISOPENTANE	0.3		2.2		0.2	
CYCLOPENTANE	TRACE		0.2		0.1	
HEXANES PLUS	0.1		0.9		0.2	
NITROGEN	1.0		0.0		0.6	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.4	
HELIUM	0.03		TRACE		0.03	
HEATING VALUE*	1208		1932		1222	
SPECIFIC GRAVITY	0.691		1.139		0.699	

	INDEX 4636 SAMPLE 15459		INDEX 4637 SAMPLE 5421		INDEX 4638 SAMPLE 11550	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CANADIAN		CANADIAN		CANADIAN	
FIELD	RICHLAND NW		UNION CITY		UNION CITY	
WELL NAME	WILKERSON NO. 3		E. HUTCHEMANN NO. 1		PORTER B NO. 1	
LOCATION	SEC. 34, T13N, R6W		SEC. 14, T12N, R7W		SEC. 5, T12N, R8W	
OWNER	UNIVERSAL RESOURCES CORP.		ATLANTIC RICHFIELD		CITIES SERVICE OIL CO.	
COMPLETED	07/27/78		10/--/52		10/30/59	
SAMPLED	10/26/78		03/18/53		06/20/68	
FORMATION	MISS-DEVO&HUNTON		EOCE-WILCOX 2ND		ORDO-BROMIDE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8424		10304		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1200		3650		4200	
OPEN FLOW, MCFD	342		14431		4900	
COMPONENT, MOLE PCT						
METHANE	76.5		94.7		94.4	
ETHANE	12.0		2.4		2.3	
PROPANE	6.1		0.7		0.6	
N-BUTANE	1.9		0.2		0.2	
ISOBUTANE	0.7		0.1		TRACE	
N-PENTANE	0.5		TRACE		0.3	
ISOPENTANE	0.5		0.1		0.0	
CYCLOPENTANE	0.2		TRACE		TRACE	
HEXANES PLUS	0.3		0.1		0.3	
NITROGEN	1.0		0.7		0.7	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.8		1.2	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1302		1040		1048	
SPECIFIC GRAVITY	0.750		0.592		0.602	

	INDEX 4639 SAMPLE 11551		INDEX 4640 SAMPLE 12405		INDEX 4641 SAMPLE 13913	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CANADIAN		CANADIAN		CANADIAN	
FIELD	UNION CITY		UNION CITY		UNION CITY	
WELL NAME	PORTER B NO. 1		GATZ NO. 1		HILL NO. 1	
LOCATION	SEC. 5, T12N, R8W		SEC. 30, T11N, R7W		SEC. 27, T11N, R7W	
OWNER	CITIES SERVICE OIL CO.		APEX OIL CO.		MACKELLAR, INC.	
COMPLETED	10/30/59		10/10/69		01/12/74	
SAMPLED	06/20/68		09/03/70		02/07/74	
FORMATION	ORDO-BROMIDE		CRET-OSBORNE		PENN-OSBORNE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		10400		9610	
WELLHEAD PRESSURE,PSIG	4200		4000		3455	
OPEN FLOW, MCFD	4900		6000		2239	
COMPONENT, MOLE PCT						
METHANE	93.7		85.4		86.6	
ETHANE	2.3		7.8		7.7	
PROPANE	0.5		4.0		3.0	
N-BUTANE	0.2		0.7		0.5	
ISOBUTANE	0.1		0.4		0.4	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.0		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	1.0		0.6		0.8	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.5		0.5	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1032		1164		1141	
SPECIFIC GRAVITY	0.601		0.664		0.652	

	INDEX 4642 SAMPLE 15273		INDEX 4643 SAMPLE 15296		INDEX 4644 SAMPLE 15297	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CANADIAN		CANADIAN		CANADIAN	
FIELD	UNION CITY		UNION CITY		UNION CITY	
WELL NAME	WHITE FARMS "A" NO. 1		VON TONGLEN NO. 1		RUND NO. 1	
LOCATION	SEC. 4, T10N, R7W		SEC. 12, T11N, R8W		SEC. 15, T11N, R8W	
OWNER	PHILLIPS PETROLEUM CO.		E. G. WILLIAMS OIL CO.		L. G. WILLIAMS OIL CO.	
COMPLETED	01/29/78		08/30/77		08/25/77	
SAMPLED	05/04/78		06/01/78		06/01/78	
FORMATION	PENN-OSBORN		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9282		11010		11799	
WELLHEAD PRESSURE,PSIG	1915		2000		3850	
OPEN FLOW, MCFD	NOT GIVEN		5600		2500	
COMPONENT, MOLE PCT						
METHANE	86.6		80.6		78.4	
ETHANE	7.4		10.5		12.9	
PROPANE	2.8		4.5		4.6	
N-BUTANE	1.7		1.4		1.3	
ISOBUTANE	0.3		0.6		0.5	
N-PENTANE	0.2		0.4		0.4	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.3		0.3	
NITROGEN	0.4		0.5		0.4	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.5		0.4	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1147		1242		1234	
SPECIFIC GRAVITY	0.667		0.712		0.720	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE SOLUBILITY OF H2S DURING SAMPLING, THE REPORTED H2S CONTENTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4645 SAMPLE 14609	INDEX 4646 SAMPLE 15096	INDEX 4647 SAMPLE 15960
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA TREND	WATONGA TREND	YUKON
WELL NAME	N. M. VICKERY NO. 1	CANYON CAMP UNIT NO. 1	WHEATLEY NO. 1-15
LOCATION	SEC. 30, T11N, R9W	SEC. 19, T11N, R10W	SEC. 15, T12N, R5W
OWNER	TENNFCO OIL CO.	DONALD C. SLAWSON	RALPH E. PLOTNER O&G
COMPLETED	11/26/75	07/15/77	NOT GIVEN
SAMPLED	03/04/76	09/10/77	05/13/80
FORMATION	PENN-MORROW	PENN-SPRINGER	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11955	11992	7426
WELLHEAD PRESSURE,PSIG	4400	6800	2188
OPEN FLOW, MCFD	5600	NOT GIVEN	17155
COMPONENT, MOLE PCT			
METHANE	93.8	76.5	80.8
ETHANE	3.4	9.4	10.2
PROPANE	0.8	3.2	4.6
N-BUTANE	0.1	0.7	1.2
ISOBUTANE	0.2	0.6	0.5
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	0.4	6.2	1.6
OXYGEN	0.0	1.5	0.1
ARGON	TRACE	0.1	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	0.4
HELIUM	0.02	0.03	0.05
HEATING VALUE*	1052	1125	1204
SPECIFIC GRAVITY	0.601	0.720	0.700

	INDEX 4648 SAMPLE 15962	INDEX 4649 SAMPLE 4607	INDEX 4650 SAMPLE 6927
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CARTER	CARTER
FIELD	YUKON	ARDMORE	ARDMORE
WELL NAME	WHEATLEY NO. 1-15	HEDGES NO. 1	J. D. NOLEN NO. 1
LOCATION	SEC. 15, T12N, R5W	SEC. 14, T5S, R1E	SEC. 12, T5S, R1E
OWNER	RALPH E. PLOTNER OIL & GAS	SAMEDAN OIL CORP.	AMOCO PRODUCTION CO.
COMPLETED	11/27/79	06/15/48	12/02/58
SAMPLED	05/13/80	11/08/48	02/11/59
FORMATION	DEVO-HUNTON&MISS	PENN-	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	350	350
DEPTH, FEET	7814	2610	8066
WELLHEAD PRESSURE,PSIG	1040	550	2490
OPEN FLOW, MCFD	850	3000	12000
COMPONENT, MOLE PCT			
METHANE	66.2	90.5	91.0
ETHANE	16.2	8.5	4.2
PROPANE	10.8	---	2.1
N-BUTANE	3.2	---	0.6
ISOBUTANE	1.2	---	0.4
N-PENTANE	0.6	---	0.2
ISOPENTANE	0.6	---	TRACE
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	0.6	0.6	1.0
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.02	0.08	0.10
HEATING VALUE*	1455	1069	1099
SPECIFIC GRAVITY	0.847	0.602	0.623

	INDEX 4651 SAMPLE 3435	INDEX 4652 SAMPLE 11376	INDEX 4653 SAMPLE 11377
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	CADDO	CADDO	CADDO
WELL NAME	NOBLE NO. 1	PRUITT NO. 1	PRUITT NO. 1
LOCATION	SEC. 35, T3S, R1E	SEC. 35, T4S, R1E	SEC. 35, T4S, R1E
OWNER	UNION OIL CO.	E. LYLE JOHNSON	E. LYLE JOHNSON
COMPLETED	05/10/39	12/30/61	04/13/53
SAMPLED	05/21/42	03/08/68	03/08/68
FORMATION	MISS-WOODFORD	PENN-GOODARD	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4289	3800	4279
WELLHEAD PRESSURE,PSIG	NOT GIVEN	750	950
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.5	81.7	81.5
ETHANE	21.5	7.5	8.8
PROPANE	---	3.4	4.0
N-BUTANE	---	0.8	1.1
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	1.4	4.7	2.9
OXYGEN	0.3	0.9	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.08	0.04	0.04
HEATING VALUE*	1160	1110	1174
SPECIFIC GRAVITY	0.670	0.679	0.692

	INDEX 4654 SAMPLE 11378	INDEX 4655 SAMPLE 9365	INDEX 4656 SAMPLE 14186
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	CADDO	HEALDTON	HEALDTON
WELL NAME	CONOVER NO. 1	STEWART-HAWK UNIT NO. 1	ORME NO. 3
LOCATION	SEC. 26, T3S, R1E	SEC. 4, T4S, R3W	SEC. 34, T3S, R3W
OWNER	E. LYLE JOHNSON	MOBIL OIL CORP.	KINGERY DRILLING CO.
COMPLETED	NOT GIVEN	02/10/64	09/--/73
SAMPLED	03/08/68	05/15/64	10/--/74
FORMATION	DEVO-HUNTON	ORDO-BIRDSEYE	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4160	2620	5700
WELLHEAD PRESSURE,PSIG	1000	480	1700
OPEN FLOW, MCFD	NOT GIVEN	1500	3710
COMPONENT, MOLE PCT			
METHANE	83.3	75.8	77.2
ETHANE	8.5	14.2	10.8
PROPANE	3.7	6.5	5.8
N-BUTANE	0.7	1.4	1.5
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.4	1.2	3.1
OXYGEN	0.3	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.04	0.03	0.08
HEATING VALUE*	1151	1270	1233
SPECIFIC GRAVITY	0.674	0.729	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4657 SAMPLE 9794	INDEX 4658 SAMPLE 11706	INDEX 4659 SAMPLE 2647
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	HEWITT	OVERBROOK	SHO-VEL-TUM
WELL NAME	MCCLURE NO. 2	A. T. RINER NO. 1	MORGAN NO. 1
LOCATION	SEC. 14, T4S, R2W	SEC. 32, T5S, R2E	SEC. 4, T1S, R3W
OWNER	J. F. STEPHENSON	GULF OIL CO. U.S.	CARTER OIL CO.
COMPLETED	01/07/65	01/16/68	04/25/33
SAMPLED	03/10/65	12/13/68	09/14/33
FORMATION	PENN-HOXBAR	PENN-SPRINGER	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1962	4890	2015
WELLHEAD PRESSURE, PSIG	431	1551	550
OPEN FLOW, MCFD	2900	1835	8000
COMPONENT, MOLE PCT			
METHANE	80.8	87.0	55.7
ETHANE	6.8	6.5	28.5
PROPANE	3.3	3.0	---
N-BUTANE	0.7	1.0	---
ISOBUTANE	0.3	0.1	---
N-PENTANE	0.1	0.4	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	7.4	1.2	15.5
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.13	0.05	0.10
HEATING VALUE*	1081	1153	1075
SPECIFIC GRAVITY	0.676	0.657	0.761

	INDEX 4660 SAMPLE 4733	INDEX 4661 SAMPLE 5014	INDEX 4662 SAMPLE 5065
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	M. A. BRADY NO. 1	IDA THOMPASS NO. 7	WILLIAMS NO. 1
LOCATION	SEC. 22, T1S, R3W	SEC. 33, T1S, R3W	SEC. 11, T1S, R3W
OWNER	TEXACO INC.	MOBIL OIL CORP.	KERR-MCGEE CORP.
COMPLETED	01/15/49	12/25/50	NOT GIVEN
SAMPLED	05/11/49	03/08/51	08/01/51
FORMATION	PENN-TUSSY U & DEESE	PENN-SPRINGER	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	2782	5652	NOT GIVEN
WELLHEAD PRESSURE, PSIG	325	1425	NOT GIVEN
OPEN FLOW, MCFD	750	12500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	90.6	84.7
ETHANE	1.6	4.4	5.3
PROPANE	0.8	1.7	3.5
N-BUTANE	0.2	0.6	0.9
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	7.1	1.6	4.6
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.10	0.15
HEATING VALUE*	981	1095	1100
SPECIFIC GRAVITY	0.614	0.627	0.665

	INDEX 4663 SAMPLE 9932	INDEX 4664 SAMPLE 9946	INDEX 4665 SAMPLE 8623
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CIMARRON
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	BURTON SE
WELL NAME	DOROTHY GALT UNIT NO. 1	DOROTHY GALT UNIT NO. 1	CLUCK A-1
LOCATION	SEC. 20, T1S, R3W	SEC. 20, T1S, R3W	SEC. 20, T4N, R9ECM
OWNER	TEXACO INC.	TEXACO INC.	HUGHES SEEWALD
COMPLETED	02/27/65	02/27/65	07/27/62
SAMPLED	06/21/65	06/30/65	07/29/62
FORMATION	PENN-SPRINGER & GOODWIN	PENN-SPRINGER & GOODWIN	PENN-MORROW M
GEOLOGIC PROVINCE CODE	350	350	435
DEPTH, FEET	6705	6478	4410
WELLHEAD PRESSURE, PSIG	1583	1208	985
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	84.5	86.9	66.6
ETHANE	6.3	6.0	4.7
PROPANE	3.5	3.0	2.6
N-BUTANE	1.1	0.9	0.7
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	2.7	2.0	23.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.12	0.10	0.86
HEATING VALUE*	1167	1132	886
SPECIFIC GRAVITY	0.682	0.654	0.725

	INDEX 4666 SAMPLE 8842	INDEX 4667 SAMPLE 9276	INDEX 4668 SAMPLE 9277
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	BURTON SE	BURTON SE	BURTON SE
WELL NAME	CLUCK NO. 1	KLINE A-1	HAGAN A NO. 1
LOCATION	SEC. 19, T4N, R9ECM	SEC. 19, T4N, R9ECM	SEC. 19, T4N, R9ECM
OWNER	DARYL DAVIS & ASSOCIATES	HUGHES SEEWALD	HUGHES SEEWALD
COMPLETED	09/15/62	01/--/64	09/--/63
SAMPLED	02/05/63	04/08/64	04/08/64
FORMATION	PENN-MORROW	PENN-MORROW M	PENN-MORROW M
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4398	4450	4440
WELLHEAD PRESSURE, PSIG	990	976	985
OPEN FLOW, MCFD	18000	5750	400
COMPONENT, MOLE PCT			
METHANE	58.0	63.7	62.3
ETHANE	3.8	4.4	4.5
PROPANE	2.1	2.3	2.7
N-BUTANE	0.5	0.8	1.0
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	31.4	26.8	27.0
OXYGEN	2.4	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.72	0.88	0.89
HEATING VALUE*	759	844	879
SPECIFIC GRAVITY	0.759	0.735	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4669 SAMPLE 9278	INDEX 4670 SAMPLE 7276	INDEX 4671 SAMPLE 7180
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	BURTON SE	CASTANEDA	GRIGGS
WELL NAME	CLUCK A NO. 1	OKLAHOMA G NO. 1	L. J. WELLS NO. 1
LOCATION	SEC. 20, T4N, R9ECM	SEC. 30, T5N, R6ECM	SEC. 10, T1N, R9ECM
OWNER	HUGHES SEEWALD	SKELLY OIL CO.	CARTER OIL CO.
COMPLETED	09/--/62	10/17/58	06/06/59
SAMPLED	04/08/64	11/05/59	08/18/59
FORMATION	PENN-MORROW M	PENN-DES MOINES	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4435	4099	4308
WELLHEAD PRESSURE,PSIG	985	10	838
OPEN FLOW, MCFD	35000	NOT GIVEN	25150
COMPONENT, MOLE PCT			
METHANE	67.2	21.7	88.4
ETHANE	4.8	10.2	5.4
PROPANE	2.6	19.6	2.2
N-BUTANE	0.8	9.2	0.6
ISOBUTANE	0.2	3.4	0.4
N-PENTANE	0.3	1.3	0.1
ISOPENTANE	0.1	4.4	0.5
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	1.3	0.2
NITROGEN	22.7	27.8	1.9
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.84	0.20	0.20
HEATING VALUE*	899	1658	1125
SPECIFIC GRAVITY	0.725	1.255	0.645

	INDEX 4672 SAMPLE 15694	INDEX 4673 SAMPLE 6344	INDEX 4674 SAMPLE 6146
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS NE	GRIGGS S	GRIGGS SE
WELL NAME	ZIMMERMAN NO. 1	GODWIN A NO. 1	BRUERE
LOCATION	SEC. 11, T2N, R9ECM	SEC. 29, T1N, R9ECM	SEC. 31, T1N, R9ECM
OWNER	ARGONAUT ENERGY CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	04/17/57	08/28/56
SAMPLED	07/10/78	06/18/57	10/10/56
FORMATION	PENN-MORROW	-MASSIVE LIME	PENN--TOPEKA
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	5000	3390	3228
WELLHEAD PRESSURE,PSIG	NOT GIVEN	450	475
OPEN FLOW, MCFD	NOT GIVEN	9800	1850
COMPONENT, MOLE PCT			
METHANE	86.2	76.3	78.4
ETHANE	5.9	5.2	5.4
PROPANE	2.8	3.0	2.9
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.3	0.6	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	3.0	12.5	10.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.55	0.45
HEATING VALUE*	1124	1030	1049
SPECIFIC GRAVITY	0.658	0.699	0.688

	INDEX 4675 SAMPLE 6460	INDEX 4676 SAMPLE 6461	INDEX 4677 SAMPLE 6593
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	W. D. YOUTSLER NO. 1	W. D. YOUTSLER NO. 1	H. S. HAWKINS NO. 1
LOCATION	SEC. 23, T1N, R9ECM	SEC. 23, T1N, R9ECM	SEC. 26, T1N, R9ECM
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	10/29/57	10/29/57	04/18/58
SAMPLED	10/29/57	12/03/57	05/15/58
FORMATION	PENN-MORROW M	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4570	4246	4568
WELLHEAD PRESSURE,PSIG	900	840	909
OPEN FLOW, MCFD	1448	5592	8089
COMPONENT, MOLE PCT			
METHANE	85.3	89.2	86.9
ETHANE	5.3	5.4	5.5
PROPANE	2.3	2.2	2.4
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.9	1.3	3.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1083	1118	1097
SPECIFIC GRAVITY	0.654	0.636	0.645

	INDEX 4678 SAMPLE 6594	INDEX 4679 SAMPLE 7394	INDEX 4680 SAMPLE 7395
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	H. S. HAWKINS NO. 1	RUTH CHUMAN NO. 1	RUTH CHUMAN NO. 1
LOCATION	SEC. 26, T1N, R9ECM	SEC. 24, T1N, R9ECM	SEC. 24, T1N, R9ECM
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	04/18/58	09/28/59	09/28/59
SAMPLED	05/15/58	02/12/60	02/12/60
FORMATION	PENN-ATOKA	PENN-OSWEGO & CHEROKEE	PENN-MORROW U
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4266	4277	4676
WELLHEAD PRESSURE,PSIG	909	839	210
OPEN FLOW, MCFD	15390	22269	2060
COMPONENT, MOLE PCT			
METHANE	88.4	90.9	87.8
ETHANE	5.5	4.7	5.5
PROPANE	2.4	1.6	2.6
N-BUTANE	0.9	0.4	0.8
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.5	1.6	2.3
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1132	1077	1115
SPECIFIC GRAVITY	0.647	0.614	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4681 SAMPLE 7752	INDEX 4682 SAMPLE 8019	INDEX 4683 SAMPLE 8459
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRO
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	GUSTAV DENCKER NO. 1	GRABEAL NO. 1	RUTH CHUMAN NO. 2
LOCATION	SEC. 27, T2N, R9ECM	SEC. 20, T1N, R9ECM	SEC. 24, T1N, R9ECM
OWNER	TEXACO INC.	GREENLAND DRILLING CO.	TEXACO INC.
COMPLETED	04/18/60	04/--/61	02/06/62
SAMPLED	11/03/60	06/--/61	03/12/62
FORMATION	PENN-TOPEKA	PERM-RED CAVE	-MASSIVE LIMESTONE
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3438	1738	3402
WELLHEAD PRESSURE,PSIG	480	NOT GIVEN	470
OPEN FLOW, MCFD	1170	NOT GIVEN	1697
COMPONENT, MOLE PCT			
METHANE	82.8	28.3	83.9
ETHANE	5.9	4.0	5.5
PROPANE	2.9	3.3	3.0
N-BUTANE	0.9	0.7	0.9
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.6	60.3	5.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.2	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.1
HELIUM	0.30	2.00	0.25
HEATING VALUE*	1086	502	1092
SPECIFIC GRAVITY	0.671	0.676	0.663

	INDEX 4684 SAMPLE 8460	INDEX 4685 SAMPLE 8545	INDEX 4686 SAMPLE 15133
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	KEYES
WELL NAME	RUTH CHUMAN NO. 2	GOWDY NO. 1	M.B. ROSS NO. 3
LOCATION	SEC. 24, T1N, R9ECM	SEC. 11, T1N, R9ECM	SEC. 28, T5N, R9ECM
OWNER	TEXACO INC.	COLORADO OIL AND GAS CO.	ASHLAND EXPLORATION, INC.
COMPLETED	02/06/62	04/09/61	06/24/77
SAMPLED	03/12/62	05/01/62	11/02/77
FORMATION	PENN-MARMATON	-MASSIVE LIME	PENN-LANSING
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4041	3452	3190
WELLHEAD PRESSURE,PSIG	770	474	356
OPEN FLOW, MCFD	2763	6500	800
COMPONENT, MOLE PCT			
METHANE	87.0	85.4	56.9
ETHANE	5.5	5.4	6.3
PROPANE	2.9	2.6	3.4
N-BUTANE	0.9	0.6	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.3	4.9	30.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.15	0.25	0.92
HEATING VALUE*	1125	1077	840
SPECIFIC GRAVITY	0.651	0.649	0.772

	INDEX 4687 SAMPLE 4155	INDEX 4688 SAMPLE 4159	INDEX 4689 SAMPLE 5483
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES DISTRICT	KEYES DISTRICT	KEYES DISTRICT
WELL NAME	JESSIE JERMYN NO. 1	J. C. JOHNSON NO. 1	E. JERMYN NO. A-1
LOCATION	SEC. 18, T5N, R8ECM	SEC. 12, T5N, R7ECM	SEC. 18, T5N, R8ECM
OWNER	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/20/46	10/26/45	04/29/46
SAMPLED	08/27/46	08/28/46	05/26/53
FORMATION	PENN-KEYES	PENN-	PENN-BASAL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4471	4855	4787
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	767
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	33995
COMPONENT, MOLE PCT			
METHANE	55.0	21.1	61.0
ETHANE	13.2	38.9	3.5
PROPANE	---	---	2.5
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.7
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	28.0	30.5	28.0
OXYGEN	0.1	0.2	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	8.7	0.9
HELIUM	2.26	0.92	2.19
HEATING VALUE*	794	911	811
SPECIFIC GRAVITY	0.740	0.955	0.743

	INDEX 4690 SAMPLE 3639	INDEX 4691 SAMPLE 3640	INDEX 4692 SAMPLE 3957
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRO
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	R. E. COX NO. 1	R. E. COX NO. 1	ROSE NO. 1
LOCATION	SEC. 16, T5N, R8ECM	SEC. 16, T5N, R8ECM	SEC. 26, T5N, R8ECM
OWNER	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.
COMPLETED	05/04/43	05/08/43	01/06/45
SAMPLED	05/09/43	05/09/43	02/05/45
FORMATION	PENN-L	PENN-L	PENN-
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4684	4684	4630
WELLHEAD PRESSURE,PSIG	846	846	825
OPEN FLOW, MCFD	19000	19000	14
COMPONENT, MOLE PCT			
METHANE	60.8	59.1	61.4
ETHANE	12.7	11.9	9.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	23.8	26.1	26.1
OXYGEN	0.9	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.9
HELIUM	2.24	2.13	2.19
HEATING VALUE*	843	812	785
SPECIFIC GRAVITY	0.711	0.719	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4693 SAMPLE 4156	INDEX 4694 SAMPLE 4157	INDEX 4695 SAMPLE 4160
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	JESSIE JERMYN NO. 2	EDWARD JERMYN NO. 1	A. T. ROSE NO. 1
LOCATION	SEC. 19, T5N, R8ECM	SEC. 18, T5N, R8ECM	SEC. 26, T5N, R8ECM
OWNER	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.
COMPLETED	06/29/46	04/29/46	12/20/44
SAMPLED	08/27/46	08/27/46	08/27/46
FORMATION	PENN-	PENN-	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4820	4778	4640
WELLHEAD PRESSURE,PSIG	848	775	850
OPEN FLOW, MCFD	20000	7455	6885
COMPONENT, MOLE PCT			
METHANE	51.5	54.8	58.0
ETHANE	17.5	14.3	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	27.1	27.5	25.6
OXYGEN	0.2	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.4	1.1	0.9
HELIUM	2.26	2.23	2.23
HEATING VALUE*	835	811	824
SPECIFIC GRAVITY	0.758	0.741	0.726

	INDEX 4696 SAMPLE 4161	INDEX 4697 SAMPLE 4162	INDEX 4698 SAMPLE 4163
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	RUSSELL SPARKMAN NO. 1	OKLAHOMA STATE NO. 1	H. P. MCKIRAHAN NO. 1
LOCATION	SEC. 3, T5N, R8ECM	SEC. 7, T5N, R8ECM	SEC. 13, T5N, R7ECM
OWNER	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.
COMPLETED	02/11/46	06/27/45	05/02/46
SAMPLED	08/28/46	08/28/46	08/28/46
FORMATION	PENN-KEYES	PENN-	PENN-
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4719	4787	4848
WELLHEAD PRESSURE,PSIG	800	275	NOT GIVEN
OPEN FLOW, MCFD	170	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.9	51.7	64.9
ETHANE	13.4	19.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	27.4	25.6	23.8
OXYGEN	0.3	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	1.1	10.8
HELIUM	2.34	2.15	0.28
HEATING VALUE*	806	864	657
SPECIFIC GRAVITY	0.733	0.758	0.758

	INDEX 4699 SAMPLE 4164	INDEX 4700 SAMPLE 4711	INDEX 4701 SAMPLE 5094
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	H. P. MCKIRAHAN NO. 2	PARKES NO. 1	PARKES NO. 1
LOCATION	SEC. 13, T5N, R9ECM	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM
OWNER	UNION OIL CO. OF CAL.	BAY PETROLEUM CORP.	BAY PETROLEUM CORP.
COMPLETED	06/03/46	04/10/49	NOT GIVEN
SAMPLED	08/28/46	07/18/49	10/29/51
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4848	4780	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	62.5	62.2
ETHANE	0.0	3.5	3.2
PROPANE	---	2.3	1.8
N-BUTANE	---	0.8	0.6
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.4	TRACE
NITROGEN	9.5	27.5	29.0
OXYGEN	0.3	0.0	0.2
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	9.6	0.3	0.4
HELIUM	0.38	1.81	1.92
HEATING VALUE*	812	833	778
SPECIFIC GRAVITY	0.687	0.741	0.726

	INDEX 4702 SAMPLE 5095	INDEX 4703 SAMPLE 5096	INDEX 4704 SAMPLE 5432
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PARKES NO. 2	BAKER NO. 1	WHISENNAND NO. A-1
LOCATION	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 2, T5N, R9ECM
OWNER	BAY PETROLEUM CORP.	BAY PETROLEUM CORP.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	03/27/53
SAMPLED	10/29/51	10/29/51	03/19/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	839
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5700
COMPONENT, MOLE PCT			
METHANE	62.1	62.1	65.3
ETHANE	3.2	3.2	2.9
PROPANE	1.7	1.8	1.9
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	29.4	29.1	25.4
OXYGEN	0.3	0.2	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.8
HELIUM	1.88	1.93	2.14
HEATING VALUE*	770	777	815
SPECIFIC GRAVITY	0.724	0.728	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4705 SAMPLE 5433	INDEX 4706 SAMPLE 5452	INDEX 4707 SAMPLE 5465
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WHISENHAND A-1	MELTON A-1	PUROY 1-A
LOCATION	SEC. 2, T5N, R9ECM	SEC. 15, T5N, R9ECM	SEC. 20, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	COLUMBIAN FUEL CORP.
COMPLETED	03/27/53	05/16/53	10/21/52
SAMPLED	03/23/53	04/29/53	05/11/53
FORMATION	PENN-MORROW	PENN-MARMATON	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4604	4196	4240
WELLHEAD PRESSURE,PSIG	839	935	1066
OPEN FLOW, MCFD	5700	3060	31640
COMPONENT, MOLE PCT			
METHANE	65.5	64.1	76.5
ETHANE	2.9	3.2	6.6
PROPANE	1.9	2.0	4.2
N-BUTANE	0.6	0.6	1.1
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	25.2	25.9	9.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.2
HELIUM	2.14	2.16	0.50
HEATING VALUE*	826	816	1079
SPECIFIC GRAVITY	0.720	0.723	0.703

	INDEX 4708 SAMPLE 5466	INDEX 4709 SAMPLE 5472	INDEX 4710 SAMPLE 5474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PURDY 1-8	DELOZIER NO. 1	WILSON NO. 1
LOCATION	SEC. 19, T6N, R9ECM	SEC. 3, T3N, R8ECM	SEC. 35, T4N, R8ECM
OWNER	COLUMBIAN FUEL CORP.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/27/53	12/15/52	07/--/52
SAMPLED	05/11/53	05/26/53	05/26/53
FORMATION	PENN-MORROW	PENN-BASAL	PENN-BASAL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4647	4715	4713
WELLHEAD PRESSURE,PSIG	838	650	746
OPEN FLOW, MCFD	13475	NOT GIVEN	1852
COMPONENT, MOLE PCT			
METHANE	60.5	61.8	62.4
ETHANE	2.9	3.5	3.6
PROPANE	2.0	1.8	2.0
N-BUTANE	0.8	0.4	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.5	0.1
HEXANES PLUS	0.3	1.1	0.4
NITROGEN	29.2	28.0	28.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.2
HELIUM	2.30	1.75	1.85
HEATING VALUE*	794	854	824
SPECIFIC GRAVITY	0.744	0.756	0.738

	INDEX 4711 SAMPLE 5475	INDEX 4712 SAMPLE 5476	INDEX 4713 SAMPLE 5477
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WIGGINS NO. 1	BAKER NO. 1	PARKS NO. 1
LOCATION	SEC. 33, T4N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/--/52	10/05/50	05/--/49
SAMPLED	05/26/53	05/26/53	05/26/53
FORMATION	PENN-BASAL	PENN-BASAL	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4744	4784	4725
WELLHEAD PRESSURE,PSIG	779	787	781
OPEN FLOW, MCFD	4218	7816	2265
COMPONENT, MOLE PCT			
METHANE	62.8	62.7	62.5
ETHANE	3.3	3.4	3.4
PROPANE	1.8	1.8	1.7
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	28.2	28.3	28.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	1.93	1.92	1.88
HEATING VALUE*	796	797	789
SPECIFIC GRAVITY	0.724	0.725	0.724

	INDEX 4714 SAMPLE 5478	INDEX 4715 SAMPLE 5480	INDEX 4716 SAMPLE 5481
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PARKES NO. 2	J. JERMYN NO. 2	COX NO. 1
LOCATION	SEC. 34, T4N, R8ECM	SEC. 19, T5N, R8ECM	SEC. 16, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09?--/49	06/24/46	03/22/43
SAMPLED	05/26/53	05/26/53	05/26/53
FORMATION	PENN-KEYES	PENN-BASAL	PENN-BASAL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4730	4613	4682
WELLHEAD PRESSURE,PSIG	777	697	807
OPEN FLOW, MCFD	4406	26375	3093
COMPONENT, MOLE PCT			
METHANE	62.7	60.4	63.0
ETHANE	3.5	3.5	3.2
PROPANE	1.7	2.3	1.8
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	28.7	28.7	27.3
OXYGEN	TRACE	0.5	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.7
HELIUM	1.83	2.17	2.13
HEATING VALUE*	788	803	807
SPECIFIC GRAVITY	0.723	0.745	0.729

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4717 SAMPLE 5482	INDEX 4718 SAMPLE 5494	INDEX 4719 SAMPLE 5499
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ROSE NO. 1	PURDY NO. 1-C	SPARKMAN A-1
LOCATION	SEC. 26, T5N, R8ECM	SEC. 21, T6N, R9ECM	SEC. 10, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLTEXO CORP.	CITIES SERVICE OIL CO.
COMPLETED	12/20/44	05/31/53	06/18/53
SAMPLED	05/26/53	06/03/53	06/19/53
FORMATION	PENN-BASAL	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4640	4554	4624
WELLHEAD PRESSURE,PSIG	824	839	834
OPEN FLOW, MCFD	1892	4605	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.1	59.0	61.7
ETHANE	3.1	2.9	4.5
PROPANE	2.6	1.8	3.9
N-BUTANE	1.2	0.7	1.8
ISOBUTANE	0.7	0.2	1.1
N-PENTANE	0.3	0.3	0.8
ISOPENTANE	0.2	TRACE	0.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.8
NITROGEN	26.5	31.6	21.6
OXYGEN	TRACE	0.2	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	1.2
HELIUM	2.13	2.40	1.62
HEATING VALUE*	852	754	1009
SPECIFIC GRAVITY	0.752	0.737	0.803

	INDEX 4720 SAMPLE 5500	INDEX 4721 SAMPLE 5512	INDEX 4722 SAMPLE 5513
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON NO. 1-C	PURDY NO. 1-D	PURDY NO. 1-F
LOCATION	SEC. 35, T5N, R9ECM	SEC. 29, T6N, R9ECM	SEC. 28, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	COLTEXO CORP.	COLTEXO CORP.
COMPLETED	06/03/53	NOT GIVEN	06/20/53
SAMPLED	06/19/53	07/04/53	07/04/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4556	4552	4562
WELLHEAD PRESSURE,PSIG	837	840	839
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	54168
COMPONENT, MOLE PCT			
METHANE	63.3	60.6	60.8
ETHANE	3.0	3.1	3.0
PROPANE	1.9	1.9	1.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	26.5	29.2	29.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.9	0.6
HELIUM	2.16	2.29	2.25
HEATING VALUE*	813	787	778
SPECIFIC GRAVITY	0.733	0.740	0.735

	INDEX 4723 SAMPLE 5517	INDEX 4724 SAMPLE 5518	INDEX 4725 SAMPLE 5519
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WHISENNAND NO. B-1	MINGENRACK NO. A-1	JORDAN NO. B-1
LOCATION	SEC. 1, T5N, R9ECM	SEC. 32, T6N, R9ECM	SEC. 25, T4N, R8ECM
OWNER	TERMINAL FACILITIES, INC.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/14/53	05/20/53	06/25/53
SAMPLED	07/15/53	07/21/53	07/21/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4562	4534	4596
WELLHEAD PRESSURE,PSIG	837	840	832
OPEN FLOW, MCFD	15100	8150	16000
COMPONENT, MOLE PCT			
METHANE	71.1	62.5	62.8
ETHANE	4.0	3.3	3.3
PROPANE	2.2	1.9	2.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	18.3	27.3	26.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	1.1
HELIUM	1.90	2.21	2.16
HEATING VALUE*	918	815	820
SPECIFIC GRAVITY	0.705	0.739	0.738

	INDEX 4726 SAMPLE 5520	INDEX 4727 SAMPLE 5521	INDEX 4728 SAMPLE 5522
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON NO. B-1	FORD NO. B-1	KINSINGER NO. A-1
LOCATION	SEC. 13, T5N, R9ECM	SEC. 24, T6N, R9ECM	SEC. 36, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/24/53	06/09/53	06/13/53
SAMPLED	07/21/53	07/21/53	07/21/53
FORMATION	PENN-MORROW U	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4218	4610	4612
WELLHEAD PRESSURE,PSIG	858	840	841
OPEN FLOW, MCFD	12100	26000	20600
COMPONENT, MOLE PCT			
METHANE	70.7	63.3	72.0
ETHANE	5.6	3.4	4.0
PROPANE	2.9	2.1	2.2
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	17.4	26.5	17.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.5
HELIUM	0.91	2.15	1.87
HEATING VALUE*	972	825	926
SPECIFIC GRAVITY	0.720	0.732	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4729 SAMPLE 5523	INDEX 4730 SAMPLE 5524	INDEX 4731 SAMPLE 5525
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	RHOTON NO. 1	STALLARD NO. 1	WIGGINS NO. 1-B
LOCATION	SEC. 27, T4N, R8ECM	SEC. 9, T5N, R8ECM	SEC. 26, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/13/53	06/27/53	07/05/53
SAMPLED	07/21/53	07/21/53	07/21/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4730	4698	4697
WELLHEAD PRESSURE,PSIG	789	800	800
OPEN FLOW, MCFD	46000	10000	25000
COMPONENT, MOLE PCT			
METHANE	62.2	62.3	62.6
ETHANE	3.5	3.5	3.7
PROPANE	2.0	2.2	1.7
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.5	0.3	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	27.6	27.7	28.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	1.99	2.14	1.95
HEATING VALUE*	837	820	798
SPECIFIC GRAVITY	0.743	0.736	0.726

	INDEX 4732 SAMPLE 5549	INDEX 4733 SAMPLE 5554	INDEX 4734 SAMPLE 5556
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON UNIT NO. 1	WHISENNAND NO. 1	SPARKMAN NO. 2
LOCATION	SEC. 26, T5N, R9ECM	SEC. 8, T5N, R8ECM	SEC. 3, T5N, R8ECM
OWNER	SHELL OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/08/53	NOT GIVEN	DRILL STEM TEST
SAMPLED	09/02/53	09/23/53	10/02/53
FORMATION	PENN-KEYES	PENN-MORROW	PENN-PURDY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4552	4374	4443
WELLHEAD PRESSURE,PSIG	NOT GIVEN	820	1150
OPEN FLOW, MCFD	31600	900	3000
COMPONENT, MOLE PCT			
METHANE	63.4	67.7	75.0
ETHANE	3.3	4.0	6.3
PROPANE	2.1	1.1	3.9
N-BUTANE	0.7	0.4	0.8
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	26.1	23.8	11.8
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.4
HELIUM	2.16	1.63	0.91
HEATING VALUE*	817	832	1032
SPECIFIC GRAVITY	0.729	0.702	0.702

	INDEX 4735 SAMPLE 5557	INDEX 4736 SAMPLE 5567	INDEX 4737 SAMPLE 5603
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BRACKEN NO. A-1	SCHOOLFIELD NO. 1	HITCH-GRAY-PRICE NO. 1
LOCATION	SEC. 34, T5N, R9ECM	SEC. 30, T6N, R9ECM	SEC. 25, T4N, R8ECM
OWNER	TERMINAL FACILITIES INC.	MACDONALD, BURNS, & NORRIS	TEXACO INC.
COMPLETED	09/21/53	12/01/53	12/07/53
SAMPLED	10/02/53	12/01/53	03/24/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4532	4524	4703
WELLHEAD PRESSURE,PSIG	A36	835	787
OPEN FLOW, MCFD	37790	40200	7690
COMPONENT, MOLE PCT			
METHANE	63.2	62.4	63.9
ETHANE	3.1	2.8	3.2
PROPANE	0.7	2.0	1.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.6	0.1	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.1	28.3	27.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	0.3
HELIUM	2.22	2.30	2.04
HEATING VALUE*	786	787	798
SPECIFIC GRAVITY	0.727	0.722	0.717

	INDEX 4738 SAMPLE 5606	INDEX 4739 SAMPLE 5654	INDEX 4740 SAMPLE 5655
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRO
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MATHIS NO. 1	HALLIDAY NO. 1-A	PHILLIPS NO. 1
LOCATION	SEC. 23, T4N, R8ECM	SEC. 25, T6N, R8ECM	SEC. 21, T4N, R8ECM
OWNER	R. H. FULTON & CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	12/09/53	03/22/54
SAMPLED	04/06/54	07/22/54	07/23/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4670	4624	4791
WELLHEAD PRESSURE,PSIG	A11	833	787
OPEN FLOW, MCFD	16400	20263	36278
COMPONENT, MOLE PCT			
METHANE	60.0	75.9	63.4
ETHANE	3.1	6.9	3.3
PROPANE	2.3	4.0	2.0
N-BUTANE	0.8	1.1	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.6	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.2	9.6	27.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.1	0.3
HELIUM	2.33	0.61	2.01
HEATING VALUE*	816	1089	809
SPECIFIC GRAVITY	0.756	0.707	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4741 SAMPLE 5656	INDEX 4742 SAMPLE 5657	INDEX 4743 SAMPLE 5658
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPARKMAN UNIT NO. 1	COLE UNIT NO. 1	HALLIDAY NO. B-1
LOCATION	SEC. 12, T5N, R9ECM	SEC. 15, T4N, R9ECM	SEC. 24, T6N, R8ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	03/25/54	01/28/54	03/25/54
SAMPLED	07/21/54	07/22/54	07/22/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-PURDY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4530	4595	4367
WELLHEAD PRESSURE,PSIG	832	827	1058
OPEN FLOW, MCFD	118949	19990	6388
COMPONENT, MOLE PCT			
METHANE	67.5	62.2	61.8
ETHANE	3.4	3.1	2.8
PROPANE	2.3	1.9	1.9
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	22.2	27.9	29.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.2	0.6
HELIUM	1.99	2.01	2.30
HEATING VALUE*	861	796	778
SPECIFIC GRAVITY	0.716	0.736	0.728

	INDEX 4744 SAMPLE 5659	INDEX 4745 SAMPLE 5723	INDEX 4746 SAMPLE 5724
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SLEEPER UNIT NO. 1	FRANK PARKES NO. 1	WIGGINS NO. 1
LOCATION	SEC. 35, T6N, R9ECM	SEC. 20, T5N, R9ECM	SEC. 23, T4N, R8ECM
OWNER	SHELL OIL CO.	VERNON TAYLOR, INC.	WESTHOMA OIL CO.
COMPLETED	02/09/54	08/11/54	09/11/54
SAMPLED	07/22/54	11/02/54	11/02/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4648	4594	4692
WELLHEAD PRESSURE,PSIG	835	828	762
OPEN FLOW, MCFD	98727	43566	5400
COMPONENT, MOLE PCT			
METHANE	65.6	63.9	63.5
ETHANE	3.3	2.8	3.2
PROPANE	2.0	1.9	1.8
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.7	26.8	27.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.4
HELIUM	2.11	2.22	1.95
HEATING VALUE*	831	799	793
SPECIFIC GRAVITY	0.714	0.722	0.720

	INDEX 4747 SAMPLE 5731	INDEX 4748 SAMPLE 5732	INDEX 4749 SAMPLE 5797
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON GAS UNIT NO. 1	WIGGINS GAS UNIT NO. A-1	W. H. SPRADLIN
LOCATION	SEC. 2, T4N, R9ECM	SEC. 22, T4N, R8ECM	SEC. 8, T4N, R9ECM
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	COLUMBIAN FUEL CORP.
COMPLETED	03/09/54	08/10/54	08/28/53
SAMPLED	11/13/54	11/13/54	03/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4590	4718	4599
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	824
OPEN FLOW, MCFD	55415	7332	20250
COMPONENT, MOLE PCT			
METHANE	64.1	64.2	64.3
ETHANE	3.1	3.2	2.9
PROPANE	1.8	1.9	1.8
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	26.2	26.2	26.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.6	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.8
HELIUM	2.15	2.11	2.22
HEATING VALUE*	809	812	807
SPECIFIC GRAVITY	0.713	0.721	0.719

	INDEX 4750 SAMPLE 5806	INDEX 4751 SAMPLE 5810	INDEX 4752 SAMPLE 5811
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PHILLIPS CIMARRON NO. 1	GROSS NO. 1	DAVID NO. 1
LOCATION	SEC. 16, T4N, R8ECM	SEC. 25, T5N, R8ECM	SEC. 15, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/12/55	08/20/54	10/22/54
SAMPLED	05/11/55	04/07/55	04/07/55
FORMATION	PENN-MARMATON	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4070	4681	4713
WELLHEAD PRESSURE,PSIG	709	823	776
OPEN FLOW, MCFD	12200	36000	6000
COMPONENT, MOLE PCT			
METHANE	45.0	64.2	64.1
ETHANE	7.3	2.8	2.9
PROPANE	3.9	1.7	1.6
N-BUTANE	1.0	0.5	0.4
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	40.6	27.0	27.7
OXYGEN	0.0	0.1	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.5
HELIUM	1.05	2.23	2.15
HEATING VALUE*	762	790	772
SPECIFIC GRAVITY	0.828	0.718	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4753 SAMPLE 5812	INDEX 4754 SAMPLE 5813	INDEX 4755 SAMPLE 5814
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ROONEY NO. 1	GAITHER NO. 1	MORRISON NO. 1
LOCATION	SEC. 2, T5N, R8ECM	SEC. 22, T5N, R8ECM	SEC. 27, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/22/54	11/21/53	10/11/54
SAMPLED	04/06/55	04/06/55	04/07/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4624	4686	4692
WELLHEAD PRESSURE,PSIG	807	810	807
OPEN FLOW, MCFD	1620	4400	68000
COMPONENT, MOLE PCT			
METHANE	62.6	63.9	64.3
ETHANE	2.6	3.0	2.9
PROPANE	1.6	2.0	1.7
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.0	26.6	26.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.8
HELIUM	2.30	2.14	2.18
HEATING VALUE*	767	816	792
SPECIFIC GRAVITY	0.716	0.723	0.715

	INDEX 4756 SAMPLE 5815	INDEX 4757 SAMPLE 5816	INDEX 4758 SAMPLE 5817
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HIGH NO. 1	JENKINS NO. 1	GENS NO. 1
LOCATION	SEC. 6, T5N, R9ECM	SEC. 17, T5N, R8ECM	SEC. 31, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/01/54	07/06/54	10/16/54
SAMPLED	04/06/55	04/06/55	04/07/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4566	4733	4621
WELLHEAD PRESSURE,PSIG	832	785	824
OPEN FLOW, MCFD	14000	77580	16400
COMPONENT, MOLE PCT			
METHANE	63.6	62.9	63.6
ETHANE	2.7	3.2	3.0
PROPANE	1.7	2.6	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.4	27.8	27.2
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.6
HELIUM	2.28	2.15	2.13
HEATING VALUE*	785	795	797
SPECIFIC GRAVITY	0.718	0.725	0.722

	INDEX 4759 SAMPLE 5818	INDEX 4760 SAMPLE 5819	INDEX 4761 SAMPLE 5820
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BACON NO. 1	SLACK NO. 1	ACKENBACK NO. 1
LOCATION	SEC. 10, T5N, R8ECM	SEC. 19, T5N, R9ECM	SEC. 1, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/07/54	11/06/54	09/01/54
SAMPLED	04/06/55	04/07/55	04/06/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4699	4614	4614
WELLHEAD PRESSURE,PSIG	808	826	833
OPEN FLOW, MCFD	1670	29500	9600
COMPONENT, MOLE PCT			
METHANE	63.2	64.3	62.9
ETHANE	3.1	2.8	2.5
PROPANE	2.0	1.5	1.5
N-BUTANE	0.7	0.4	0.4
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.3	27.3	28.3
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	1.1
HELIUM	2.19	2.25	2.29
HEATING VALUE*	804	775	758
SPECIFIC GRAVITY	0.724	0.710	0.718

	INDEX 4762 SAMPLE 5821	INDEX 4763 SAMPLE 5822	INDEX 4764 SAMPLE 5823
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PHILLIPS NO. 1	BURFORD NO. 1	KING NO. 1
LOCATION	SEC. 35, T5N, R8ECM	SEC. 29, T5N, R8ECM	SEC. 21, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/26/54	11/03/53	07/10/54
SAMPLED	04/07/55	04/06/55	04/06/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4703	4760	4692
WELLHEAD PRESSURE,PSIG	819	828	805
OPEN FLOW, MCFD	62000	45000	107000
COMPONENT, MOLE PCT			
METHANE	64.3	64.2	64.3
ETHANE	2.8	2.9	2.9
PROPANE	1.7	1.8	1.8
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	26.7	27.0	26.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.7
HELIUM	2.20	2.10	2.19
HEATING VALUE*	794	790	808
SPECIFIC GRAVITY	0.716	0.712	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4765 SAMPLE 5825	INDEX 4766 SAMPLE 5827	INDEX 4767 SAMPLE 5828
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPRADLIN UNIT NO. 1	HUNT UNIT NO. 1	FERGUSON NO. B-1
LOCATION	SEC. 9, T4N, R9ECM	SEC. 28, T4N, R8ECM	SEC. 27, T5N, R9ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/--/54	09/--/53	06/--/54
SAMPLED	04/26/55	04/26/55	04/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4589	4780	4490
WELLHEAD PRESSURE,PSIG	825	735	831
OPEN FLOW, MCFD	10000	2350	22800
COMPONENT, MOLE PCT			
METHANE	64.2	64.0	60.0
ETHANE	2.9	3.2	3.0
PROPANE	1.9	1.9	1.7
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	25.9	27.0	31.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.5
HELIUM	2.15	1.98	1.54
HEATING VALUE*	817	817	783
SPECIFIC GRAVITY	0.725	0.725	0.749

	INDEX 4768 SAMPLE 5829	INDEX 4769 SAMPLE 5830	INDEX 4770 SAMPLE 5832
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HALLIDAY NO. C-1	DAVOLT NO. 1	STATE NO. 1-D
LOCATION	SEC. 26, T6N, R8ECM	SEC. 25, T6N, R9ECM	SEC. 25, T5N, R9ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/--/54	06/--/54	05/--/54
SAMPLED	04/26/55	04/26/55	04/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4686	4583	4532
WELLHEAD PRESSURE,PSIG	828	825	832
OPEN FLOW, MCFD	11000	4800	32000
COMPONENT, MOLE PCT			
METHANE	61.2	64.8	64.0
ETHANE	3.1	3.2	2.9
PROPANE	2.1	1.9	1.9
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	28.8	25.5	26.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	1.0
HELIUM	2.30	2.03	2.15
HEATING VALUE*	798	837	807
SPECIFIC GRAVITY	0.736	0.727	0.722

	INDEX 4771 SAMPLE 5837	INDEX 4772 SAMPLE 5840	INDEX 4773 SAMPLE 5841
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	CIMARRON NO. 1	HEATLEY NO. A-1	SPRADLIN A NO. 1
LOCATION	SEC. 16, T4N, R8ECM	SEC. 30, T5N, R9ECM	SEC. 4, T4N, R9ECM
OWNER	PHILLIPS PETROLEUM CO.	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.
COMPLETED	04/12/55	10/10/53	09/09/53
SAMPLED	05/11/55	05/03/55	05/03/55
FORMATION	PENN-MARMATON	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4070	4660	4510
WELLHEAD PRESSURE,PSIG	709	827	830
OPEN FLOW, MCFD	12200	7531	21120
COMPONENT, MOLE PCT			
METHANE	44.9	64.0	64.3
ETHANE	7.6	2.9	2.9
PROPANE	4.0	1.9	1.9
N-BUTANE	0.9	0.6	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	40.3	26.3	26.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.9
HELIUM	0.99	2.15	2.20
HEATING VALUE*	773	827	817
SPECIFIC GRAVITY	0.832	0.731	0.725

	INDEX 4774 SAMPLE 5842	INDEX 4775 SAMPLE 5843	INDEX 4776 SAMPLE 5845
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPRADLIN B NO. 1	BAUGHMAN NO. A-1	TURNER NO. A-1
LOCATION	SEC. 5, T4N, R9ECM	SEC. 16, T5N, R9ECM	SEC. 24, T5N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	09/18/53	10/02/54	05/27/54
SAMPLED	05/03/55	05/02/55	05/03/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4610	4596	4570
WELLHEAD PRESSURE,PSIG	828	832	833
OPEN FLOW, MCFD	13924	37886	33000
COMPONENT, MOLE PCT			
METHANE	64.2	64.1	64.6
ETHANE	2.9	2.8	3.0
PROPANE	1.8	1.7	1.9
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	26.3	26.5	25.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	1.0
HELIUM	2.19	2.22	2.15
HEATING VALUE*	810	804	826
SPECIFIC GRAVITY	0.720	0.722	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4777 SAMPLE 5846	INDEX 4778 SAMPLE 5847	INDEX 4779 SAMPLE 5848
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	STATE NO. H-1	SPARKMAN NO. C-1	MINGENBACK NO. B-1
LOCATION	SEC. 21, T5N, R9ECM	SEC. 32, T5N, R9ECM	SEC. 33, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	10/26/54	05/18/54	01/09/54
SAMPLED	05/03/55	05/03/55	02/05/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4562	4572	4574
WELLHEAD PRESSURE,PSIG	828	830	835
OPEN FLOW, MCFD	32000	23940	2900
COMPONENT, MOLE PCT			
METHANE	63.9	64.1	64.2
ETHANE	2.9	2.9	2.9
PROPANE	1.8	1.8	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	26.5	26.4	26.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.5
HELIUM	2.21	2.13	2.25
HEATING VALUE*	815	816	805
SPECIFIC GRAVITY	0.727	0.725	0.718

	INDEX 4780 SAMPLE 5849	INDEX 4781 SAMPLE 5850	INDEX 4782 SAMPLE 5851
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPARKMAN NO. D-1	SPARKMAN NO. B-1	SCHNAUFER A NO. 1
LOCATION	SEC. 11, T5N, R9ECM	SEC. 3, T5N, R9ECM	SEC. 23, T5N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	09/08/54	01/17/54	04/10/54
SAMPLED	05/03/55	05/02/55	05/03/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4530	4628	4466
WELLHEAD PRESSURE,PSIG	834	834	833
OPEN FLOW, MCFD	27000	17704	28000
COMPONENT, MOLE PCT			
METHANE	67.0	65.0	65.2
ETHANE	3.1	3.0	3.0
PROPANE	2.0	1.8	1.8
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	23.2	25.5	25.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.8
HELIUM	2.09	2.11	2.12
HEATING VALUE*	851	824	818
SPECIFIC GRAVITY	0.714	0.724	0.716

	INDEX 4783 SAMPLE 5952	INDEX 4784 SAMPLE 5953	INDEX 4785 SAMPLE 5956
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PHILLIPS NO. 1-B	FRENCH NO. 1	HAYWARD NO. 1
LOCATION	SEC. 8, T4N, R8ECM	SEC. 31, T6N, R9ECM	SEC. 29, T5N, R9ECM
OWNER	SHELL OIL CO.	SUPERIOR OIL CO.	KERR-MCGEE CORP.
COMPLETED	07/06/55	07/18/54	02/26/55
SAMPLED	10/16/55	10/27/55	NOT GIVEN
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4757	4576	4560
WELLHEAD PRESSURE,PSIG	818	837	821
OPEN FLOW, MCFD	33000	30500	40000
COMPONENT, MOLE PCT			
METHANE	62.9	62.2	63.9
ETHANE	3.0	2.7	4.5
PROPANE	2.0	1.8	2.2
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.1	28.5	24.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.9
HELIUM	2.11	2.39	2.27
HEATING VALUE*	780	783	839
SPECIFIC GRAVITY	0.722	0.728	0.724

	INDEX 4786 SAMPLE 5957	INDEX 4787 SAMPLE 5969	INDEX 4788 SAMPLE 5981
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	COLBY NO. 1	ED PHILLIPS NO. 1	H. HAGER
LOCATION	SEC. 22, T5N, R9ECM	SEC. 18, T5N, R9ECM	SEC. 36, T6N, R8ECM
OWNER	MCGEE CORP.	COLORADO INTERSTATE GAS CO.	COLTEXO CORP.
COMPLETED	03/10/55	08/16/55	09/20/53
SAMPLED	12/13/55	11/17/55	12/01/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4462	4575	4576
WELLHEAD PRESSURE,PSIG	819	815	809
OPEN FLOW, MCFD	31000	82500	7804
COMPONENT, MOLE PCT			
METHANE	63.3	62.9	62.4
ETHANE	2.9	2.6	2.8
PROPANE	1.8	1.6	1.7
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	27.2	28.1	28.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.1	0.9
HELIUM	2.19	2.40	2.39
HEATING VALUE*	801	779	780
SPECIFIC GRAVITY	0.724	0.727	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4789 SAMPLE 6069	INDEX 4790 SAMPLE 6070	INDEX 4791 SAMPLE 6071
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WILEY NO. 1	BURNETT NO. 1	HOLLIDAY NO. 2
LOCATION	SEC. 15, T5N, R8ECM	SEC. 23, T5N, R8ECM	SEC. 35, T6N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/12/55	09/27/55	07/05/55
SAMPLED	06/08/56	06/08/56	06/08/56
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4641	4646	4696
WELLHEAD PRESSURE,PSIG	809	809	819
OPEN FLOW, MCFD	2280	4200	2250
COMPONENT, MOLE PCT			
METHANE	64.1	64.1	61.3
ETHANE	3.1	3.0	3.1
PROPANE	2.0	2.0	2.7
N-BUTANE	0.5	0.5	0.9
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	26.8	26.5	28.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.0	0.7
HELIUM	2.20	2.21	2.29
HEATING VALUE*	805	800	816
SPECIFIC GRAVITY	0.717	0.706	0.742

	INDEX 4792 SAMPLE 6072	INDEX 4793 SAMPLE 6081	INDEX 4794 SAMPLE 6096
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HOLLIDAY NO. 4	WIGGINS NO. 1	BRADSHAW A-1
LOCATION	SEC. 34, T6N, R8ECM	SEC. 23, T4N, R8ECM	SEC. 14, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	WESTHOMA OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/11/55	09/11/54	05/04/55
SAMPLED	06/08/56	06/09/56	07/19/56
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4730	4692	4474
WELLHEAD PRESSURE,PSIG	797	762	820
OPEN FLOW, MCFD	4000	5400	3200
COMPONENT, MOLE PCT			
METHANE	60.5	63.5	65.2
ETHANE	3.0	3.2	3.3
PROPANE	3.1	1.8	2.6
N-BUTANE	0.7	0.4	0.8
ISOBUTANE	0.1	0.5	0.1
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.6	27.6	24.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.9
HELIUM	2.43	1.86	2.11
HEATING VALUE*	796	806	849
SPECIFIC GRAVITY	0.740	0.724	0.725

	INDEX 4795 SAMPLE 6104	INDEX 4796 SAMPLE 6256	INDEX 4797 SAMPLE 6257
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HITCH-GRAY-PRICE LAND CO.	C. B. SPRADLIN	A. H. HAGER NO. 1
LOCATION	SEC. 25, T4N, R8ECM	SEC. 16, T4N, R9ECM	SEC. 36, T6N, R8ECM
OWNER	TEXACO INC.	COLUMBIAN FUEL CORP.	COLUMBIAN FUEL CORP.
COMPLETED	12/24/53	05/11/54	08/15/53
SAMPLED	07/03/56	03/04/57	03/04/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4703	4593	4576
WELLHEAD PRESSURE,PSIG	765	831	835
OPEN FLOW, MCFD	2006	23500	5650
COMPONENT, MOLE PCT			
METHANE	63.6	63.5	63.1
ETHANE	3.4	3.1	2.8
PROPANE	1.9	1.9	1.8
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.2	26.6	27.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.7
HELIUM	2.03	2.19	2.35
HEATING VALUE*	802	811	777
SPECIFIC GRAVITY	0.728	0.726	0.717

	INDEX 4798 SAMPLE 6259	INDEX 4799 SAMPLE 6260	INDEX 4800 SAMPLE 6261
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	C. B. SPRADLIN NO. 1	M. B. ROSS NO. 1	W. H. SPRADLIN NO. 1
LOCATION	SEC. 33, T5N, R9ECM	SEC. 28, T5N, R9ECM	SEC. 3, T4N, R9ECM
OWNER	UNITED CARBON CO., INC.	UNITED CARBON CO., INC.	UNITED CARBON CO., INC.
COMPLETED	08/18/53	06/15/54	08/11/53
SAMPLED	03/04/57	03/04/57	03/04/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4530	4542	4512
WELLHEAD PRESSURE,PSIG	823	823	822
OPEN FLOW, MCFD	24000	3829	18000
COMPONENT, MOLE PCT			
METHANE	64.2	64.7	63.9
ETHANE	3.1	2.9	3.1
PROPANE	1.8	1.9	1.7
N-BUTANE	0.6	0.8	0.6
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.1	25.8	26.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	1.3
HELIUM	2.30	2.25	2.28
HEATING VALUE*	804	815	795
SPECIFIC GRAVITY	0.721	0.717	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4801 SAMPLE 6262	INDEX 4802 SAMPLE 6278	INDEX 4803 SAMPLE 6324
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	V. S. BURKETT NO. 1	PHILLIPS C NO. 1	HARRYMAN
LOCATION	SEC. 10, T4N, R9ECM	SEC. 17, T4N, R8ECM	SEC. 17, T5N, R9ECM
OWNER	UNITED CARBON CO., INC.	SHELL OIL CO.	SUPERIOR OIL CO.
COMPLETED	09/10/53	12/30/55	08/25/54
SAMPLED	03/04/57	03/19/57	05/14/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4588	4760	4602
WELLHEAD PRESSURE,PSIG	A22	811	810
OPEN FLOW, MCFD	15800	8900	18691
COMPONENT, MOLE PCT			
METHANE	64.0	63.0	63.5
ETHANE	3.2	3.2	2.8
PROPANE	1.6	1.6	1.8
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	26.3	28.2	27.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.3	0.9
HELIUM	2.27	2.17	2.36
HEATING VALUE*	799	798	784
SPECIFIC GRAVITY	0.720	0.726	0.718

	INDEX 4804 SAMPLE 6325	INDEX 4805 SAMPLE 6366	INDEX 4806 SAMPLE 6367
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HAYWORTH	BRYAN NO. 1	BURKHARDT NO. 1
LOCATION	SEC. 5, T5N, R9ECM	SEC. 31, T5N, R8ECM	SEC. 4, T4N, R8ECM
OWNER	SUPERIOR OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/17/54	07/10/51	08/29/56
SAMPLED	05/14/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4591	4824	4734
WELLHEAD PRESSURE,PSIG	A06	790	797
OPEN FLOW, MCFD	9778	35000	60000
COMPONENT, MOLE PCT			
METHANE	63.8	61.7	63.5
ETHANE	3.0	3.1	3.1
PROPANE	1.9	2.0	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	26.7	28.3	27.2
OXYGEN	0.0	0.5	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.5
HELIUM	2.27	2.11	2.10
HEATING VALUE*	A05	781	807
SPECIFIC GRAVITY	0.722	0.732	0.724

	INDEX 4807 SAMPLE 6368	INDEX 4808 SAMPLE 6369	INDEX 4809 SAMPLE 6370
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	DITTMAR NO. 1	ENTRIKIN NO. 2	FOSTER NO. 1
LOCATION	SEC. 33, T5N, R8ECM	SEC. 20, T5N, R8ECM	SEC. 24, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/11/56	10/15/56	08/05/55
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4735	4750	4603
WELLHEAD PRESSURE,PSIG	789	788	814
OPEN FLOW, MCFD	32	30000	10200
COMPONENT, MOLE PCT			
METHANE	63.0	62.3	62.8
ETHANE	3.0	3.0	2.8
PROPANE	1.8	1.8	1.6
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.5	27.9	28.0
OXYGEN	0.1	0.4	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.7
HELIUM	2.29	2.20	2.31
HEATING VALUE*	799	787	769
SPECIFIC GRAVITY	0.728	0.728	0.714

	INDEX 4810 SAMPLE 6371	INDEX 4811 SAMPLE 6372	INDEX 4812 SAMPLE 6373
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HALLIDAY NO. 3	HARGIS NO. 1	HARRYMAN NO. 1
LOCATION	SEC. 4, T5N, R8ECM	SEC. 8, T5N, R9ECM	SEC. 13, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/24/55	08/22/55	09/21/56
SAMPLED	08/19/57	08/20/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4756	4670	4578
WELLHEAD PRESSURE,PSIG	A05	817	799
OPEN FLOW, MCFD	2140	44000	7800
COMPONENT, MOLE PCT			
METHANE	61.1	63.6	62.2
ETHANE	3.1	2.9	2.7
PROPANE	2.2	1.8	1.7
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	28.2	26.9	28.4
OXYGEN	0.1	TRACE	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.0	1.1
HELIUM	2.27	2.30	2.29
HEATING VALUE*	791	A09	767
SPECIFIC GRAVITY	0.738	0.726	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4813 SAMPLE 6374	INDEX 4814 SAMPLE 6375	INDEX 4815 SAMPLE 6376
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HOWE NO. 1	HURST NO. 1	JOHNSON NO. 1
LOCATION	SEC. 12, T5N, R8ECM	SEC. 3, T4N, R8ECM	SEC. 36, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/14/56	08/18/56	07/30/55
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4516	4724	4679
WELLHEAD PRESSURE,PSIG	801	796	812
OPEN FLOW, MCFD	6800	4000	17000
COMPONENT, MOLE PCT			
METHANE	62.7	64.0	63.0
ETHANE	2.6	3.0	3.0
PROPANE	2.4	1.8	1.9
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	27.6	26.8	26.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	0.8
HELIUM	2.33	2.25	2.22
HEATING VALUE*	782	801	816
SPECIFIC GRAVITY	0.722	0.718	0.733

	INDEX 4816 SAMPLE 6377	INDEX 4817 SAMPLE 6378	INDEX 4818 SAMPLE 6379
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	LA MAR NO. 1	MCCOY NO. 1	NASH NO. 1
LOCATION	SEC. 34, T5N, R8ECM	SEC. 10, T4N, R8ECM	SEC. 7, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/25/55	05/14/56	09/04/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4653	4670	4541
WELLHEAD PRESSURE,PSIG	810	798	802
OPEN FLOW, MCFD	33500	1290	28000
COMPONENT, MOLE PCT			
METHANE	64.0	59.8	63.1
ETHANE	3.0	2.9	2.8
PROPANE	1.8	1.7	1.7
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.6	30.4	27.8
OXYGEN	TRACE	1.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.9
HELIUM	2.19	2.10	2.35
HEATING VALUE*	802	754	782
SPECIFIC GRAVITY	0.720	0.737	0.722

	INDEX 4819 SAMPLE 6380	INDEX 4820 SAMPLE 6381	INDEX 4821 SAMPLE 6382
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PETTY NO. 1	PHILMAG NO. 1	ROBERTS NO. 1
LOCATION	SEC. 30, T5N, R8ECM	SEC. 32, T5N, R8ECM	SEC. 14, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/55	06/01/56	08/06/56
SAMPLED	08/19/57	08/19/57	NOT GIVEN
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4846	4748	4604
WELLHEAD PRESSURE,PSIG	805	802	800
OPEN FLOW, MCFD	12130	59000	730
COMPONENT, MOLE PCT			
METHANE	62.3	63.4	63.2
ETHANE	3.2	3.1	3.0
PROPANE	2.1	1.9	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	27.8	26.9	27.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.6
HELIUM	2.25	2.19	2.34
HEATING VALUE*	795	808	802
SPECIFIC GRAVITY	0.728	0.724	0.726

	INDEX 4822 SAMPLE 6383	INDEX 4823 SAMPLE 6384	INDEX 4824 SAMPLE 6385
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ST. JOHN NO. 1	SLACK NO. 2	SMITH NO. 1
LOCATION	SEC. 4, T5N, R8ECM	SEC. 11, T5N, R8ECM	SEC. 28, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/11/56	06/10/55	10/29/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4754	4576	4740
WELLHEAD PRESSURE,PSIG	785	811	787
OPEN FLOW, MCFD	2450	3350	16200
COMPONENT, MOLE PCT			
METHANE	61.9	62.0	62.3
ETHANE	3.6	2.8	3.1
PROPANE	2.3	1.8	1.8
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.6	28.8	28.1
OXYGEN	TRACE	0.1	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.6
HELIUM	2.18	2.28	2.17
HEATING VALUE*	816	772	785
SPECIFIC GRAVITY	0.736	0.725	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4825 SAMPLE 6386	INDEX 4826 SAMPLE 6387	INDEX 4827 SAMPLE 6437
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	THRASH NO. 1	WILMARTH NO. 1	FRANCIS NO. 1
LOCATION	SEC. 9, T5N, R9ECM	SEC. 5, T4N, R8ECM	SEC. 6, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/08/55	05/24/56	08/25/57
SAMPLED	08/20/57	08/19/57	11/22/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4644	4774	4786
WELLHEAD PRESSURE,PSIG	818	805	764
OPEN FLOW, MCFD	47500	13300	43500
COMPONENT, MOLE PCT			
METHANE	63.6	61.8	62.4
ETHANE	2.9	3.0	2.8
PROPANE	1.9	1.7	1.7
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	26.6	28.6	28.6
OXYGEN	0.5	0.5	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	0.6
HELIUM	2.64	2.14	2.20
HEATING VALUE*	802	785	775
SPECIFIC GRAVITY	0.723	0.731	0.723

	INDEX 4828 SAMPLE 6438	INDEX 4829 SAMPLE 6476	INDEX 4830 SAMPLE 6518
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FIDLER NO. 1	FORD UNIT NO. 1	ELMER ADAMS NO. 1
LOCATION	SEC. 7, T4N, R8ECM	SEC. 27, T4N, R9ECM	SEC. 12, T4N, R7ECM
OWNER	COLORADO INTERSTATE GAS CO.	SOHIO PETROLEUM ET AL.	UNION OIL CO. OF CAL.
COMPLETED	09/19/57	11/24/57	03/19/58
SAMPLED	11/24/57	01/09/58	03/09/58
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4766	4576	4860
WELLHEAD PRESSURE,PSIG	776	860	NOT GIVEN
OPEN FLOW, MCFD	40000	750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.2	58.0	61.8
ETHANE	3.1	3.9	4.6
PROPANE	1.7	1.7	3.6
N-BUTANE	0.5	0.4	1.6
ISOBUTANE	0.4	0.3	1.0
N-PENTANE	0.1	0.1	0.6
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.5
NITROGEN	27.9	33.5	23.2
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.7
HELIUM	2.10	1.50	1.80
HEATING VALUE*	748	729	962
SPECIFIC GRAVITY	0.720	0.739	0.782

	INDEX 4831 SAMPLE 6536	INDEX 4832 SAMPLE 6621	INDEX 4833 SAMPLE 6622
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	STATE NO. 1-18	MINNS NO. 1	CONOVER NO. 1
LOCATION	SEC. 18, T4N, R8ECM	SEC. 6, T4N, R9ECM	SEC. 5, T5N, R8ECM
OWNER	COLORADO OIL & GAS CORP.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/17/58	NOT GIVEN	09/05/57
SAMPLED	03/29/58	05/31/58	05/31/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4810	4627	4781
WELLHEAD PRESSURE,PSIG	783	773	764
OPEN FLOW, MCFD	9650	38500	4100
COMPONENT, MOLE PCT			
METHANE	60.7	63.6	61.4
ETHANE	0.1	3.2	3.4
PROPANE	1.5	1.8	2.3
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	33.2	26.5	27.7
OXYGEN	0.7	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	1.1
HELIUM	2.30	2.20	2.20
HEATING VALUE*	701	817	815
SPECIFIC GRAVITY	0.724	0.727	0.745

	INDEX 4834 SAMPLE 6623	INDEX 4835 SAMPLE 6627	INDEX 4836 SAMPLE 6628
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BARRICK NO. 1	FORD NO. 1-22	FLEMING NO. 1
LOCATION	SEC. 1, T4N, R8ECM	SEC. 22, T4N, R9ECM	SEC. 21, T4N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO OIL & GAS CORP.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/12/57	--/--/55	--/--/57
SAMPLED	06/--/58	06/16/58	06/16/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4676	4700	4700
WELLHEAD PRESSURE,PSIG	774	775	775
OPEN FLOW, MCFD	6100	33000	2000
COMPONENT, MOLE PCT			
METHANE	63.7	60.6	61.7
ETHANE	3.1	3.2	3.8
PROPANE	1.8	1.9	1.6
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	1.2	0.2	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	26.6	29.7	30.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.5
HELIUM	2.20	1.90	1.90
HEATING VALUE*	817	779	752
SPECIFIC GRAVITY	0.728	0.743	0.727

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4837 SAMPLE 6629	INDEX 4838 SAMPLE 6649	INDEX 4839 SAMPLE 6700
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BORDON NO. 1-4	NEFF NO. 1	TROTTI NO. A-1
LOCATION	SEC. 4, T5N, R9ECM	SEC. 1, T4N, R7ECM	SEC. 13, T4N, R8ECM
OWNER	COLORADO OIL & GAS CORP.	UNION OIL CO. OF CAL.	HUGHES SEEWALD
COMPLETED	--/--/56	01/31/58	NOT GIVEN
SAMPLED	06/16/58	06/21/58	07/01/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4700	4818	4647
WELLHEAD PRESSURE,PSIG	780	700	NOT GIVEN
OPEN FLOW, MCFD	14000	4280	40000
COMPONENT, MOLE PCT			
METHANE	42.6	63.2	64.0
ETHANE	11.8	2.8	3.2
PROPANE	14.0	1.3	1.8
N-BUTANE	5.7	0.4	0.7
ISOBUTANE	3.7	0.2	0.4
N-PENTANE	1.4	0.1	0.2
ISOPENTANE	1.9	0.2	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	1.0	0.1	0.2
NITROGEN	15.2	28.7	26.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	0.4
HELIUM	1.10	2.30	2.20
HEATING VALUE*	1523	762	829
SPECIFIC GRAVITY	1.058	0.717	0.728

	INDEX 4840 SAMPLE 6991	INDEX 4841 SAMPLE 7182	INDEX 4842 SAMPLE 7183
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WHISENAND NO. 1	WIGGINS NO. 1	KINSINGER NO. 1
LOCATION	SEC. 22, T6N, R9ECM	SEC. 33, T4N, R8ECM	SEC. 36, T6N, R9ECM
OWNER	PANHANDLE EASTERN PIPELINE	COLORADO INTERSTATE GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	11/09/58	07/28/52	06/13/53
SAMPLED	03/03/59	08/26/59	08/21/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4539	4806	4612
WELLHEAD PRESSURE,PSIG	771	753	762
OPEN FLOW, MCFD	1674	3920	10296
COMPONENT, MOLE PCT			
METHANE	59.9	63.1	71.3
ETHANE	2.9	3.3	3.7
PROPANE	1.9	1.8	2.6
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	30.6	28.1	18.1
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.5
HELIUM	2.40	2.00	1.90
HEATING VALUE*	772	798	924
SPECIFIC GRAVITY	0.739	0.723	0.702

	INDEX 4843 SAMPLE 7184	INDEX 4844 SAMPLE 7186	INDEX 4845 SAMPLE 7187
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	DELOZIER NO. 1	SPARKMAN A-1	WHISENNAND NO. 1
LOCATION	SEC. 3, T3N, R8ECM	SEC. 10, T5N, R9ECM	SEC. 8, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	CITIES SERVICE OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/15/52	07/12/53	10/30/53
SAMPLED	08/26/59	08/21/59	08/21/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4761	4624	4753
WELLHEAD PRESSURE,PSIG	7098	757	778
OPEN FLOW, MCFD	1620	17790	4800
COMPONENT, MOLE PCT			
METHANE	58.4	64.6	62.0
ETHANE	3.3	3.1	3.4
PROPANE	1.7	2.9	2.5
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	32.2	25.0	27.7
OXYGEN	1.2	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.4
HELIUM	1.60	2.10	2.15
HEATING VALUE*	748	843	823
SPECIFIC GRAVITY	0.747	0.726	0.738

	INDEX 4846 SAMPLE 7188	INDEX 4847 SAMPLE 7196	INDEX 4848 SAMPLE 7244
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FLEMING NO. 1	FRANK PARKES NO. A-1	BORDEN NO. 1-4
LOCATION	SEC. 21, T4N, R9ECM	SEC. 12, T4N, R8ECM	SEC. 4, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	HUGHES SEEWALD	COLORADO OIL & GAS CORP.
COMPLETED	08/07/57	01/04/58	NOT GIVEN
SAMPLED	08/26/59	08/25/59	10/16/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4660	4636	4618
WELLHEAD PRESSURE,PSIG	751	748	760
OPEN FLOW, MCFD	1940	81000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.6	63.1	63.0
ETHANE	3.1	3.0	2.8
PROPANE	2.6	1.1	1.7
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.3	0.5	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	32.8	27.7	27.6
OXYGEN	0.9	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.0	0.9
HELIUM	1.85	2.20	2.20
HEATING VALUE*	754	791	797
SPECIFIC GRAVITY	0.762	0.728	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4849 SAMPLE 7245	INDEX 4850 SAMPLE 7271	INDEX 4851 SAMPLE 7272
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HALLIDAY B	HALLIDAY NO. 1	STATE NO. 1-18
LOCATION	SEC. 24, T6N, R8ECM	SEC. 25, T6N, R8ECM	SEC. 18, T4N, R8ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/24/54	12/09/53	01/17/58
SAMPLED	10/16/59	11/03/59	11/03/59
FORMATION	PENN-PUROY	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4367	4624	4810
WELLHEAD PRESSURE,PSIG	950	758	733
OPEN FLOW, MCFD	6400	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.5	60.8	62.6
ETHANE	6.3	2.8	3.0
PROPANE	4.1	2.6	2.0
N-BUTANE	0.9	0.7	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.5	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	10.1	29.3	28.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.60	2.40	2.20
HEATING VALUE*	1071	799	790
SPECIFIC GRAVITY	0.700	0.741	0.725

	INDEX 4852 SAMPLE 7283	INDEX 4853 SAMPLE 7284	INDEX 4854 SAMPLE 7301
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HALLIDAY B-1	WHISENNAND A-1	BURNS NO. 1
LOCATION	SEC. 24, T6N, R8ECM	SEC. 1, T5N, R9ECM	SEC. 18, T4N, R9ECM
OWNER	SHELL OIL CO.	CITIES SERVICE OIL CO.	HUGHES SEEWALD
COMPLETED	06/18/58	07/12/53	NOT GIVEN
SAMPLED	11/17/59	11/17/59	12/04/59
FORMATION	PENN-PUROY & KEYES	PENN-KEYES	PENN-
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4367	4552	NOT GIVEN
WELLHEAD PRESSURE,PSIG	758	759	7419
OPEN FLOW, MCFD	1449	6287	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.4	69.4	62.9
ETHANE	2.7	3.5	2.9
PROPANE	3.1	5.0	3.1
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	29.3	20.1	26.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	2.30	1.90	2.20
HEATING VALUE*	795	893	823
SPECIFIC GRAVITY	0.741	0.704	0.732

	INDEX 4855 SAMPLE 7302	INDEX 4856 SAMPLE 7321	INDEX 4857 SAMPLE 7393
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HAGAN	MEAD NO. 1	HURST NO. 2
LOCATION	SEC. 19, T4N, R9ECM	SEC. 29, T6N, R9ECM	SEC. 9, T4N, R8ECM
OWNER	HUGHES SEEWALD	DIAMOND SHAMROCK CORP.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/04/59	12/20/59	02/12/60
FORMATION	PENN-	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4722
WELLHEAD PRESSURE,PSIG	743	NOT GIVEN	739
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4579
COMPONENT, MOLE PCT			
METHANE	62.9	61.3	62.6
ETHANE	3.0	3.0	3.2
PROPANE	2.N	2.1	2.0
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	27.9	29.4	28.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	2.00	2.30	2.10
HEATING VALUE*	A03	785	800
SPECIFIC GRAVITY	0.726	0.733	0.729

	INDEX 4858 SAMPLE 7500	INDEX 4859 SAMPLE 7807	INDEX 4860 SAMPLE 8105
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WHISENNAND A-2	JERMYN NO. 1	R. R. HANES NO. 1-Z
LOCATION	SEC. 2, T5N, R9ECM	SEC. 19, T5N, R8ECM	SEC. 2, T3N, R9ECM
OWNER	CITIES SERVICE OIL CO.	COLORADO OIL & GAS CORP.	BAKER & TAYLOR DRILLING CO.
COMPLETED	01/16/60	05/05/60	NOT GIVEN
SAMPLED	04/13/60	01/04/61	08/02/61
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW U
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4590	4817	4275
WELLHEAD PRESSURE,PSIG	752	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4[illegible]	7800	4828
COMPONENT, MOLE PCT			
METHANE	68.7	61.7	68.8
ETHANE	3.3	3.5	4.9
PROPANE	2.1	0.9	2.0
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.4	0.8	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	20.9	28.7	22.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.6	0.2
HELIUM	2.70	2.20	0.60
HEATING VALUE*	A29	781	880
SPECIFIC GRAVITY	0.717	0.726	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4861 SAMPLE 8391	INDEX 4862 SAMPLE 8546	INDEX 4863 SAMPLE 8742
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PAUL HANKE NO. 1	NASH NO. 1	HANKE-HANES NO. 1
LOCATION	SEC. 3, T3N, R9ECM	SEC. 7, T5N, R9ECM	SEC. 11, T3N, R9ECM
OWNER	TEXACO INC.	HUGHES SEEWALD	TEXACO INC.
COMPLETED	12/03/61	NOT GIVEN	07/11/62
SAMPLED	02/01/62	05/09/62	11/01/62
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4477	4544	4295
WELLHEAD PRESSURE,PSIG	842	NOT GIVEN	971
OPEN FLOW, MCFD	8577	NOT GIVEN	9416
COMPONENT, MOLE PCT			
METHANE	57.6	62.7	69.5
ETHANE	3.3	2.8	4.8
PROPANE	1.9	1.6	2.0
N-BUTANE	0.8	0.6	0.5
ISOBUTANE	0.7	0.4	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	1.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.6	0.2	TRACE
NITROGEN	32.0	27.8	21.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.1	0.2
HELIUM	1.08	2.34	0.56
HEATING VALUE*	829	787	885
SPECIFIC GRAVITY	0.783	0.729	0.706

	INDEX 4864 SAMPLE 8744	INDEX 4865 SAMPLE 8866	INDEX 4866 SAMPLE 9204
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ANKE-HANES NO. 1	OKLAHOMA STATE C NO. 1	DOUGHTY NO. 1
LOCATION	SEC. 11, T3N, R9ECM	SEC. 14, T6N, R9ECM	SEC. 22, T3N, R9ECM
OWNER	TEXACO INC.	PETROLEUM, INC.	MONSANTO CHEMICAL CO.
COMPLETED	07/11/62	11/05/62	NOT GIVEN
SAMPLED	11/01/62	02/12/63	12/9/63
FORMATION	PENN-KEYES	PENN-WABAUNSEE	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4545	2728	4580
WELLHEAD PRESSURE,PSIG	841	460	946
OPEN FLOW, MCFD	10214	1400	1500
COMPONENT, MOLE PCT			
METHANE	54.5	46.5	56.5
ETHANE	3.4	3.9	3.0
PROPANE	1.7	3.6	1.4
N-BUTANE	0.6	1.3	0.8
ISOBUTANE	0.4	0.3	TRACE
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	36.2	42.7	34.6
OXYGEN	1.0	0.0	1.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.06	0.95	1.00
HEATING VALUE*	722	715	735
SPECIFIC GRAVITY	0.772	0.821	0.765

	INDEX 4867 SAMPLE 9279	INDEX 4868 SAMPLE 9509	INDEX 4869 SAMPLE 10651
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MINNS A NO. 2	DOUGHERTY NO. 1	WIGGINS NO. 1
LOCATION	SEC. 20, T4N, R9ECM	SEC. 22, T3N, R9ECM	SEC. 33, T4N, R8ECM
OWNER	HUGHES SEEWALD	MONSANTO CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/--/62	12/24/63	07/08/52
SAMPLED	04/08/64	07/28/64	07/20/66
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4720	4580	4806
WELLHEAD PRESSURE,PSIG	712	793	621
OPEN FLOW, MCFD	18000	1654	924
COMPONENT, MOLE PCT			
METHANE	62.9	60.6	63.0
ETHANE	3.2	3.1	3.3
PROPANE	1.9	1.5	1.9
N-BUTANE	0.8	0.6	0.5
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	27.5	32.5	28.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	2.14	0.64	2.04
HEATING VALUE*	817	766	803
SPECIFIC GRAVITY	0.732	0.745	0.730

	INDEX 4870 SAMPLE 10652	INDEX 4871 SAMPLE 10653	INDEX 4872 SAMPLE 10654
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	E. JERMYN NO. A-1	ROSE NO. 1	COX NO. 1
LOCATION	SEC. 18, T5N, R8ECM	SEC. 26, T5N, R8ECM	SEC. 16, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/29/46	12/20/44	03/22/43
SAMPLED	07/20/66	07/20/66	07/20/66
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4787	4640	4682
WELLHEAD PRESSURE,PSIG	622	631	625
OPEN FLOW, MCFD	11421	2480	3749
COMPONENT, MOLE PCT			
METHANE	62.1	62.9	63.0
ETHANE	3.4	3.0	3.1
PROPANE	2.4	2.0	2.0
N-BUTANE	0.8	0.7	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	27.3	27.2	27.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.5
HELIUM	2.20	2.26	2.23
HEATING VALUE*	825	816	810
SPECIFIC GRAVITY	0.740	0.730	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4873 SAMPLE 10655	INDEX 4874 SAMPLE 10656	INDEX 4875 SAMPLE 10657
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BAKER NO. 1	PARKES NO. 1	FERGUSON UNIT NO. 1
LOCATION	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 2, T4N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	10/05/50	04/10/49	03/09/54
SAMPLED	07/20/66	07/20/66	07/20/66
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4784	4725	4590
WELLHEAD PRESSURE,PSIG	620	617	834
OPEN FLOW, MCFD	1676	104	55415
COMPONENT, MOLE PCT			
METHANE	63.1	63.3	62.3
ETHANE	3.4	3.4	3.1
PROPANE	1.9	1.8	2.0
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	27.8	28.1	27.2
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	1.2
HELIUM	1.97	1.38	2.22
HEATING VALUE*	802	790	867
SPECIFIC GRAVITY	0.720	0.720	0.740

	INDEX 4876 SAMPLE 13733	INDEX 4877 SAMPLE 6884	INDEX 4878 SAMPLE 6885
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES W	KEYES W
WELL NAME	ROSA B. NEFF GAS UNIT NO. 1	L. K. TWINNING NO. 1	TWINNING NO. 1
LOCATION	SEC. 1, T4N, R7ECM	SEC. 28, T5N, R7ECM	SEC. 28, T5N, R7ECM
OWNER	CHARLES B. WILSON, JR. LTD.	J. S. ABERCOMBIE	J. S. ABERCOMBIE
COMPLETED	02/--/59	NOT GIVEN	NOT GIVEN
SAMPLED	10/1/73	NOT GIVEN	NOT GIVEN
FORMATION	PENN-KEYES	PENN-KEYES	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4810	4824	4128
WELLHEAD PRESSURE,PSIG	435	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.8	57.3	37.6
ETHANE	2.9	2.5	5.6
PROPANE	1.6	1.2	3.8
N-BUTANE	0.5	0.4	1.0
ISOBUTANE	0.4	0.3	0.6
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	29.6	34.7	48.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.6
HELIUM	2.21	2.60	1.29
HEATING VALUE*	773	694	661
SPECIFIC GRAVITY	0.729	0.735	0.859

	INDEX 4879 SAMPLE 12617	INDEX 4880 SAMPLE 12661	INDEX 4881 SAMPLE 13658
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES W	KEYES W	MIDWELL
WELL NAME	JOHNSON NO. 1	JOHNSON NO. 1	DENNING NO. 1
LOCATION	SEC. 34, T5N, R7ECM	SEC. 34, T5N, R7ECM	SEC. 24, T4N, R9ECM
OWNER	TEXAS ENERGIES	TEXAS ENERGIES, INC.	AN-SON CORP.
COMPLETED	DRILL STEM TEST	02/02/71	02/09/73
SAMPLED	01/04/71	02/08/71	07/25/73
FORMATION	PENN-MARMATON	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4060	4161	4560
WELLHEAD PRESSURE,PSIG	NOT GIVEN	200	750
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	38.4	38.4	60.1
ETHANE	5.5	5.2	4.0
PROPANE	4.8	4.6	2.3
N-BUTANE	1.0	0.8	0.6
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.4	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	48.0	48.7	30.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	1.23	1.29	1.21
HEATING VALUE*	448	659	792
SPECIFIC GRAVITY	0.859	0.850	0.744

	INDEX 4882 SAMPLE 4102	INDEX 4883 SAMPLE 4954	INDEX 4884 SAMPLE 14968
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	NOT GIVEN	NOT GIVEN	RICE SW
WELL NAME	SEEPAGE FROM WATER HOLE	WATER WELL	SMALTS NO. 1-A
LOCATION	SEC. 17, T6N, R1ECM	NEAR KENTON	SEC. 12, T2N, R9ECM
OWNER	FRED V. TUCKER	FRED V. TUCKER	ARGONAUT ENERGY CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	01/12/77
SAMPLED	05/20/46	09/22/50	04/19/77
FORMATION	NOT GIVEN	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4524
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1090
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	52500
COMPONENT, MOLE PCT			
METHANE	90.0	55.8	73.6
ETHANE	6.0	0.1	5.1
PROPANE	---	0.1	2.7
N-BUTANE	---	0.1	1.0
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.2
NITROGEN	3.8	42.1	15.6
OXYGEN	0.6	0.3	0.0
ARGON	---	0.6	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	5.4	0.0	0.1
HELIUM	TRACE	0.02	0.59
HEATING VALUE*	912	576	996
SPECIFIC GRAVITY	0.628	0.748	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4885 SAMPLE 4030	INDEX 4886 SAMPLE 5473	INDEX 4887 SAMPLE 6973
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	SAMPSEL NE	SAMPSEL NE	SAMPSEL NE
WELL NAME	R. R. OMOHUNDRO NO. 1	OMOHUNDRO NO. 1	JOHNSON UNIT NO. 1
LOCATION	SEC. 21, T3N, R8ECM	SEC. 21, T3N, R8ECM	SEC. 20, T3N, R8ECM
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	TEXACO INC.
COMPLETED	10/15/45	06/--/45	12/11/58
SAMPLED	10/29/45	05/26/53	02/17/59
FORMATION	PENN-BASAL	PENN-	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4801	4800	4899
WELLHEAD PRESSURE,PSIG	835	800	633
OPEN FLOW, MCFD	NOT GIVEN	1534	3500
COMPONENT, MOLE PCT			
METHANE	69.1	77.2	68.8
ETHANE	19.1	5.9	5.3
PROPANE	---	2.3	2.2
N-BUTANE	---	0.6	0.6
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	10.5	11.9	20.5
OXYGEN	0.1	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	0.80	0.80	1.30
HEATING VALUE*	1042	1014	1012
SPECIFIC GRAVITY	0.693	0.683	0.712

	INDEX 4888 SAMPLE 7972	INDEX 4889 SAMPLE 8449	INDEX 4890 SAMPLE 9081
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	SAMPSEL NE	SAMPSEL NE	SAMPSEL NE
WELL NAME	PINKERTON A NO. 1	HARPER B NO. 1	DUNGAN A NO. 1
LOCATION	SEC. 4, T2N, R8ECM	SEC. 8, T2N, R8ECM	SEC. 21, T2N, R8ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/05/61	01/23/62	06/28/63
SAMPLED	05/18/61	03/06/62	09/08/63
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW M
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4446	4514	4580
WELLHEAD PRESSURE,PSIG	898	908	964
OPEN FLOW, MCFD	10700	3050	6900
COMPONENT, MOLE PCT			
METHANE	75.4	76.1	83.9
ETHANE	5.9	5.6	5.9
PROPANE	2.4	2.4	2.2
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.4	13.8	6.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.50	0.48	0.30
HEATING VALUE*	980	995	1064
SPECIFIC GRAVITY	0.688	0.691	0.654

	INDEX 4891 SAMPLE 9082	INDEX 4892 SAMPLE 9083	INDEX 4893 SAMPLE 13826
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	SAMPSEL NE	SAMPSEL NE	STURGESS N
WELL NAME	DUNGAN A NO. 1	DUNGAN A NO. 1	STATE OF OKLAHOMA B-1
LOCATION	SEC. 21, T2N, R8ECM	SEC. 21, T2N, R8ECM	SEC. 14, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	SHENANDOAH OIL CORP.
COMPLETED	06/28/63	06/28/63	10/06/73
SAMPLED	09/08/63	09/08/63	11/29/73
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MARMATON
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4818	4458	3798
WELLHEAD PRESSURE,PSIG	800	875	680
OPEN FLOW, MCFD	19000	4000	2100
COMPONENT, MOLE PCT			
METHANE	81.5	81.5	70.9
ETHANE	6.1	6.1	7.0
PROPANE	2.5	2.5	2.8
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	7.7	7.7	16.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.50	0.53
HEATING VALUE*	1064	1056	987
SPECIFIC GRAVITY	0.670	0.665	0.719

	INDEX 4894 SAMPLE 9984	INDEX 4895 SAMPLE 9985	INDEX 4896 SAMPLE 11368
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	MOORE NW	MOORE NW	MOORE W
WELL NAME	CORFF NO. 1	CORFF NO. 1	E. HARRIS NO. 2
LOCATION	SEC. 5, T10N, R3W	SEC. 5, T10N, R3W	SEC. 29, T10N, R3W
OWNER	J.M. HUBER CORP.	J.M. HUBER CORP.	SUN OIL CO.
COMPLETED	08/03/64	08/03/64	04/24/50
SAMPLED	07/14/65	07/14/65	03/11/68
FORMATION	ORDO-VIOLA	PENN-PRUE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	7710	7075	7950
WELLHEAD PRESSURE,PSIG	2739	2201	900
OPEN FLOW, MCFD	43905	2500	250
COMPONENT, MOLE PCT			
METHANE	87.8	81.9	76.4
ETHANE	6.6	6.9	12.6
PROPANE	2.3	3.6	5.5
N-BUTANE	0.7	1.1	1.5
ISOBUTANE	0.5	0.7	0.8
N-PENTANE	0.2	0.3	0.8
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	1.2	4.8	1.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.04	0.08	0.04
HEATING VALUE*	1130	1139	1278
SPECIFIC GRAVITY	0.646	0.688	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4897 SAMPLE 11374	INDEX 4898 SAMPLE 12232	INDEX 4899 SAMPLE 3421
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	MOORE W	MOORE W	NORMAN N
WELL NAME	E. HARRIS NO. 1	SILER HEIRS NO. 1-L	D. ALLEN NO. 1
LOCATION	SEC. 29, T10N, R3W	SEC. 26, T10N, R4W	SEC. 27, T10N, R2E
OWNER	SUN OIL CO.	SHENANDOAH OIL CORP.	GULF OIL CO. U.S.
COMPLETED	12/09/51	11/25/69	10/--/36
SAMPLED	03/11/68	04/--/70	05/15/42
FORMATION	ORDO-SIMPSON	CAMO-ARBUCKLE	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8600	9641	7370
WELLHEAD PRESSURE,PSIG	1000	2959	NOT GIVEN
OPEN FLOW, MCFD	1500	2327	100
COMPONENT, MOLE PCT			
METHANE	85.6	79.9	46.4
ETHANE	7.1	8.0	50.4
PROPANE	3.1	4.1	---
N-BUTANE	1.3	0.9	---
ISOBUTANE	0.6	0.6	---
N-PENTANE	0.5	0.4	---
ISOPENTANE	0.4	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	0.5	5.8	2.2
OXYGEN	0.0	0.0	0.5
ARGON	0.0	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.0	0.4
HELIUM	0.01	0.00	0.05
HEATING VALUE*	1212	1137	1373
SPECIFIC GRAVITY	0.687	0.694	0.819

	INDEX 4900 SAMPLE 3426	INDEX 4901 SAMPLE 3557	INDEX 4902 SAMPLE 11523
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	NORMAN N	NORMAN N	NORMAN N
WELL NAME	FRANKLIN COM. NO. 1A	T. M. MARVEL NO. 1	MAY WALKER & STERLING NO. 1
LOCATION	SEC. 21, T10N, R2E	SEC. 21, T10N, R2E	SEC. 29, T10N, R2W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	TRICE PRODUCTION CO.
COMPLETED	05/29/35	03/27/36	--/--/59
SAMPLED	05/15/42	05/16/42	05/27/68
FORMATION	ORDO-SIMPSON	DEVO-WILCOX & SIMPSON	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6988	6960	6500
WELLHEAD PRESSURE,PSIG	1200	925	1200
OPEN FLOW, MCFD	23270	9898	2000
COMPONENT, MOLE PCT			
METHANE	77.2	67.4	80.3
ETHANE	20.7	29.4	7.9
PROPANE	---	---	4.4
N-BUTANE	---	---	1.4
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	1.9	2.4	4.4
OXYGEN	0.3	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.09	0.09	0.08
HEATING VALUE*	1153	1210	1173
SPECIFIC GRAVITY	0.667	0.715	0.704

	INDEX 4903 SAMPLE 12193	INDEX 4904 SAMPLE 11448	INDEX 4905 SAMPLE 11449
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	NORMAN S	OKLAHOMA CITY S	OKLAHOMA CITY S
WELL NAME	N. J. VALOUCH NO. 1	M. T. REYNOLDS 1-A	A. C. ADAMS NO. 2
LOCATION	SEC. 17, T8N, R2W	SEC. 6, T10N, R2W	SEC. 6, T10N, R2W
OWNER	UNION OIL CO. OF CALIFORNIA	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	04/23/68	09/28/58	10/29/60
SAMPLED	02/13/70	04/10/68	04/10/68
FORMATION	EOCE-WILCOX	ORDO-WILCOX	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8065	7375	7146
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1230	1657
OPEN FLOW, MCFD	7100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.5	79.5	83.7
ETHANE	10.5	7.9	7.2
PROPANE	7.4	4.5	3.6
N-BUTANE	2.3	2.0	1.3
ISOBUTANE	0.9	0.9	0.6
N-PENTANE	0.6	1.0	0.6
ISOPENTANE	0.6	0.4	0.2
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.3	0.7	0.6
NITROGEN	5.7	2.4	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.06	0.07	0.05
HEATING VALUE*	1283	1269	1207
SPECIFIC GRAVITY	0.786	0.743	0.696

	INDEX 4906 SAMPLE 15285	INDEX 4907 SAMPLE 5017	INDEX 4908 SAMPLE 14792
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	ASHLAND	ASHLAND S	ASHLAND S
WELL NAME	SIDMORE NO. 1-35	H. A. JONES NO. 1	SMALLEY NO. 1-12
LOCATION	SEC. 35, T3N, R11E	SEC. 35, T3N, R11E	SEC. 12, T3N, R11E
OWNER	ARKLA EXPLORATION CO.	OHIO OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/25/77	10/19/50	NOT GIVEN
SAMPLED	05/26/77	03/03/51	09/30/76
FORMATION	PENN-CROMWELL & WAPANUCKA	ORDO-	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6877	8955	3320
WELLHEAD PRESSURE,PSIG	2125	2600	500
OPEN FLOW, MCFD	4800	2500	5300
COMPONENT, MOLE PCT			
METHANE	95.5	95.8	85.4
ETHANE	1.7	1.4	3.1
PROPANE	1.2	0.3	1.5
N-BUTANE	0.1	0.2	0.4
ISOBUTANE	0.2	0.0	0.2
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	1.1	8.3
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.6	1.0	0.3
HELIUM	0.09	0.04	0.12
HEATING VALUE*	1016	1015	993
SPECIFIC GRAVITY	0.588	0.585	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4909 SAMPLE 14812	INDEX 4910 SAMPLE 3434	INDEX 4911 SAMPLE 3464
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	ASHLAND S	CENTRAHOMA	CENTRAHOMA
WELL NAME	GOODMAN NO. 1	HARRYMAN NO. 1	HARRYMAN NO. 2
LOCATION	SEC. 1, T3N, R11E	SEC. 27, T2N, R9E	SEC. 27, T2N, R9E
OWNER	NFC PETROLEUM CORP.	RAMSEY PETROLEUM CORP.	RAMSEY PETROLEUM CORP.
COMPLETED	06/17/76	05/14/41	05/25/41
SAMPLED	10/--/76	05/23/42	05/23/42
FORMATION	PENN-HARTSHORNE	PENN-CROMWELL	PENN-MCALESTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3347	4790	1208
WELLHEAD PRESSURE,PSIG	486	1750	550
OPEN FLOW, MCFD	4881	5000	10634
COMPONENT, MOLE PCT			
METHANE	91.3	79.5	80.1
ETHANE	3.3	19.8	15.7
PROPANE	1.7	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.1	TRACE	3.3
OXYGEN	TRACE	0.3	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	0.13	0.08	0.20
HEATING VALUE*	1062	1160	1093
SPECIFIC GRAVITY	0.616	0.657	0.650

	INDEX 4912 SAMPLE 3878	INDEX 4913 SAMPLE 8520	INDEX 4914 SAMPLE 8521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	CENTRAHOMA	CENTRAHOMA	CENTRAHOMA
WELL NAME	PAYTE NO. 1	MIKE MAYER JR., A NO. 1	C. W. JOHNSTON NO. 1
LOCATION	SEC. 28, T2N, R9E	SEC. 1, T1N, R9E	SEC. 6, T1N, R10E
OWNER	PHILLIPS PETROLEUM CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	05/02/44	11/01/61	01/23/62
SAMPLED	08/05/44	04/21/62	04/21/62
FORMATION	PENN-CROMWELL	ORDO-OIL CREEK	ORDO-MCLISH
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4973	8218	8082
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3305	3222
OPEN FLOW, MCFD	1698	32400	141000
COMPONENT, MOLE PCT			
METHANE	82.2	94.7	95.1
ETHANE	17.2	1.6	1.7
PROPANE	---	0.4	0.4
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.0	2.5	2.1
OXYGEN	0.5	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.08	0.07	0.07
HEATING VALUE*	1141	1006	1015
SPECIFIC GRAVITY	0.643	0.585	0.583

	INDEX 4915 SAMPLE 13672	INDEX 4916 SAMPLE 13673	INDEX 4917 SAMPLE 11313
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	CENTRAHOMA	CENTRAHOMA	CHILES DOME
WELL NAME	MIKE MOYER JR. A NO. 2	MIKE MAYER JR. ANO. 2	A.D. CODY GAS UNIT 2 NO. 1
LOCATION	SEC. 1, T1N, R9E	SEC. 1, T1N, R9E	SEC. 19, T3N, R10E
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/22/72	11/22/72	02/14/58
SAMPLED	08/01/73	08/01/73	02/27/68
FORMATION	ORDO-VIOLA & OIL CREEK	PENN-WAPANUCKA	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7475	6000	3650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	613
OPEN FLOW, MCFD	1000	2000	8023
COMPONENT, MOLE PCT			
METHANE	89.5	87.1	88.0
ETHANE	4.7	7.0	6.3
PROPANE	1.9	2.8	2.2
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.8	0.9	1.6
OXYGEN	0.2	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.04	0.06	0.08
HEATING VALUE*	1105	1145	1119
SPECIFIC GRAVITY	0.638	0.654	0.644

	INDEX 4918 SAMPLE 3670	INDEX 4919 SAMPLE 11660	INDEX 4920 SAMPLE 14112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	LULA NE	LULA NE	LULA NE
WELL NAME	CUSHING ROYALTY CORP. B1	BROORECHT NO. 1	MORGAN NO. 1
LOCATION	SEC. 22, T3N, R9E	SEC. 23, T3N, R9E	SEC. 27, T3N, R9E
OWNER	AMOCO PRODUCTION CO.	BBR OIL CORP.	WESTHEIMER-NEUSTADT CORP.
COMPLETED	05/22/43	01/04/68	09/25/73
SAMPLED	09/27/43	10/02/68	07/24/74
FORMATION	PENN-CROMWELL	PENN-WAPANUCKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3522	3114	4060
WELLHEAD PRESSURE,PSIG	1560	1290	1500
OPEN FLOW, MCFD	44800	6000	20000
COMPONENT, MOLE PCT			
METHANE	77.9	85.8	84.9
ETHANE	19.7	7.5	7.9
PROPANE	---	2.8	3.0
N-BUTANE	---	0.7	0.8
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	1.6	1.9	2.2
OXYGEN	0.4	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.08	0.08	0.09
HEATING VALUE*	1142	1134	1142
SPECIFIC GRAVITY	0.663	0.653	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4921 SAMPLE 14126	INDEX 4922 SAMPLE 9058	INDEX 4923 SAMPLE 6921
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	LULA NE	TUPELO N	WILDCAT
WELL NAME	MORGAN NO. 1	SIMS NO. 1	COOK NO. 2
LOCATION	SEC. 27, T3N, R9E	SEC. 17, T2N, R9E	SEC. 15, T1N, R11E
OWNER	WESTHEIMER-NEUSTADT CORP.	HEFNER PRODUCTION CO.	ANDERSON-PRICHARD OIL CORP.
COMPLETED	09/25/73	11/30/61	NOT GIVEN
SAMPLED	07/24/74	08/06/63	01/12/59
FORMATION	PENN-CROMWELL	PENN-CROMWELL	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4060	5520	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1500	2225	3095
OPEN FLOW, MCFD	20000	15500	205
COMPONENT, MOLE PCT			
METHANE	85.1	81.5	97.0
ETHANE	7.7	9.1	0.6
PROPANE	3.0	3.8	0.1
N-BUTANE	0.8	1.3	0.0
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.2	0.8	0.0
CYCLOPENTANE	TRACE	0.3	0.0
HEXANES PLUS	0.1	0.6	0.0
NITROGEN	2.3	1.7	0.5
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	1.5
HELIUM	0.08	0.10	0.10
HEATING VALUE*	1137	1219	966
SPECIFIC GRAVITY	0.660	0.709	0.574

	INDEX 4924 SAMPLE 5083	INDEX 4925 SAMPLE 3756	INDEX 4926 SAMPLE 3828
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	APACHE SE	FORT SILL	FORT SILL
WELL NAME	MYERS NO. 1	H. E. CLINE NO. 1	STEPHENS E NO. 1
LOCATION	SEC. 10, T4N, R11W	SEC. 8, T3N, R10W	SEC. 20, T3N, R10W
OWNER	TIDE WATER OIL CO.	TEXACO INC.	JOHN B. HAWLEY, JR.
COMPLETED	03/21/51	04/--/43	10/03/43
SAMPLED	07/03/51	04/01/44	05/06/44
FORMATION	NOT GIVEN	-SAND	PERM-
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3940	820	800
WELLHEAD PRESSURE,PSIG	1500	210	100
OPEN FLOW, MCFD	1629	3000	3000
COMPONENT, MOLE PCT			
METHANE	87.5	83.8	75.8
ETHANE	6.5	13.9	19.0
PROPANE	2.4	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.5	1.8	4.8
OXYGEN	0.2	0.4	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.03	TRACE	0.08
HEATING VALUE*	1126	1098	1108
SPECIFIC GRAVITY	0.651	0.634	0.671

	INDEX 4927 SAMPLE 14281	INDEX 4928 SAMPLE 5441	INDEX 4929 SAMPLE 15017
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	FT. SILL	HANBURG NE	LAWTON
WELL NAME	RYAN NO. 1	GOODY NO. 1	WATSON NO. B-2
LOCATION	SEC. 23, T3N, R10W	SEC. 21, T2N, R9W	SEC. 16, T2N, R10W
OWNER	SHERFSTER, INC.	WILLIAM H. ATKINSON	OUACHITA EXPLORATION, INC.
COMPLETED	11/30/73	11/05/52	NOT GIVEN
SAMPLED	02/28/75	04/02/53	04/14/77
FORMATION	PERM-RYAN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1395	728	NOT GIVEN
WELLHEAD PRESSURE,PSIG	535	NOT GIVEN	380
OPEN FLOW, MCFD	2340	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	90.9	87.8	84.3
ETHANE	3.6	4.8	4.8
PROPANE	1.7	1.9	1.9
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.8	3.8	6.5
OXYGEN	0.0	TRACE	1.0
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.10	0.06	0.06
HEATING VALUE*	1062	1075	1034
SPECIFIC GRAVITY	0.615	0.638	0.653

	INDEX 4930 SAMPLE 11243	INDEX 4931 SAMPLE 11357	INDEX 4932 SAMPLE 15014
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	STERLING	STERLING	STERLING W
WELL NAME	MARY G. VAUGHT NO. 1	SALLIE NO. 1	W.S. SANDERS NO. 10-1
LOCATION	SEC. 27, T3N, R9W	SEC. 7, T3N, R9W	SEC. 10, T3N, R10W
OWNER	ARKLA EXPLORATION CO.	A. A. CAMERON	WOODS PETROLEUM CORP.
COMPLETED	01/03/67	NOT GIVEN	01/13/77
SAMPLED	12/13/67	03/06/68	05/10/77
FORMATION	-MIX	PENN-ROWE	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5215	5692	5684
WELLHEAD PRESSURE,PSIG	600	1400	2412
OPEN FLOW, MCFD	950	300000	35622
COMPONENT, MOLE PCT			
METHANE	90.2	86.6	93.0
ETHANE	4.2	4.0	3.6
PROPANE	1.4	1.9	1.1
N-BUTANE	0.5	1.1	0.3
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.8	5.4	1.1
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.08	0.05
HEATING VALUE*	1063	1070	1075
SPECIFIC GRAVITY	0.623	0.652	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4933 SAMPLE 15015	INDEX 4934 SAMPLE 11	INDEX 4935 SAMPLE 925
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COTTON	CREEK
FIELD	STERLING W	WALTERS	BRISTOW N
WELL NAME	HARDZOG NO. 15-1	NEAL NO. 2	WRIGHT NO. 1
LOCATION	SEC. 15, T3N, R10W	SEC. 31, T1S, R10W	SEC. 19, T17N, R9E
OWNER	WOODS PETROLEUM CORP.	M.O. & G. CO. & H.J. PARKER	ATLANTIC RICHFIELD CO.
COMPLETED	02/04/77	NOT GIVEN	NOT GIVEN
SAMPLED	05/10/77	05/16/19	09/16/24
FORMATION	PENN-SPRINGER	PENN-CISCO	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	355
DEPTH, FEET	7260	2109	2645
WELLHEAD PRESSURE,PSIG	2415	540	850
OPEN FLOW, MCFD	41399	12000	11000
COMPONENT, MOLE PCT			
METHANE	93.4	0.0	72.9
ETHANE	3.7	0.0	18.9
PROPANE	1.2	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.7	0.0	7.1
OXYGEN	0.0	0.0	0.6
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.05	TRACE	0.09
HEATING VALUE*	1080	0	1077
SPECIFIC GRAVITY	0.605	0.000	0.681

	INDEX 4936 SAMPLE 15363	INDEX 4937 SAMPLE 2491	INDEX 4938 SAMPLE 11097
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	BRISTOW S	CUSHING	CUSHING
WELL NAME	COLEMAN NO. 1	NORA WILLIAMS NO. 10	TURNER NO. 1
LOCATION	SEC. 17, T15N, R9E	SEC. 3, T16N, R7E	SEC. 26, T16N, R7E
OWNER	KRUMME OIL CO.	MOBIL OIL CORP.	M. L. MARRS
COMPLETED	01/03/78	03/01/32	09/08/67
SAMPLED	08/15/78	05/03/32	09/08/67
FORMATION	PENN-DUTCHER	PENN-TUCKER	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3081	2625	2955
WELLHEAD PRESSURE,PSIG	580	350	320
OPEN FLOW, MCFD	350	3000	1250
COMPONENT, MOLE PCT			
METHANE	81.0	67.4	88.8
ETHANE	7.8	23.6	5.2
PROPANE	4.5	---	0.5
N-BUTANE	1.3	---	0.2
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.3	---	0.1
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	4.1	8.5	3.9
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.06	0.12	0.08
HEATING VALUE*	1161	1106	1053
SPECIFIC GRAVITY	0.693	0.709	0.627

	INDEX 4939 SAMPLE 2484	INDEX 4940 SAMPLE 3304	INDEX 4941 SAMPLE 3843
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	HITCHCOCK	IRON POST	IRON POST
WELL NAME	BARNETT NO. 1	LEWIS BEAR NO. 2	BEAVER NO. 1
LOCATION	SEC. 18, T17N, R10E	SEC. 3, T14N, R7E	SEC. 32, T14N, R8E
OWNER	CURTIS OIL CO., ET AL.	MID CONTINENT REFINING CO.	NORTHERN ORDNANCE INC.
COMPLETED	02/01/32	03/14/42	05/02/44
SAMPLED	03/24/32	04/22/42	05/22/44
FORMATION	NOT GIVEN	NOT GIVEN	PENN-FLAT-TOP
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2166	3146	2491
WELLHEAD PRESSURE,PSIG	780	900	150
OPEN FLOW, MCFD	7000	12568	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.4	79.9	24.0
ETHANE	33.1	15.8	67.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.6	3.6	8.4
OXYGEN	0.1	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.16	0.12	0.00
HEATING VALUE*	1195	1093	1444
SPECIFIC GRAVITY	0.751	0.651	0.924

	INDEX 4942 SAMPLE 11108	INDEX 4943 SAMPLE 1822	INDEX 4944 SAMPLE 3863
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	IRON POST	MANNFORD	MILFAY
WELL NAME	WINN NO. 1	HARMON NO. 1	LEOTA GOFF NO. 1
LOCATION	SEC. 23, T15N, R8E	SEC. 28, T19N, R9E	SEC. 14, T14N, R7E
OWNER	NORTON & POUND DRILLING CO.	CARTER OIL CO. & W.J. SHERRY	ATLANTIC RICHFIELD CO.
COMPLETED	04/04/66	04/01/29	06/16/44
SAMPLED	09/09/67	08/03/29	07/28/44
FORMATION	PENN-DUTCHER	PENN-CLEVELAND	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3287	1359	2656
WELLHEAD PRESSURE,PSIG	400	555	NOT GIVEN
OPEN FLOW, MCFD	2150	3000	1705
COMPONENT, MOLE PCT			
METHANE	83.9	75.5	76.7
ETHANE	8.1	13.2	17.4
PROPANE	3.2	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	3.0	11.0	5.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.06	0.17	0.11
HEATING VALUE*	1139	1001	1089
SPECIFIC GRAVITY	0.669	0.669	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4945 SAMPLE 11765	INDEX 4946 SAMPLE 3391	INDEX 4947 SAMPLE 4181
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	SLICK	STROUD	STROUD
WELL NAME	BISHOP NO. 1	ROUNTREE NO. 1	MCVEY NO. 1
LOCATION	SEC. 29, T16N, R10E	SEC. 2, T14N, R7E	SEC. 29, T15N, R7E
OWNER	KISKA OIL CO.	D. B. MALERNEE	DAVON OIL CO.
COMPLETED	09/19/68	--/--/42	11/30/46
SAMPLED	02/19/69	05/13/42	11/--/46
FORMATION	PENN-BARTLESVILLE	PENN-BARTLESVILLE	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2423	3117	2860
WELLHEAD PRESSURE,PSIG	780	1150	NOT GIVEN
OPEN FLOW, MCFD	4500	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.2	78.9	75.0
ETHANE	4.1	15.9	19.0
PROPANE	2.9	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	9.1	4.5	5.6
OXYGEN	0.1	0.4	0.1
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.13	0.11
HEATING VALUE*	1067	1084	1100
SPECIFIC GRAVITY	0.688	0.655	0.674

	INDEX 4948 SAMPLE 3779	INDEX 4949 SAMPLE 13291	INDEX 4950 SAMPLE 13660
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CUSTER	CUSTER
FIELD	VANDERSLICE	ANTHON	ANTHON
WELL NAME	ORA GIBSON	WRIGHT NO. 1-4	WRIGHT NO. 1-4
LOCATION	SEC. 31, T14N, R7E	SEC. 4, T14N, R17W	SEC. 4, T14N, R17W
OWNER	TEXACO INC.	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	12/--/42	04/27/72	04/25/73
SAMPLED	04/11/44	07/07/72	07/26/73
FORMATION	PENN-PRUE	MISS-OSAGE	PENN-MORROW
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	2857	15600	13106
WELLHEAD PRESSURE,PSIG	965	5599	7448
OPEN FLOW, MCFD	9580	3252	11882
COMPONENT, MOLE PCT			
METHANE	67.4	96.0	95.9
ETHANE	20.5	0.3	1.6
PROPANE	---	TRACE	0.3
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.1
NITROGEN	11.4	0.7	0.4
OXYGEN	0.4	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	2.9	1.3
HELIUM	0.15	0.02	0.03
HEATING VALUE*	1050	978	1020
SPECIFIC GRAVITY	0.705	0.586	0.584

	INDEX 4951 SAMPLE 15305	INDEX 4952 SAMPLE 11288	INDEX 4953 SAMPLE 11289
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ANTHON	ANTHON NW	ANTHON NW
WELL NAME	HOELKER NO. 1	LYLE COIT NO 1	RENE GRAFT NO. 1
LOCATION	SEC. 33, T15N, R17W	SEC. 17, T15N, R17W	SEC. 18, T15N, R17W
OWNER	FERGUSON OIL CO.	HUNT OIL CO.	HUNT OIL CO.
COMPLETED	09/19/77	10/18/61	05/20/61
SAMPLED	06/22/78	02/16/68	02/16/68
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15708	11196	12240
WELLHEAD PRESSURE,PSIG	4200	4800	988
OPEN FLOW, MCFD	8630	746	915
COMPONENT, MOLE PCT			
METHANE	92.2	98.3	97.1
ETHANE	0.2	0.7	0.9
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.1	2.8	0.3
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.3	1.4	1.5
HELIUM	0.03	0.02	0.02
HEATING VALUE*	938	970	1003
SPECIFIC GRAVITY	0.616	0.587	0.575

	INDEX 4954 SAMPLE 13289	INDEX 4955 SAMPLE 15800	INDEX 4956 SAMPLE 16089
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ANTHON NW	ARAPAHO	CARPENTER E
WELL NAME	GRAFT NO. 1-A	COULSON NO. 1	HUTSON NO. 1-15
LOCATION	SEC. 7, T15N, R17W	SEC. 28, T13N, R17W	SEC. 15, T12N, R20W
OWNER	A. J. WESSELY	HARPER OIL CO.	GHK CO.
COMPLETED	10/30/71	NOT GIVEN	02/11/80
SAMPLED	07/--/72	10/02/79	10/13/80
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10742	15740	14803
WELLHEAD PRESSURE,PSIG	4974	9800	9170
OPEN FLOW, MCFD	2286	NOT GIVEN	7600
COMPONENT, MOLE PCT			
METHANE	81.3	96.9	95.9
ETHANE	12.8	0.7	2.1
PROPANE	4.5	0.1	0.4
N-BUTANE	1.0	TRACE	0.1
ISOBUTANE	0.7	TRACE	TRACE
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.9	0.9
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1222	1002	1028
SPECIFIC GRAVITY	0.702	0.581	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4957 SAMPLE 11431	INDEX 4958 SAMPLE 11631	INDEX 4959 SAMPLE 13922
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CRANE SE	CUSTER CITY	CUSTER CITY E
WELL NAME	CRANE STAR NO. 1	JONES NO. 1	PAULINE REINSON NO. 1
LOCATION	SEC. 17, T15N, R14W	SEC. 31, T15N, R15W	SEC. 20, T14N, R15W
OWNER	EASON OIL CO.	PARKER DRILLING CO.	LVO CORP.
COMPLETED	04/05/66	04/15/67	01/15/74
SAMPLED	04/05/68	08/20/68	02/18/74
FORMATION	PENN-MORROW & MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11100	11074	12250
WELLHEAD PRESSURE,PSIG	4500	3600	6000
OPEN FLOW, MCFD	NOT GIVEN	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.6	95.2	93.7
ETHANE	3.0	1.3	3.7
PROPANE	0.7	0.0	1.0
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	TRACE	0.0	0.2
N-PENTANE	0.2	0.7	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.3	1.1	0.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.7
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1051	1044	1064
SPECIFIC GRAVITY	0.594	0.598	0.602

	INDEX 4960 SAMPLE 7648	INDEX 4961 SAMPLE 9785	INDEX 4962 SAMPLE 9838
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CUSTER CITY N	CUSTER CITY N	CUSTER CITY NORTH
WELL NAME	TED WEBB UNIT NO. 1	DIEHL ESTATE NO. 1	SHARP HUNT UNIT NO. 1
LOCATION	SEC. 23, T15N, R16W	SEC. 20, T15N, R16W	SEC. 26, T15N, R16W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	06/14/60	10/01/64	01/03/65
SAMPLED	08/17/60	03/05/65	04/08/65
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14174	14700	10249
WELLHEAD PRESSURE,PSIG	5335	4314	4465
OPEN FLOW, MCFD	13400	55000	11500
COMPONENT, MOLE PCT			
METHANE	93.4	95.1	84.8
ETHANE	0.6	0.6	7.5
PROPANE	0.1	0.4	3.2
N-BUTANE	0.1	TRACE	0.7
ISOBUTANE	TRACE	TRACE	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	1.0	0.8	2.1
OXYGEN	TRACE	TRACE	0.3
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	2.9	0.6
HELIUM	0.02	0.02	0.04
HEATING VALUE*	992	9900	1132
SPECIFIC GRAVITY	0.615	0.595	0.665

	INDEX 4963 SAMPLE 11406	INDEX 4964 SAMPLE 15458	INDEX 4965 SAMPLE 12752
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CUSTER CITY SE	FAY S	INDIANAPOLIS
WELL NAME	BURGTORF NO. 1	SOBER UNIT A NO. 1	NICKEL NO. 35-1
LOCATION	SEC. 6, T13N, R15W	SEC. 2, T15N, R14W	SEC. 35, T13N, R16W
OWNER	GULF OIL CO.-U.S.	AMOCO PRODUCTION CO.	RODEN OIL CO.
COMPLETED	08/--/59	08/16/78	11/19/70
SAMPLED	03/14/68	10/26/78	04/02/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13365	10478	14880
WELLHEAD PRESSURE,PSIG	4152	5613	9400
OPEN FLOW, MCFD	1738	2405	48000
COMPONENT, MOLE PCT			
METHANE	95.6	87.2	96.5
ETHANE	2.5	6.3	1.0
PROPANE	0.5	2.9	0.2
N-BUTANE	0.3	0.7	TRACE
ISOBUTANE	0.0	0.5	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	0.4	0.6	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	1.3
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1036	1158	1022
SPECIFIC GRAVITY	0.585	0.656	0.584

	INDEX 4966 SAMPLE 15740	INDEX 4967 SAMPLE 8016	INDEX 4968 SAMPLE 13560
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	INDIANAPOLIS	PUTNAM	STAFFORD N
WELL NAME	STEHR NO. 1	M. E. HORTON NO. 1	BEAUCHAMP NO. 1-21
LOCATION	SEC. 21, T13N, R16W	SEC. 14, T15N, R15W	SEC. 21, T13N, R18W
OWNER	AN-SON CORP.	MOBIL OIL CO.	ARKLA EXPLORATION CO.
COMPLETED	07/24/79	03/22/61	12/27/72
SAMPLED	09/06/79	06/12/61	03/06/73
FORMATION	PENN-ATOKA	MISS-MERAMEC	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13217	13192	12310
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7000	6600
OPEN FLOW, MCFD	1200	1018	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.8	93.2	83.7
ETHANE	7.5	3.2	8.3
PROPANE	2.8	0.8	4.2
N-BUTANE	0.5	0.4	1.0
ISOBUTANE	0.5	0.4	0.8
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	0.8	0.4	0.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.5
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1147	1081	1220
SPECIFIC GRAVITY	0.656	0.616	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4969 SAMPLE 14979	INDEX 4970 SAMPLE 15908	INDEX 4971 SAMPLE 16104
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	THOMAS S	THOMAS S	WEATHERFORD
WELL NAME	BOYD MILLER NO. 1	C. B. MCNEILL NO. 4	BERGNER NO. 1
LOCATION	SEC. 10, T14N, R14W	SEC. 13, T14N, R14W	SEC. 21, T13N, R14W
OWNER	DAVIS OIL CO.	SOUTHPORT EXPLORATION, INC.	KAISER-FRANCIS OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	08/26/80
SAMPLED	04/24/77	02/28/80	10/20/80
FORMATION	PENN-RED FORK	PENN-RED FORK	-BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10630	13504
WELLHEAD PRESSURE,PSIG	4982	NOT GIVEN	5900
OPEN FLOW, MCFD	4350	449	25396
COMPONENT, MOLE PCT			
METHANE	83.0	78.3	96.3
ETHANE	9.3	9.1	1.8
PROPANE	4.8	4.6	0.3
N-BUTANE	0.9	1.0	TRACE
ISOBUTANE	0.5	0.6	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.9	4.3	0.3
OXYGEN	0.0	1.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	1.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1191	1156	1019
SPECIFIC GRAVITY	0.685	0.710	0.579

	INDEX 4972 SAMPLE 15809	INDEX 4973 SAMPLE 13559	INDEX 4974 SAMPLE 11553
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	DEWEY
FIELD	WEATHERFORD N	WEATHERFORD NW	ALEDO
WELL NAME	MAST NO. 1-16	URANIA LEONARD NO. 1	E. H. WALKER NO. 1
LOCATION	SEC. 16, T13N, R14W	SEC. 26, T13N, R15W	SEC. 5, T15N, R18W
OWNER	TENNECO OIL CO.	ARKLA EXPLORATION CO.	J. C. BARNES OIL CO.
COMPLETED	06/13/79	09/05/72	03/13/67
SAMPLED	10/17/79	03/06/73	06/19/68
FORMATION	PENN-SPRINGER&MORROW	PENN-RED FORK	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13820	13428	15372
WELLHEAD PRESSURE,PSIG	6600	6556	5222
OPEN FLOW, MCFD	6200	1450	115079
COMPONENT, MOLE PCT			
METHANE	96.5	60.2	91.8
ETHANE	1.8	15.8	0.2
PROPANE	0.2	12.0	0.0
N-BUTANE	0.1	3.7	0.3
ISOBUTANE	0.0	2.8	0.0
N-PENTANE	0.0	0.9	0.2
ISOPENTANE	0.1	1.8	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	1.4	TRACE
NITROGEN	0.3	0.3	1.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	5.3
HELIUM	0.03	TRACE	0.04
HEATING VALUE*	1023	1618	961
SPECIFIC GRAVITY	0.580	0.951	0.626

	INDEX 4975 SAMPLE 12823	INDEX 4976 SAMPLE 12824	INDEX 4977 SAMPLE 14587
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	ALEDO	ALEDO	CESTOS
WELL NAME	BRAY NO. 1	BRAY NO. 1	TERREL NO. 1
LOCATION	SEC. 29, T16N, R18W	SEC. 29, T16N, R18W	SEC. 2, T17N, R20W
OWNER	MCCULLOCH OIL CORP.	MCCULLOCH OIL CORP.	WOODS PETROLEUM CORP.
COMPLETED	09/28/70	09/28/70	01/15/76
SAMPLED	05/21/71	05/21/71	02/23/76
FORMATION	PENN-CLEVELAND	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9604	10945	9102
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3400
OPEN FLOW, MCFD	1910	700	1000
COMPONENT, MOLE PCT			
METHANE	81.1	82.3	95.5
ETHANE	10.3	9.7	2.3
PROPANE	5.2	4.0	0.7
N-BUTANE	0.9	0.9	0.1
ISOBUTANE	0.7	0.7	0.1
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	0.9	0.6	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.4
HELIUM	0.04	0.03	0.08
HEATING VALUE*	1209	1216	1043
SPECIFIC GRAVITY	0.696	0.698	0.586

	INDEX 4978 SAMPLE 12740	INDEX 4979 SAMPLE 14506	INDEX 4980 SAMPLE 14737
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	CESTOS SE	CESTOS SW	EAGLE CITY W
WELL NAME	CARTER NO. 1	KENNEDY BROTHERS NO. 1	ROY WOMACK UNIT NO. 1
LOCATION	SEC. 20, T19N, R17W	SEC. 35, T19N, R19W	SEC. 36, T17N, R14W
OWNER	SNEE & EBERLY	JONES & PELLOW OIL CO.	BONRAY OIL CO.
COMPLETED	02/26/70	06/27/75	04/24/76
SAMPLED	03/24/71	10/24/75	08/25/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9811	10160	9700
WELLHEAD PRESSURE,PSIG	3750	NOT GIVEN	5430
OPEN FLOW, MCFD	NOT GIVEN	26550	1500
COMPONENT, MOLE PCT			
METHANE	95.3	96.0	90.0
ETHANE	2.1	1.6	5.8
PROPANE	0.5	0.4	2.0
N-BUTANE	0.1	0.1	0.4
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.5	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.3	0.4
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1032	1023	1106
SPECIFIC GRAVITY	0.592	0.587	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4981 SAMPLE 12531	INDEX 4982 SAMPLE 14950	INDEX 4983 SAMPLE 15218
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	LEEDEY	LEEDEY N	LEEDEY N
WELL NAME	HENRY HARRELL ET AL. NO. 1	FARISS NO. 1	MOORE NO. 1-34
LOCATION	SEC. 10, T16N, R20W	SEC. 36, T17N, R20W	SEC. 34, T17N, R20W
OWNER	MCCULLOCH OIL CORP.	WOODS PETROLEUM CORP.	DYCO PETROLEUM CORP.
COMPLETED	04/28/70	12/08/75	NOT GIVEN
SAMPLED	11/17/70	03/17/77	03/02/78
FORMATION	DEVO-HUNTON	PENN-RED FORK	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16464	10406	10230
WELLHEAD PRESSURE,PSIG	5793	2828	5000
OPEN FLOW, MCFD	56000	1290	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.8	82.1	80.2
ETHANE	0.5	8.9	10.0
PROPANE	0.1	4.4	4.3
N-BUTANE	0.0	1.1	1.0
ISOBUTANE	0.0	0.7	0.5
N-PENTANE	0.0	0.4	0.2
ISOPENTANE	0.0	0.5	0.3
CYCLOPENTANE	0.0	0.2	0.1
HEXANES PLUS	0.0	0.5	0.2
NITROGEN	2.3	0.5	2.2
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.7	0.6
HELIUM	0.04	0.03	0.03
HEATING VALUE*	982	1237	1189
SPECIFIC GRAVITY	0.579	0.712	0.703

	INDEX 4984 SAMPLE 14889	INDEX 4985 SAMPLE 14499	INDEX 4986 SAMPLE 8958
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	LEEDEY SE	LEONEL SE	NOBSCOT NW
WELL NAME	GAMBLE NO. 1	BOND NO. 1	LEO HEWITT NO. 1
LOCATION	SEC. 15, T16N, R20W	SEC. 12, T17N, R14W	SEC. 24, T17N, R15W
OWNER	UNION OIL CO. OF CALIFORNIA	TEXAS OIL & GAS CORP.	TEXACO INC. & SUN OIL CO.
COMPLETED	05/28/76	NOT GIVEN	11/15/62
SAMPLED	01/27/77	10/24/75	05/14/63
FORMATION	DEVO-HUNTON	NOT GIVEN	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16582	NOT GIVEN	10117
WELLHEAD PRESSURE,PSIG	4340	NOT GIVEN	2995
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	815
COMPONENT, MOLE PCT			
METHANE	94.5	88.0	83.4
ETHANE	0.3	6.7	7.3
PROPANE	TRACE	2.8	4.8
N-BUTANE	0.0	0.6	1.6
ISOBUTANE	0.0	0.4	0.5
N-PENTANE	0.0	0.1	0.5
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	0.1	0.7
NITROGEN	2.1	0.5	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.6	0.2
HELIUM	0.04	0.04	0.04
HEATING VALUE*	963	1136	1257
SPECIFIC GRAVITY	0.593	0.647	0.714

	INDEX 4987 SAMPLE 11255	INDEX 4988 SAMPLE 9818	INDEX 4989 SAMPLE 13507
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	NOBSCOT NW	OAKWOOD N	OAKWOOD NW
WELL NAME	CROSS UNIT NO. 1	HARPER UNIT NO. 1	FEIKES NO. 1
LOCATION	SEC. 25, T17N, R16W	SEC. 4, T17N, R14W	SEC. 31, T18N, R14W
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	WOODS PETROLEUM CORP.
COMPLETED	10/01/67	09/24/64	10/25/72
SAMPLED	01/10/68	03/22/65	01/18/73
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10244	9470	9370
WELLHEAD PRESSURE,PSIG	4250	4239	3712
OPEN FLOW, MCFD	9245	7576	6376
COMPONENT, MOLE PCT			
METHANE	91.9	85.9	82.0
ETHANE	3.6	7.7	7.6
PROPANE	1.1	3.2	3.8
N-BUTANE	0.3	0.7	1.5
ISOBUTANE	0.2	0.4	0.9
N-PENTANE	0.1	TRACE	0.9
ISOPENTANE	0.2	0.3	0.7
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.9
NITROGEN	1.3	1.0	0.8
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1068	1146	1268
SPECIFIC GRAVITY	0.615	0.657	0.731

	INDEX 4990 SAMPLE 13508	INDEX 4991 SAMPLE 12421	INDEX 4992 SAMPLE 6277
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	OAKWOOD NW	PUTMAN W	PUTNAM
WELL NAME	STATE UNIT NO. 1	CLARK NO. 1	A. M. KUNC NO. 1
LOCATION	SEC. 36, T18N, R15W	SEC. 8, T16N, R17W	SEC. 11, T17N, R18W
OWNER	WOODS PETROLEUM CORP.	WESSELY PETROLEUM, LTD.	ATLANTIC RICHFIELD CO.
COMPLETED	08/12/72	01/17/70	01/02/57
SAMPLED	01/18/73	NOT GIVEN	03/14/57
FORMATION	PENN-MORROW	DEVO-HUNTON	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9380	14078	9159
WELLHEAD PRESSURE,PSIG	3499	4740	3500
OPEN FLOW, MCFD	14277	12439	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.0	93.6	81.2
ETHANE	26.5	0.3	10.2
PROPANE	13.0	TRACE	4.7
N-BUTANE	2.7	0.0	1.2
ISOBUTANE	1.7	0.0	0.8
N-PENTANE	0.6	0.0	0.3
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.3
NITROGEN	0.0	1.3	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	4.7	0.5
HELIUM	0.02	0.03	0.07
HEATING VALUE*	1556	954	1235
SPECIFIC GRAVITY	0.915	0.607	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4993 SAMPLE 8391	INDEX 4994 SAMPLE 9944	INDEX 4995 SAMPLE 10011
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	WELLS UNIT NO. 1	RIGG UNIT NO. 1	RIGG UNIT NO. 1
LOCATION	SEC. 30, T17N, R17W	SEC. 30, T18N, R16W	SEC. 30, T18N, R16W
OWNER	PETROLEUM, INC.	AMERADA HESS CORP.	AMERADA HESS CORP.
COMPLETED	09/25/61	08/20/64	07/11/64
SAMPLED	12/17/61	06/29/65	07/22/65
FORMATION	PENN-OSWEGO	PENN-COTTAGE GROVE	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9092	7730	7239
WELLHEAD PRESSURE,PSIG	3175	2089	2059
OPEN FLOW, MCFD	57118	3520	2231
COMPONENT, MOLE PCT			
METHANE	72.3	78.7	80.0
ETHANE	11.8	9.0	8.7
PROPANE	8.5	5.1	4.7
N-BUTANE	2.2	1.4	1.2
ISOBUTANE	2.0	1.0	0.6
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.6	0.3	1.0
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.4
NITROGEN	1.2	2.9	2.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.3
HELIUM	0.09	0.20	0.16
HEATING VALUE*	1350	1230	1220
SPECIFIC GRAVITY	0.794	0.729	0.718

	INDEX 4996 SAMPLE 10502	INDEX 4997 SAMPLE 10503	INDEX 4998 SAMPLE 10504
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	FIELDS UNIT NO. 1-31	CALKINS UNIT NO. 1-25	CALKINS UNIT NO. 1
LOCATION	SEC. 31, T18N, R16W	SEC. 25, T18N, R17W	SEC. 25, T18N, R17W
OWNER	SARKEYS INC.	SARKEYS INC.	SARKEYS INC.
COMPLETED	09/16/63	01/27/65	01/27/65
SAMPLED	08/01/65	08/01/65	08/01/65
FORMATION	PENN-OSWEGO	PENN-COTTAGE GROVE	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8652	7795	7282
WELLHEAD PRESSURE,PSIG	1750	2054	2111
OPEN FLOW, MCFD	632	6200	1170
COMPONENT, MOLE PCT			
METHANE	80.9	79.5	80.9
ETHANE	10.6	9.0	9.0
PROPANE	4.5	5.1	4.5
N-BUTANE	1.0	1.6	1.2
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.1	0.7	0.2
ISOPENTANE	0.4	0.1	0.4
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.3
NITROGEN	1.6	2.5	2.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.16	0.17
HEATING VALUE*	1203	1234	1206
SPECIFIC GRAVITY	0.695	0.723	0.704

	INDEX 4999 SAMPLE 10806	INDEX 5000 SAMPLE 10913	INDEX 5001 SAMPLE 11391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	HARRY BUTLER NO. 2	MERCER-HALLMARK UNIT NO. 1	W. J. HOYT A UNIT
LOCATION	SEC. 8, T17N, R16W	SEC. 10, T18N, R18W	SEC. 27, T1AN, R17W
OWNER	TENNECO OIL CO.	AMERADA HESS CORP.	CONTINENTAL OIL CO.
COMPLETED	10/01/66	09/16/66	NOT GIVEN
SAMPLED	11/29/66	04/06/67	03/19/68
FORMATION	PENN-BIG LIME	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8800	10186	9962
WELLHEAD PRESSURE,PSIG	1700	3350	2400
OPEN FLOW, MCFD	4500	56550	734
COMPONENT, MOLE PCT			
METHANE	77.8	95.7	94.6
ETHANE	8.9	1.9	2.7
PROPANE	5.2	0.4	0.7
N-BUTANE	1.7	0.1	0.1
ISOBUTANE	0.7	0.0	0.2
N-PENTANE	0.5	0.1	0.2
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	3.4	0.4	0.3
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	0.8
HELIUM	0.15	0.04	0.04
HEATING VALUE*	1243	1027	1054
SPECIFIC GRAVITY	0.740	0.585	0.597

	INDEX 5002 SAMPLE 11392	INDEX 5003 SAMPLE 11393	INDEX 5004 SAMPLE 11541
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	LITTLE HAWK UNIT NO. 1	O. C. PETREE	PASTORIOUS NO. 1
LOCATION	SEC. 19, T18N, R17W	SEC. 2, T17N, R18W	SEC. 10, T17N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	APACHE CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	06/15/62
SAMPLED	03/19/68	03/19/68	06/--/68
FORMATION	PENN-MORROW	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10134	9131	9550
WELLHEAD PRESSURE,PSIG	2500	2800	3052
OPEN FLOW, MCFD	13000	1057	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.5	82.1	77.8
ETHANE	1.7	9.9	5.6
PROPANE	0.5	4.4	6.2
N-BUTANE	0.6	1.0	1.9
ISOBUTANE	0.0	0.5	0.2
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.0	0.2	1.9
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	2.3	0.9	4.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.4	1.2
HELIUM	0.32	0.06	0.05
HEATING VALUE*	999	1209	1215
SPECIFIC GRAVITY	0.592	0.694	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5005 SAMPLE 13203	INDEX 5006 SAMPLE 14733	INDEX 5007 SAMPLE 14959
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	KNOX NO. 1-33	GOSDA UNIT NO. 1	FARRIS NO. 1
LOCATION	SEC. 33, T17N, R18W	SEC. 8, T17N, R17W	SEC. 7, T16N, R18W
OWNER	MCCULLOCH OIL CORP.	ENERGY RESERVES GROUP, INC.	WESSELY ENERGY CORP.
COMPLETED	05/26/71	04/18/76	04/15/76
SAMPLED	05/08/72	08/18/76	04/07/77
FORMATION	MISS-	DEVO-HUNTON	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14388	13362	8512
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4150	2239
OPEN FLOW, MCFD	4675	44	969
COMPONENT, MOLE PCT			
METHANE	96.5	93.3	82.1
ETHANE	0.3	0.4	9.7
PROPANE	TRACE	0.1	4.6
N-BUTANE	0.0	0.0	1.1
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.9	1.4	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	4.9	0.3
HELIUM	0.03	0.03	0.07
HEATING VALUE*	983	955	1214
SPECIFIC GRAVITY	0.582	0.611	0.696

	INDEX 5008 SAMPLE 14960	INDEX 5009 SAMPLE 15826	INDEX 5010 SAMPLE 13521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	SEILING SW
WELL NAME	FARRIS NO. 1	NICHOLS NO. 1	FUQUA NO. 1
LOCATION	SEC. 7, T16N, R18W	SEC. 29, T16N, R15W	SEC. 14, T19N, R17W
OWNER	WESSELY ENERGY CORP.	FERGUSON OIL CO.	TEXAS OIL + GAS CORP.
COMPLETED	04/15/76	11/26/77	11/13/72
SAMPLED	04/07/77	10/--/79	01/05/73
FORMATION	PENN-TONKAWA	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7883	11246	9284
WELLHEAD PRESSURE,PSIG	1836	4134	1600
OPEN FLOW, MCFD	450	2545	2122
COMPONENT, MOLE PCT			
METHANE	81.9	86.9	91.1
ETHANE	9.3	6.2	4.4
PROPANE	4.4	2.5	1.9
N-BUTANE	1.1	0.4	0.5
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.7	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.8	0.2
NITROGEN	1.5	0.7	0.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	0.10	0.04	0.05
HEATING VALUE*	1191	1176	1108
SPECIFIC GRAVITY	0.692	0.675	0.630

	INDEX 5011 SAMPLE 14025	INDEX 5012 SAMPLE 13204	INDEX 5013 SAMPLE 14299
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	VICI	VICI TOWNSHIP	WILDCAT
WELL NAME	BASKETT NO. 1	CAIN NO. 1-11	KATY ZO WOMACH UNIT NO. 1
LOCATION	SEC. 28, T19N, R20W	SEC. 11, T19N, R20W	SEC. 25, T17N, R14W
OWNER	MONSANTO CO.	MCCULLOCH OIL CORP.	AMOCO PRODUCTION CO.
COMPLETED	12/27/73	03/02/71	10/15/74
SAMPLED	06/10/74	05/08/72	03/18/75
FORMATION	PENN-MORROW	MISS-	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10180	12328	9527
WELLHEAD PRESSURE,PSIG	1350	900	5552
OPEN FLOW, MCFD	1200	3099	7503
COMPONENT, MOLE PCT			
METHANE	85.7	96.4	88.2
ETHANE	7.6	0.8	6.7
PROPANE	3.5	0.3	2.9
N-BUTANE	0.8	0.2	0.5
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.7	0.9	0.6
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.3
HELIUM	0.05	0.02	0.04
HEATING VALUE*	1167	1019	1133
SPECIFIC GRAVITY	0.670	0.581	0.641

	INDEX 5014 SAMPLE 14300	INDEX 5015 SAMPLE 11586	INDEX 5016 SAMPLE 13445
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	ELLIS	ELLIS
FIELD	WILDCAT	ARNETT E	ARNETT E
WELL NAME	MURRY NO. 1	BOYD NO. 1	HANAN NO. 1
LOCATION	SEC. 7, T18N, R14W	SEC. 32, T20N, R23W	SEC. 31, T20N, R23W
OWNER	SNEE & EBERLY	AMOCO PRODUCTION CO.	MAGNESS PETROLEUM CO.
COMPLETED	09/06/74	06/17/65	06/16/72
SAMPLED	03/18/74	07/16/68	10/02/72
FORMATION	PENN-MORROW	DEVO-HUNTON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9135	13426	10634
WELLHEAD PRESSURE,PSIG	2000	3855	3657
OPEN FLOW, MCFD	5400	16190	4155
COMPONENT, MOLE PCT			
METHANE	82.8	95.9	95.3
ETHANE	8.4	0.4	1.9
PROPANE	4.6	TRACE	0.5
N-BUTANE	1.1	0.0	0.1
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	0.1
NITROGEN	0.9	1.7	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.9	1.6
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1214	979	1029
SPECIFIC GRAVITY	0.697	0.581	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5017 SAMPLE 13735		INDEX 5018 SAMPLE 11246		INDEX 5019 SAMPLE 14630	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	ARNETT S		ARNETT SE		BAYLESS E	
WELL NAME	RIDER UNIT NO. 1		BERRYMAN NO. 2		STATE NO. 1	
LOCATION	SEC. 8, T20N, R24W		SEC. 30, T19N, R23W		SEC. 32, T19N, R21W	
OWNER	WESSELY ENERGY CORP.		JONES & PELLOW OIL CO.		ENSERCH EXPLORATION, INC.	
COMPLETED	08/03/73		07/20/67		09/03/75	
SAMPLED	10/06/73		12/20/67		03/26/76	
FORMATION	PENN-MORROW		PENN-COTTAGE GROVE		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10130		8260		11060	
WELLHEAD PRESSURE,PSIG	3100		2100		3850	
OPEN FLOW, MCFD	3713		21090		3600	
COMPONENT, MOLE PCT						
METHANE	88.2		81.1		89.1	
ETHANE	5.3		9.0		5.7	
PROPANE	2.9		4.2		2.1	
N-BUTANE	0.6		1.2		0.5	
ISOBUTANE	0.6		0.6		0.4	
N-PENTANE	0.1		0.4		0.1	
ISOPENTANE	0.3		0.3		0.1	
CYCLOPENTANE	0.1		0.2		TRACE	
HEXANES PLUS	0.2		0.5		0.1	
NITROGEN	0.7		2.1		0.6	
OXYGEN	0.1		TRACE		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.4		1.2	
HELIUM	0.03		0.11		0.04	
HEATING VALUE*	1122		1116		1103	
SPECIFIC GRAVITY	0.658		0.710		0.637	

	INDEX 5020 SAMPLE 10510		INDEX 5021 SAMPLE 10511		INDEX 5022 SAMPLE 10848	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	BISHOP		BISHOP		BISHOP	
WELL NAME	GRAY A-1		E. K. KING NO. 1		ARCHIE B NO. 1	
LOCATION	SEC. 7, T17N, R25W		SEC. 20, T17N, R26W		SEC. 18, T17N, R25W	
OWNER	TEXAS OIL & GAS CORP.		TEXAS OIL & GAS CORP.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		05/11/64	
SAMPLED	04/09/66		04/09/66		01/23/67	
FORMATION	PENN-TONKAWA		PENN-TONKAWA		PENN-TONKAWA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7900		7900		7811	
WELLHEAD PRESSURE,PSIG	1800		2200		2217	
OPEN FLOW, MCFD	NOT GIVEN		1600		19750	
COMPONENT, MOLE PCT						
METHANE	82.5		79.6		82.7	
ETHANE	8.1		10.0		8.0	
PROPANE	4.4		4.7		4.4	
N-BUTANE	1.3		1.3		1.1	
ISOBUTANE	0.4		0.9		0.6	
N-PENTANE	0.3		0.6		0.2	
ISOPENTANE	0.4		0.1		0.3	
CYCLOPENTANE	0.1		0.3		TRACE	
HEXANES PLUS	0.3		0.7		0.2	
NITROGEN	1.6		1.2		2.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.5		0.4	
HELIUM	0.22		0.28		0.12	
HEATING VALUE*	1201		1259		1184	
SPECIFIC GRAVITY	0.698		0.730		0.690	

	INDEX 5023 SAMPLE 14403		INDEX 5024 SAMPLE 15679		INDEX 5025 SAMPLE 6637	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	CHANEY N		FARGO NW		FARGO S	
WELL NAME	HARDY NO. 1		PREWETT NO. 1		T. M. MOORE NO. 1	
LOCATION	SEC. 7, T23N, R24W		SEC. 29, T23N, R23W		SEC. 14, T21N, R23W	
OWNER	ZOLLER & DANNEBERG, INC.		PHOENIX RESOURCES CO.		AMOCO PRODUCTION CO	
COMPLETED	03/01/75		03/--/78		02/19/58	
SAMPLED	06/--/75		06/23/79		06/12/58	
FORMATION	PENN-MORROW		MISS-MERAMEC		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8292		11617		9319	
WELLHEAD PRESSURE,PSIG	2100		1680		105	
OPEN FLOW, MCFD	4100		2151		1290	
COMPONENT, MOLE PCT						
METHANE	86.0		94.7		91.8	
ETHANE	6.5		1.6		4.6	
PROPANE	3.1		0.5		1.4	
N-BUTANE	0.9		0.3		0.3	
ISOBUTANE	0.6		0.1		0.3	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.7		0.1		0.1	
CYCLOPENTANE	0.2		TRACE		0.1	
HEXANES PLUS	0.4		0.2		0.2	
NITROGEN	0.7		1.1		0.1	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	2.2		0.0		0.0	
CARBON DIOXIDE	0.8		1.1		1.1	
HELIUM	0.05		0.04		0.05	
HEATING VALUE*	1185		1038		1091	
SPECIFIC GRAVITY	0.682		0.599		0.623	

	INDEX 5026 SAMPLE 13472		INDEX 5027 SAMPLE 11582		INDEX 5028 SAMPLE 12697	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	FARGO SE		GAGE		GAGE	
WELL NAME	PERRIN NO. 1		HAMBY UNIT B NO. 1		HARVEY UNIT NO. 1	
LOCATION	SEC. 1, T21N, R23W		SEC. 34, T22N, R24W		SEC. 24, T23N, R24W	
OWNER	MESA PETROLEUM CO.		AMOCO PRODUCTION CO.		SHENANDOAH OIL CORP.	
COMPLETED	12/04/71		11/14/62		01/20/71	
SAMPLED	11/--/72		07/16/68		03/03/71	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9096		8807		8268	
WELLHEAD PRESSURE,PSIG	2795		1890		2390	
OPEN FLOW, MCFD	18800		256		21000	
COMPONENT, MOLE PCT						
METHANE	83.1		91.1		92.5	
ETHANE	4.2		4.0		3.3	
PROPANE	1.3		1.7		1.1	
N-BUTANE	2.9		0.6		0.2	
ISOBUTANE	2.2		0.2		0.2	
N-PENTANE	2.1		0.3		0.0	
ISOPENTANE	TRACE		0.1		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	1.1		0.3		0.2	
NITROGEN	7.5		0.3		1.2	
OXYGEN	2.0		0.0		0.2	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.0		0.8	
HELIUM	0.04		0.09		0.04	
HEATING VALUE*	977		1110		1041	
SPECIFIC GRAVITY	0.658		0.638		0.612	

* CALCULATED GROSS BTU PER CU. FT. DRY AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5029 SAMPLE 9616	INDEX 5030 SAMPLE 13865	INDEX 5031 SAMPLE 11583
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GAGE N	GAGE NE	GAGE S
WELL NAME	NO. 1	WHITTENBERG NO. 1	STATE OF OKLAHOMA K NO. 1
LOCATION	SEC. 8, T22N, R24W	SEC. 32, T24N, R23W	SEC. 33, T21N, R24W
OWNER	TIDEWATER OIL CO.	TEXAS OIL & GAS CORP.	AMOCO PRODUCTION CO.
COMPLETED	07/11/64	07/24/73	08/09/60
SAMPLED	10/28/64	01/17/74	07/16/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8589	8034	9640
WELLHEAD PRESSURE,PSIG	2600	2195	2263
OPEN FLOW, MCFD	1500	2480	1242
COMPONENT, MOLE PCT			
METHANE	91.8	94.8	93.4
ETHANE	4.2	2.6	3.2
PROPANE	1.4	0.9	0.8
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.5	0.4	0.4
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	1.3
HELIUM	0.05	0.01	0.04
HEATING VALUE*	1097	1053	1057
SPECIFIC GRAVITY	0.622	0.597	0.608

	INDEX 5032 SAMPLE 9986	INDEX 5033 SAMPLE 11276	INDEX 5034 SAMPLE 12611
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GAGE SE	GOODWIN S	GOODWIN S
WELL NAME	PEER NO. 1	W. A. MEIERS NO. 1	LEAH TAYLOR NO. 1
LOCATION	SEC. 36, T21N, R24W	SEC. 36, T20N, R26W	SEC. 23, T20N, R26W
OWNER	J.M. HUBER CORP.	MOBIL OIL CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	04/09/65	02/11/59	11/20/69
SAMPLED	07/17/65	02/12/68	12/24/70
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON & VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9604	11360	13801
WELLHEAD PRESSURE,PSIG	3278	3145	4360
OPEN FLOW, MCFD	4390	13140	10745
COMPONENT, MOLE PCT			
METHANE	95.8	96.5	96.5
ETHANE	1.6	0.9	0.5
PROPANE	0.5	0.2	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.4	0.2	1.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.1	1.9
HELIUM	0.04	0.03	0.06
HEATING VALUE*	1024	999	989
SPECIFIC GRAVITY	0.587	0.582	0.581

	INDEX 5035 SAMPLE 11670	INDEX 5036 SAMPLE 13529	INDEX 5037 SAMPLE 15904
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GRAND NE	GRAND NE	HARMON SE
WELL NAME	BERRYMAN UNIT NO. 1	A.C. BERRYMAN NO. 1-4	MORAN NO. 1
LOCATION	SEC. 4, T18N, R23W	SEC. 4, T18N, R23W	SEC. 25, T19N, R22W
OWNER	AMOCO PRODUCTION CO.	MCCULLOCH OIL CORP.	MONSANTO CO.
COMPLETED	08/13/68	05/12/72	02/22/79
SAMPLED	10/18/68	02/12/73	02/21/80
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15154	12068	11036
WELLHEAD PRESSURE,PSIG	4925	4000	3000
OPEN FLOW, MCFD	7000	4767	9354
COMPONENT, MOLE PCT			
METHANE	95.8	92.6	88.5
ETHANE	0.3	3.8	5.8
PROPANE	TRACE	0.9	2.2
N-BUTANE	0.0	0.1	0.5
ISOBUTANE	0.0	0.3	0.5
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	1.7	0.1	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.7	1.2
HELIUM	0.04	0.03	0.04
HEATING VALUE*	976	1061	1115
SPECIFIC GRAVITY	0.583	0.613	0.644

	INDEX 5038 SAMPLE 9581	INDEX 5039 SAMPLE 14938	INDEX 5040 SAMPLE 9542
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	HIGGINS S	HIGGINS S	HILDER
WELL NAME	STUCKER NO. 1	STATE NO. 1-11	W. A. JONTRA NO. 1
LOCATION	SEC. 8, T18N, R26W	SEC. 11, T18N, R26W	SEC. 14, T22N, R25W
OWNER	SUN OIL CO.	HOOVER & BRACKEN, INC.	TEXACO INC.
COMPLETED	04/08/64	12/05/76	05/13/64
SAMPLED	09/21/64	03/14/77	08/19/64
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11674	11829	8903
WELLHEAD PRESSURE,PSIG	5200	NOT GIVEN	2900
OPEN FLOW, MCFD	4700	6000	3329
COMPONENT, MOLE PCT			
METHANE	94.6	95.1	92.4
ETHANE	2.5	2.0	4.0
PROPANE	0.7	0.3	1.5
N-BUTANE	0.2	0.1	0.4
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	0.1	0.3	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.0	0.9
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1051	1019	1081
SPECIFIC GRAVITY	0.600	0.593	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5041 SAMPLE 11584	INDEX 5042 SAMPLE 8233	INDEX 5043 SAMPLE 6349
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	WILDER	MOCANE-LAVERN GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	SHATTUCK UNIT 1 NO. 2	MACE	L. PEETOOM NO. 1
LOCATION	SEC. 19, T22N, R26W	SEC. 2, T23N, R25W	SEC. 29, T24N, R25W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	06/08/59	06/22/61	05/14/57
SAMPLED	07/16/68	10/10/61	06/27/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8984	8159	7961
WELLHEAD PRESSURE,PSIG	425	2200	2300
OPEN FLOW, MCFD	1428	4200	2400
COMPONENT, MOLE PCT			
METHANE	87.2	91.1	82.8
ETHANE	5.8	4.6	7.1
PROPANE	2.9	1.8	3.1
N-BUTANE	1.0	0.5	1.0
ISOBUTANE	0.4	0.3	1.0
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	0.2	1.1
CYCLOPENTANE	0.1	TRACE	0.5
HEXANES PLUS	0.2	0.1	1.6
NITROGEN	0.6	0.4	0.7
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.8	0.7
HELIUM	0.04	0.05	0.06
HEATING VALUE*	1149	1097	1270
SPECIFIC GRAVITY	0.664	0.625	0.733

	INDEX 5044 SAMPLE 6618	INDEX 5045 SAMPLE 7320	INDEX 5046 SAMPLE 7613
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	RUSSELL TUNE UNIT NO. 1	STACEY A. WOOD NO. 1	MCLUNG NO. 1
LOCATION	SEC. 35, T24N, R23W	SEC. 11, T23N, R26W	SEC. 17, T24 , R24
OWNER	AMOCO PRODUCTION CO.	ATLANTIC RICHFIELD CO.	TEXOMA PRODUCTION CO.
COMPLETED	11/26/57	11/16/59	06/24/60
SAMPLED	05/27/58	12/31/59	07/21/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7849	8432	7720
WELLHEAD PRESSURE,PSIG	2315	NOT GIVEN	1769
OPEN FLOW, MCFD	19000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	90.1	87.2
ETHANE	4.3	4.8	6.9
PROPANE	1.6	1.5	3.0
N-BUTANE	0.4	0.6	0.9
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.3	0.7	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.6
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1099	1108	1157
SPECIFIC GRAVITY	0.623	0.637	0.656

	INDEX 5047 SAMPLE 8003	INDEX 5048 SAMPLE 8313	INDEX 5049 SAMPLE 8902
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	PITTMAN UNIT A-1	CORLESS UNIT B	SNYDER NO. 1
LOCATION	SEC. 2, T23N, R23W	SEC. 4, T24N, R25W	SEC. 7, T23N, R24W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/11/61	06/28/61	10/17/62
SAMPLED	05/31/61	12/04/61	03/25/63
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7891	7562	8230
WELLHEAD PRESSURE,PSIG	2375	1850	2270
OPEN FLOW, MCFD	1750	1050	600
COMPONENT, MOLE PCT			
METHANE	93.0	82.6	87.1
ETHANE	3.5	7.8	4.4
PROPANE	1.1	4.0	1.4
N-BUTANE	0.3	1.4	0.3
ISOBUTANE	0.3	0.7	TRACE
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	1.1	0.1
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	0.7	1.0	4.7
OXYGEN	0.0	TRACE	1.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.9
HELIUM	0.10	0.03	0.05
HEATING VALUE*	1072	1226	1012
SPECIFIC GRAVITY	0.609	0.707	0.631

	INDEX 5050 SAMPLE 9827	INDEX 5051 SAMPLE 9852	INDEX 5052 SAMPLE 13383
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	SUTTER D NO. 1	SUTTER 1-29	LATTA UNIT NO. 1
LOCATION	SEC. 21, T23N, R23W	SEC. 29, T22N, R23W	SEC. 5, T23N, R23W
OWNER	AMOCO PRODUCTION CO	SHELL OIL CO.	WESSELY ENERGY CORP.
COMPLETED	02/15/65	01/29/65	06/08/72
SAMPLED	04/01/65	04/23/65	09/18/72
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8142	8788	8038
WELLHEAD PRESSURE,PSIG	2560	2515	2645
OPEN FLOW, MCFD	5000	6600	19239
COMPONENT, MOLE PCT			
METHANE	82.3	91.2	94.7
ETHANE	4.9	4.8	2.5
PROPANE	3.8	1.7	0.8
N-BUTANE	0.9	0.4	0.2
ISOBUTANE	0.7	0.1	0.2
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	1.2	0.2	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.9
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1214	1098	1056
SPECIFIC GRAVITY	0.704	0.624	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5053 SAMPLE 10562	INDEX 5054 SAMPLE 10563	INDEX 5055 SAMPLE 14724
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	PEEK S	PEEK S	PEEK S
WELL NAME	BERRYMAN A NO. 1	J. W. BERRYMAN NO. 1	WAGNON NO. 1-11
LOCATION	SEC. 26, T17N, R23W	SEC. 27, T17N, R23W	SEC. 11, T16N, R24W
OWNER	SUN OIL CO.	SUN OIL CO.	TENNECO OIL CO.
COMPLETED	02/01/66	11/13/65	04/30/76
SAMPLED	05/12/66	05/12/66	07/--/76
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8405	8400	8107
WELLHEAD PRESSURE,PSIG	2250	2250	2100
OPEN FLOW, MCFD	42000	3000	2600
COMPONENT, MOLE PCT			
METHANE	81.5	84.2	86.3
ETHANE	8.4	7.9	7.5
PROPANE	4.2	3.3	3.0
N-BUTANE	1.6	1.1	0.7
ISOBUTANE	TRACE	0.2	0.4
N-PENTANE	0.6	0.6	0.1
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.3	0.3	0.1
HEXANES PLUS	0.7	0.7	0.2
NITROGEN	1.5	1.1	1.2
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.11	0.10	0.11
HEATING VALUE*	1229	1201	1150
SPECIFIC GRAVITY	0.716	0.690	0.659

	INDEX 5056 SAMPLE 6939	INDEX 5057 SAMPLE 7492	INDEX 5058 SAMPLE 14306
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	SHATTUCK	SHATTUCK E	SHATTUCK FIELD
WELL NAME	BATT UNIT NO. 1	SHERRILL OPER. UNIT NO. 1	WALTON NO. 1
LOCATION	SEC. 32, T21N, R25W	SEC. 36, T21N, R25W	SEC. 15, T21N, R25W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	ARKLA EXPLORATION CO.
COMPLETED	12/26/58	11/16/59	NOT GIVEN
SAMPLED	02/13/59	12/21/59	03/21/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9722	9742	9430
WELLHEAD PRESSURE,PSIG	2875	2725	3100
OPEN FLOW, MCFD	1817	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	83.2	91.0
ETHANE	2.9	4.3	4.5
PROPANE	1.2	3.6	1.7
N-BUTANE	0.2	1.7	0.5
ISOBUTANE	0.2	1.5	0.3
N-PENTANE	TRACE	1.1	0.1
ISOPENTANE	0.1	1.1	0.2
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.3	2.0	0.2
NITROGEN	TRACE	0.3	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	1.0
HELIUM	0.03	0.02	0.04
HEATING VALUE*	1068	1333	1100
SPECIFIC GRAVITY	0.607	0.765	0.631

	INDEX 5059 SAMPLE 14885	INDEX 5060 SAMPLE 6827	INDEX 5061 SAMPLE 9070
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	SHATTUCK N	SHATTUCK W	TANGIER
WELL NAME	MOGAN NO. 1	H.J. SCHOENHALS UNIT NO. 1	FEERER NO. 1-33
LOCATION	SEC. 2, T22N, R25W	SEC. 24, T21N, R26W	SEC. 33, T23N, R23W
OWNER	H & L OPERATING CO.	MOBIL OIL CORP.	SHELL OIL CO.
COMPLETED	10/21/76	06/10/58	01/24/63
SAMPLED	01/19/77	10/14/58	08/23/63
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8744	9243	8226
WELLHEAD PRESSURE,PSIG	2800	2803	2625
OPEN FLOW, MCFD	2600	13500	84000
COMPONENT, MOLE PCT			
METHANE	91.3	85.0	81.6
ETHANE	4.5	9.2	9.3
PROPANE	1.5	3.2	4.0
N-BUTANE	0.4	0.5	1.1
ISOBUTANE	0.2	0.4	0.9
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.4
HEXANES PLUS	0.2	0.1	1.0
NITROGEN	0.5	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.8	0.7
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1091	1157	1265
SPECIFIC GRAVITY	0.625	0.663	0.727

	INDEX 5062 SAMPLE 10717	INDEX 5063 SAMPLE 10770	INDEX 5064 SAMPLE 11581
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	TANGIER	TANGIER	TAUZALIN
WELL NAME	F.H. MOREHART NO. 1	MOREHART NO. 1	STATE OF OKLAHOMA Y-T NO. 1
LOCATION	SEC. 12, T22N, R23W	SEC. 12, T22N, R23W	SEC. 36, T22N, R26W
OWNER	SUN OIL CO.	SUN OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	07/14/66	06/28/66	02/12/62
SAMPLED	09/14/66	11/07/66	07/11/68
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8612	8403	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2535	2493	2586
OPEN FLOW, MCFD	3902	2043	33282
COMPONENT, MOLE PCT			
METHANE	89.9	80.0	95.3
ETHANE	3.9	8.8	1.8
PROPANE	1.7	4.8	0.4
N-BUTANE	0.5	1.5	0.2
ISOBUTANE	0.3	0.9	0.0
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.3	0.5	0.0
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	1.7	1.3	0.8
OXYGEN	0.2	0.2	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.9
HELIUM	0.06	0.05	0.10
HEATING VALUE*	1088	1249	1033
SPECIFIC GRAVITY	0.640	0.734	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5065 SAMPLE 8488	INDEX 5066 SAMPLE 8489	INDEX 5067 SAMPLE 13151
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	TOUZALIN	TOUZALIN	VICI W
WELL NAME	STATE OF OKLAHOMA UNIT Y	STATE OF OKLA. GAS UNIT Y	HAMILTON NO. 1
LOCATION	SEC. 36, T22N, R26W	SEC. 36, T22N, R26W	SEC. 5, T19N, R21W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	NATOL PETROLEUM CORP.
COMPLETED	02/09/62	02/12/62	NOT GIVEN
SAMPLED	04/02/62	04/02/62	02/16/72
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9197	9684	10402
WELLHEAD PRESSURE,PSIG	1125	3075	3363
OPEN FLOW, MCFD	680	7600	9225
COMPONENT, MOLE PCT			
METHANE	96.8	95.2	85.9
ETHANE	1.3	1.6	7.6
PROPANE	0.3	0.3	3.2
N-BUTANE	0.1	0.1	0.7
ISOBUTANE	TRACE	TRACE	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.9	1.7	0.6
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	1.1
HELIUM	0.07	0.06	0.04
HEATING VALUE*	1020	1008	1148
SPECIFIC GRAVITY	0.580	0.580	0.665

	INDEX 5068 SAMPLE 13155	INDEX 5069 SAMPLE 13979	INDEX 5070 SAMPLE 15944
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	VICI W	VICI W	WILDCAT
WELL NAME	CLEM NO. 1	AARON MORGAN NO. 1	D. L. SHREWDER NO. 1
LOCATION	SEC. 4, T19N, R21W	SEC. 3, T19N, R21W	SEC. 36, T18N, R23W
OWNER	NATOL PETROLEUM CORP.	NATOL PETROLEUM CORP.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	03/21/71	12/12/73	12/01/78
SAMPLED	02/--/72	04/19/74	04/24/80
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10386	10329	11070
WELLHEAD PRESSURE,PSIG	4500	2500	5464
OPEN FLOW, MCFD	9169	10000	3409
COMPONENT, MOLE PCT			
METHANE	97.5	85.1	82.7
ETHANE	0.5	7.3	7.6
PROPANE	0.1	3.3	4.1
N-BUTANE	0.1	0.9	1.3
ISOBUTANE	TRACE	0.6	0.9
N-PENTANE	TRACE	0.3	2.3
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.6
NITROGEN	0.7	0.5	0.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	0.4
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1008	1183	1287
SPECIFIC GRAVITY	0.573	0.683	0.731

	INDEX 5071 SAMPLE 4946	INDEX 5072 SAMPLE 10054	INDEX 5073 SAMPLE 10095
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BILLINGS NW	BROWN S	ELK HORN NE
WELL NAME	ENSMINGER NO. 1	JOHNSON NO. 1	FORSHEE NO. 1
LOCATION	SEC. 12, T24N, R3W	SEC. 15, T20N, R4W	SEC. 11, T20N, R3W
OWNER	NORTHERN OKLAHOMA GAS CO.	JORDON PETROLEUM CO.	LIVINGSTON OIL CO.
COMPLETED	12/14/49	02/01/65	04/17/65
SAMPLED	08/03/50	08/07/65	09/26/65
FORMATION	MISS-LIME	PENN-RED FORK	PENN-SKINNER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4568	5576	5378
WELLHEAD PRESSURE,PSIG	1560	1800	875
OPEN FLOW, MCFD	1360	1880	1350
COMPONENT, MOLE PCT			
METHANE	73.0	86.0	76.5
ETHANE	9.5	6.6	8.5
PROPANE	4.1	2.5	4.5
N-BUTANE	1.2	0.8	1.1
ISOBUTANE	0.3	0.4	0.7
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.4	2.6	7.3
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.17	0.10	0.12
HEATING VALUE*	1101	1126	1140
SPECIFIC GRAVITY	0.726	0.658	0.719

	INDEX 5074 SAMPLE 5860	INDEX 5075 SAMPLE 9644	INDEX 5076 SAMPLE 9902
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ELK HORN NW	ENID NE	ENID NE
WELL NAME	KENNETT NO. 1	BRAKHAGE NO. 1	LEMKE NO. 1
LOCATION	SEC. 30, T20N, R3W	SEC. 14, T23N, R7W	SEC. 23, T23N, R5W
OWNER	M&P DRILLING CORP. ET AL.	SUN OIL CO.	LIVINGSTON OIL CO.
COMPLETED	10/24/54	11/22/62	03/26/65
SAMPLED	06/11/55	11/23/64	04/21/65
FORMATION	PENN-PERRY	PENN-SKINNER	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4054	5966	5947
WELLHEAD PRESSURE,PSIG	1425	1425	1040
OPEN FLOW, MCFD	4100	1420	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	84.8	72.1
ETHANE	5.9	5.9	9.6
PROPANE	2.6	3.1	6.6
N-BUTANE	1.9	1.0	3.4
ISOBUTANE	1.3	0.6	1.8
N-PENTANE	0.2	0.2	0.7
ISOPENTANE	0.1	0.3	1.3
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.3	0.2	0.9
NITROGEN	2.1	3.3	2.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.5	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.09	0.10	0.05
HEATING VALUE*	1129	1131	1392
SPECIFIC GRAVITY	0.653	0.670	0.828

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5077 SAMPLE 12310	INDEX 5078 SAMPLE 12316	INDEX 5079 SAMPLE 12890
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ENID NE	ENID NE	ENID NE
WELL NAME	ZALOUDEK NO. 3-1	ZALOUDEK NO. 3-1	HOMER P. KING NO. 1
LOCATION	SEC. 3, T23N, R6W	SEC. 3, T23N, R6W	SEC. 29, T23N, R5W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	05/27/70	04/09/70	03/26/70
SAMPLED	07/01/70	07/08/70	06/29/71
FORMATION	PENN-SKINNER	MISS-	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5658	6062	5937
WELLHEAD PRESSURE,PSIG	1697	1697	763
OPEN FLOW, MCFD	1650	2510	4249
COMPONENT, MOLE PCT			
METHANE	83.4	82.1	87.7
ETHANE	7.3	6.1	5.6
PROPANE	3.4	3.7	2.1
N-BUTANE	0.8	1.0	0.4
ISOBUTANE	0.5	0.7	0.2
N-PENTANE	0.2	0.4	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	3.9	5.0	3.4
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.12	0.10
HEATING VALUE*	1122	1135	1073
SPECIFIC GRAVITY	0.668	0.690	0.632

	INDEX 5080 SAMPLE 2361	INDEX 5081 SAMPLE 2362	INDEX 5082 SAMPLE 2363
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARBER	GARBER	GARBER
WELL NAME	KINDT NO. 1-A	WILCOX NO. 1	HAYES NO. 1
LOCATION	SEC. 36, T23N, R4W	SEC. 19, T23N, R3W	SEC. 30, T23N, R3W
OWNER	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	03/01/31	11/01/27	02/01/31
SAMPLED	07/17/31	07/17/31	07/17/31
FORMATION	MISS-	ORDO-WILCOX	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5095	5250	5080
WELLHEAD PRESSURE,PSIG	1700	1750	1700
OPEN FLOW, MCFD	6000	8000	12000
COMPONENT, MOLE PCT			
METHANE	69.7	69.7	74.4
ETHANE	24.8	27.5	23.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.7	1.6	1.1
OXYGEN	2.1	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.9	1.0
HELIUM	0.04	0.06	0.06
HEATING VALUE*	1150	1199	1173
SPECIFIC GRAVITY	0.707	0.708	0.685

	INDEX 5083 SAMPLE 4483	INDEX 5084 SAMPLE 5376	INDEX 5085 SAMPLE 16016
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARBER	GARBER E	GARBER NE
WELL NAME	MARINER NO. 2	CASSADY NO. 2	RANCH NO. 2
LOCATION	SEC. 6, T22N, R3W	SEC. 23, T22N, R3W	SEC. 5, T23N, R3W
OWNER	CITIES SERVICE OIL CO.	PANDA DRILLING CO.	KETAL OIL PRODUCING CO.
COMPLETED	NOT GIVEN	10/02/52	NOT GIVEN
SAMPLED	03/17/48	01/02/53	07/21/80
FORMATION	PENN-	NOT GIVEN	PERM-HERRINGTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4620	1421	980
WELLHEAD PRESSURE,PSIG	1520	675	200
OPEN FLOW, MCFD	NOT GIVEN	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.7	61.8	78.4
ETHANE	47.3	5.7	7.4
PROPANE	---	3.0	3.3
N-BUTANE	---	0.7	1.0
ISOBUTANE	---	0.5	0.5
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.8	27.3	8.2
OXYGEN	0.5	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.2
HELIUM	0.06	0.31	0.18
HEATING VALUE*	1361	873	1103
SPECIFIC GRAVITY	0.800	0.756	0.701

	INDEX 5086 SAMPLE 9200	INDEX 5087 SAMPLE 9948	INDEX 5088 SAMPLE 13713
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GREEN VALLEY	HUNTER S	HUNTER S
WELL NAME	SAMBERG NO. 1	ATHEY NO. 1	FISCHABER NO. 2
LOCATION	SEC. 2, T21N, R3W	SEC. 20, T23N, R4W	SEC. 17, T23N, R4W
OWNER	ROYCE G. HERNDON, ET AL	LIVINGSTON OIL CO.	MASSEY + MOORE CO.
COMPLETED	11/13/63	03/28/64	02/--/73
SAMPLED	12/13/63	07/01/65	09/10/73
FORMATION	PENN-CREWS	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2122	5590	5500
WELLHEAD PRESSURE,PSIG	500	2072	1120
OPEN FLOW, MCFD	3000	9368	1200
COMPONENT, MOLE PCT			
METHANE	44.2	84.0	83.5
ETHANE	2.4	7.3	7.9
PROPANE	1.6	3.1	3.7
N-BUTANE	0.7	0.9	1.1
ISOBUTANE	0.1	0.4	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	49.9	2.9	2.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.45	0.09	0.08
HEATING VALUE*	581	1138	1180
SPECIFIC GRAVITY	0.809	0.672	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5089 SAMPLE 15083		INDEX 5090 SAMPLE 12190		INDEX 5091 SAMPLE 9016	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARFIELD		GARFIELD		GARFIELD	
FIELD	KREMLIN		KREMLIN SE		SOONER TREND	
WELL NAME	THOMPSON NO. 1		IRENE GAU NO. 1		M. C. LIEBHART NO. 1	
LOCATION	SEC. 1, T24N, R 6W		SEC. 35, T24N, R6W		SEC. 35, T22N, R8W	
OWNER	R.R. LAMMERTS OIL CO.		EL PASO NATURAL GAS CO.		HARPER OIL CO. ET AL.	
COMPLETED	12/27/76		12/16/69		02/23/62	
SAMPLED	08/26/77		02/12/70		06/17/63	
FORMATION	PENN-SKINNER		PENN-SKINNER		MISS-MERAMEC	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5326		5608		6746	
WELLHEAD PRESSURE,PSIG	800		1815		1525	
OPEN FLOW, MCFD	1250		13000		750	
COMPONENT, MOLE PCT						
METHANE	77.0		82.4		84.6	
ETHANE	7.2		5.8		8.1	
PROPANE	4.6		3.3		3.0	
N-BUTANE	1.5		0.8		1.3	
ISOBUTANE	0.6		0.6		0.3	
N-PENTANE	0.4		0.5		0.3	
ISOPENTANE	0.3		0.2		0.4	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.2		0.5		0.4	
NITROGEN	7.8		4.8		1.1	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.6		0.3	
HELIUM	0.12		0.13		0.10	
HEATING VALUE*	1143		1135		1188	
SPECIFIC GRAVITY	0.729		0.691		0.681	

	INDEX 5092 SAMPLE 9356		INDEX 5093 SAMPLE 9558		INDEX 5094 SAMPLE 10291	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARFIELD		GARFIELD		GARFIELD	
FIELD	SOONER TREND		SOONER TREND		SOONER TREND	
WELL NAME	LESTER DIERKSON NO. 1		J. LEE CROMWELL		HODGDEN NO. 1	
LOCATION	SEC. 23, T22N, R8W		SEC. 10, T21N, R8W		SEC. 33, T22N, R8W	
OWNER	ATLANTIC RICHFIELD CO.		HARPER OIL CO.		SUN OIL CO.	
COMPLETED	03/27/69		05/23/64		08/01/65	
SAMPLED	05/19/69		09/15/64		11/16/65 •	
FORMATION	MISS-LIME		MISS-		MISS-MERAMEC	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6961		7254		6840	
WELLHEAD PRESSURE,PSIG	2094		1485		1958	
OPEN FLOW, MCFD	345000		1950		4126	
COMPONENT, MOLE PCT						
METHANE	82.1		86.4		80.2	
ETHANE	8.5		7.5		8.2	
PROPANE	3.7		2.6		3.3	
N-BUTANE	1.7		0.8		1.2	
ISOBUTANE	TRACE		0.3		0.6	
N-PENTANE	0.5		0.1		0.6	
ISOPENTANE	0.5		0.2		0.1	
CYCLOPENTANE	0.2		0.1		0.3	
HEXANES PLUS	0.5		0.1		0.9	
NITROGEN	2.1		1.4		4.0	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.4		0.6	
HELIUM	0.07		0.06		0.04	
HEATING VALUE*	1213		1136		1193	
SPECIFIC GRAVITY	0.702		0.654		0.719	

	INDEX 5095 SAMPLE 10433		INDEX 5096 SAMPLE 10549		INDEX 5097 SAMPLE 10725	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARFIELD		GARFIELD		GARFIELD	
FIELD	SOONER TREND		SOONER TREND		SOONER TREND	
WELL NAME	SAWYER NO. 1		MUNKRESS NO. 1		HENRY MOEHLE UNIT NO. 1	
LOCATION	SEC. 1, T21N, R7W		SEC. 6, T21N, R8W		SEC. 3, T22N, R8W	
OWNER	SKELLY OIL CO.		HARPER OIL CO.		CHAMPLIN PETROLEUM CO.	
COMPLETED	NOT GIVEN		12/01/65		05/15/66	
SAMPLED	03/07/66		05/03/66		09/09/66	
FORMATION	MISS-MORMIO		PENN-RED FORK		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6770		6550		6546	
WELLHEAD PRESSURE,PSIG	1200		1600		1943	
OPEN FLOW, MCFD	850		1285		17420	
COMPONENT, MOLE PCT						
METHANE	89.5		92.9		89.0	
ETHANE	7.7		3.7		5.7	
PROPANE	3.2		1.0		2.2	
N-BUTANE	1.1		0.2		0.7	
ISOBUTANE	0.5		0.1		0.3	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.3		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	1.4		1.4		1.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.3		0.2	
HELIUM	0.10		0.12		0.05	
HEATING VALUE*	1166		1057		1117	
SPECIFIC GRAVITY	0.677		0.602		0.640	

	INDEX 5098 SAMPLE 10741		INDEX 5099 SAMPLE 10749		INDEX 5100 SAMPLE 10772	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARFIELD		GARFIELD		GARFIELD	
FIELD	SOONER TREND		SOONER TREND		SOONER TREND	
WELL NAME	ROBERTA BASS NO. 1		ANDERSON-BEARD NO. 1		NEWTON MCGILL UNIT NO. 1	
LOCATION	SEC. 15, T22N, R7W		SEC. 19, T21N, R6W		SEC. 28, T22N, R7W	
OWNER	TENNECO OIL CO.		GUNGOLL & GUNGOLL		ATLANTIC RICHFIELD CO.	
COMPLETED	07/23/66		07/01/65		05/23/66	
SAMPLED	NOT GIVEN		10/15/66		11/09/66	
FORMATION	PERM-WICHITA-ALBANY		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6520		6830		6573	
WELLHEAD PRESSURE,PSIG	1669		2200		2022	
OPEN FLOW, MCFD	3040		18000		13763	
COMPONENT, MOLE PCT						
METHANE	88.3		86.5		84.3	
ETHANE	7.6		7.0		8.4	
PROPANE	3.3		3.0		3.4	
N-BUTANE	1.1		0.9		1.0	
ISOBUTANE	0.5		0.2		0.3	
N-PENTANE	0.4		0.1		0.2	
ISOPENTANE	0.5		0.3		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.3		0.1		0.1	
NITROGEN	2.0		1.1		1.5	
OXYGEN	0.0		0.2		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.4	
HELIUM	0.07		0.05		0.06	
HEATING VALUE*	1172		1139		1159	
SPECIFIC GRAVITY	0.679		0.654		0.669	

• CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5101 SAMPLE 11651	INDEX 5102 SAMPLE 11759	INDEX 5103 SAMPLE 14930
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARVIN
FIELD	SOONER TREND	SOONER TREND	BUTTERLY NW
WELL NAME	BAKER NO. 26-1	EGGERS-BARBEE NO. 1	MCKINLEY NO. 1
LOCATION	SEC. 26, T20N, R8W	SEC. 4, T21N, R5W	SEC. 15, T1N, R1E
OWNER	RODMAN CORP.	VIERSEN & COCHRAN	WESTHEIMER NEUSTADT CORP.
COMPLETED	07/18/67	NOT GIVEN	08/12/76
SAMPLED	09/20/68	02/07/69	02/24/77
FORMATION	DEVO-HUNTON	MISS-	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	360	360	350
DEPTH, FEET	7995	6150	3061
WELLHEAD PRESSURE,PSIG	2200	2000	340
OPEN FLOW, MCFD	2000	NOT GIVEN	1200
COMPONENT, MOLE PCT			
METHANE	70.3	55.5	78.2
ETHANE	14.5	18.3	10.2
PROPANE	8.0	14.4	4.8
N-BUTANE	2.0	5.0	1.2
ISOBUTANE	0.9	2.8	0.4
N-PENTANE	0.5	1.4	0.3
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	0.7	0.1
NITROGEN	3.1	0.3	4.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	TRACE
HELIUM	0.07	TRACE	0.05
HEATING VALUE*	1317	1659	1180
SPECIFIC GRAVITY	0.783	0.976	0.708

	INDEX 5104 SAMPLE 15299	INDEX 5105 SAMPLE 973	INDEX 5106 SAMPLE 974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	EOLA	EOLA-ROBBERSON	EOLA-ROBBERSON
WELL NAME	ELLA COOK NO. B-4	S. H. COWAN NO. 24	F. J. PEARCE NO. 3
LOCATION	SEC. 12, T1N, R3W	SEC. 15, T1N, R3W	SEC. 13, T1N, R3W
OWNER	TEXAS PACIFIC OIL CO., INC.	MOBIL OIL CORP.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	03/--/75	05/--/24	08/--/24
SAMPLED	06/--/78	01/17/25	01/15/25
FORMATION	MISS-SYCAMORE	PERM-NEWBERRY	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5700	1453	1580
WELLHEAD PRESSURE,PSIG	1800	40	7
OPEN FLOW, MCFD	2000	700	200
COMPONENT, MOLE PCT			
METHANE	83.2	---	65.0
ETHANE	8.8	---	27.0
PROPANE	4.0	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	1.3	---	7.4
OXYGEN	TRACE	---	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	---	0.2
HELIUM	0.05	0.05	0.10
HEATING VALUE*	1198	0	1142
SPECIFIC GRAVITY	0.688	0.000	0.722

	INDEX 5107 SAMPLE 1089	INDEX 5108 SAMPLE 6442	INDEX 5109 SAMPLE 4614
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	EOLA-ROBBERSON	EOLA-ROBBERSON	GOLDEN TREND
WELL NAME	F. H. HARRIS NO. 6	MAYS-RINGER NO. 1	BRADSHAW-WATKINS NO. 1
LOCATION	SEC. 16, T1N, R3W	SEC. 8, T1N, R3W	SEC. 4, T4N, R3W
OWNER	MOBIL OIL CORP.	JOHN F. RINGER ET AL	CARTER OIL CO.
COMPLETED	04/--/25	11/07/55	07/27/48
SAMPLED	07/07/25	11/11/57	11/03/48
FORMATION	PERM-ROBBERSON	PERM-PONTOTOC	-GIBSON
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1546	2690	7110
WELLHEAD PRESSURE,PSIG	350	780	500
OPEN FLOW, MCFD	10000	8868	197
COMPONENT, MOLE PCT			
METHANE	75.0	78.0	35.4
ETHANE	19.2	4.1	61.2
PROPANE	---	1.9	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	5.3	14.6	2.9
OXYGEN	0.2	0.0	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.08	0.10	0.03
HEATING VALUE*	1104	935	1455
SPECIFIC GRAVITY	0.674	0.673	0.873

	INDEX 5110 SAMPLE 4704	INDEX 5111 SAMPLE 4705	INDEX 5112 SAMPLE 6802
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	GOLDEN TREND
WELL NAME	G. O. CHRISTIAN NO. 1	ROSE-VOSE NO. 1	W. K. DONNEL NO. 9
LOCATION	SEC. 5, T1N, R1W	SEC. 3, T2N, R3W	SEC. 21, T4N, R3W
OWNER	CARTER OIL CO.	CONTINENTAL OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	05/19/48	08/15/48	07/--/58
SAMPLED	09/22/48	09/22/48	09/10/58
FORMATION	PENN-DEESE	PENN-DEESE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6090	8050	9260
WELLHEAD PRESSURE,PSIG	2800	NOT GIVEN	1500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.5	62.6	77.0
ETHANE	9.9	15.1	10.8
PROPANE	5.9	12.3	5.9
N-BUTANE	1.6	4.5	2.5
ISOBUTANE	0.6	1.3	1.0
N-PENTANE	0.7	1.0	0.7
ISOPENTANE	0.0	0.5	0.7
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.7	0.5	0.5
NITROGEN	4.7	1.6	0.5
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.07	0.02	0.03
HEATING VALUE*	1234	1512	1338
SPECIFIC GRAVITY	0.752	0.893	0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5113 SAMPLE 9815		INDEX 5114 SAMPLE 9816		INDEX 5115 SAMPLE 9885	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARVIN		GARVIN		GARVIN	
FIELD	GOLDEN TREND		GOLDEN TREND		GOLDEN TREND	
WELL NAME	WOODRUFF F NO. 1		WOODRUFF F NO. 1		BOST-HAYS NO. 2	
LOCATION	SEC. 14, T4N, R3W		SEC. 14, T4N, T3W		SEC. 27, T4N, R3W	
OWNER	SKELLY OIL CO.		SKELLY OIL CO.		TEXACO INC.	
COMPLETED	01/02/65		01/02/65		02/22/65	
SAMPLED	03/12/65		03/12/65		05/05/65	
FORMATION	ORDO-OIL CREEK		CAMO-ARBUCKLE		ORDO-OIL CREEK	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	8571		8733		10502	
WELLHEAD PRESSURE,PSIG	2775		2550		2384	
OPEN FLOW, MCFD	4388		1532		6325	
COMPONENT, MOLE PCT						
METHANE	77.5		87.5		89.3	
ETHANE	5.3		4.6		5.1	
PROPANE	3.2		1.8		1.9	
N-BUTANE	2.5		0.8		0.7	
ISOBUTANE	0.9		0.4		0.3	
N-PENTANE	0.6		0.3		0.1	
ISOPENTANE	1.7		0.3		0.3	
CYCLOPENTANE	0.3		TRACE		TRACE	
HEXANES PLUS	0.9		0.2		0.2	
NITROGEN	6.4		3.7		1.9	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.3		0.2	
HELIUM	0.10		0.07		0.05	
HEATING VALUE*	1072		1092		1106	
SPECIFIC GRAVITY	0.768		0.648		0.636	

	INDEX 5116 SAMPLE 12802		INDEX 5117 SAMPLE 12803		INDEX 5118 SAMPLE 14789	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARVIN		GARVIN		GARVIN	
FIELD	GOLDEN TREND		GOLDEN TREND		GOLDEN TREND	
WELL NAME	BROWN NO. 1		BROWN K NO. 1		ELLITHORPE "A" NO. 1	
LOCATION	SEC. 16, T4N, R3W		SEC. 16, T4N, R3W		SEC. 12, T3N, R3W	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	03/08/71		03/08/71		11/07/74	
SAMPLED	04/29/71		04/29/71		10/01/76	
FORMATION	ORDO-BROMIDE 2ND		ORDO-BROMIDE 3RD		ORDO-MCLISH	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	9104		9187		8496	
WELLHEAD PRESSURE,PSIG	2277		2130		2500	
OPEN FLOW, MCFD	4532		1455		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	47.7		52.8		77.8	
ETHANE	19.5		14.4		9.3	
PROPANE	17.5		15.4		6.0	
N-BUTANE	6.6		7.4		2.1	
ISOBUTANE	3.1		3.6		0.8	
N-PENTANE	2.0		2.5		0.5	
ISOPENTANE	1.4		1.3		0.5	
CYCLOPENTANE	0.3		0.3		0.1	
HEXANES PLUS	1.1		1.3		0.2	
NITROGEN	0.7		0.9		2.5	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	TRACE		0.02		0.04	
HEATING VALUE*	1127		1804		1265	
SPECIFIC GRAVITY	1.076		1.061		0.741	

	INDEX 5119 SAMPLE 14790		INDEX 5120 SAMPLE 4657		INDEX 5121 SAMPLE 3546	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARVIN		GARVIN		GARVIN	
FIELD	GOLDEN TREND		KATIE SE		PAULS VALLEY	
WELL NAME	ELLITHORPE "A" NO. 1		TEARY-VAUGHN NO. 1		TETER NO. 1	
LOCATION	SEC. 12, T3N, R3W		SEC. 9, T1N, R1W		SEC. 31, T4N, R1E	
OWNER	PHILLIPS PETROLEUM CO.		CARTER OIL CO.		UNION OIL CO. OF CAL.	
COMPLETED	11/20/74		11/05/48		04/08/42	
SAMPLED	10/01/76		02/25/49		05/19/42	
FORMATION	ORDO-BROMIDE		PENN-		ORDO-SIMPSON	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	8232		4730		3898	
WELLHEAD PRESSURE,PSIG	2200		1200		800	
OPEN FLOW, MCFD	NOT GIVEN		10025		3500	
COMPONENT, MOLE PCT						
METHANE	39.7		82.5		31.0	
ETHANE	15.5		8.6		68.0	
PROPANE	23.5		5.8		---	
N-BUTANE	9.6		1.0		---	
ISOBUTANE	6.2		0.7		---	
N-PENTANE	1.9		0.5		---	
ISOPENTANE	2.3		0.0		---	
CYCLOPENTANE	0.2		0.1		---	
HEXANES PLUS	0.8		0.4		---	
NITROGEN	0.3		2.0		0.2	
OXYGEN	TRACE		0.1		0.5	
ARGON	0.0		TRACE		---	
HYDROGEN	0.0		0.1		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	TRACE		0.08		TRACE	
HEATING VALUE*	2046		1192		1533	
SPECIFIC GRAVITY	1.211		0.691		0.897	

	INDEX 5122 SAMPLE 12517		INDEX 5123 SAMPLE 3642		INDEX 5124 SAMPLE 3852	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARVIN		GARVIN		GARVIN	
FIELD	PAULS VALLEY		PAULS VALLEY E		PAULS VALLEY E	
WELL NAME	FRANKLIN UNIT NO.1		A. P. BURNS NO. 1		A. J. BRUNDIGE NO. 1	
LOCATION	SEC. 4, T3N, R1W		SEC. 17, T3N, R2E		SEC. 17, T3N, R2E	
OWNER	PETROLEUM, INC.		OHIO OIL CO.		OHIO OIL CO.	
COMPLETED	03/27/70		NOT GIVEN		NOT GIVEN	
SAMPLED	11/09/70		05/08/43		NOT GIVEN	
FORMATION	ORDO-ARBUCKLE U		PENN-		PENN-	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	9580		2880		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1450		175		NOT GIVEN	
OPEN FLOW, MCFD	3270		30000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	81.6		85.5		82.4	
ETHANE	7.6		10.1		10.8	
PROPANE	1.7		---		---	
N-BUTANE	0.9		---		---	
ISOBUTANE	0.6		---		---	
N-PENTANE	0.3		---		---	
ISOPENTANE	0.1		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.2		---		---	
NITROGEN	1.7		1.7		5.9	
OXYGEN	5.3		0.3		0.4	
ARGON	0.0		---		---	
HYDROGEN	0.1		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	2.9		2.3		0.4	
HELIUM	0.21		0.06		0.06	
HEATING VALUE*	1117		1047		1028	
SPECIFIC GRAVITY	0.699		0.635		0.638	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5125 SAMPLE 15103	INDEX 5126 SAMPLE 12336	INDEX 5127 SAMPLE 11058
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	PAULS VALLEY E	PAULS VALLEY W	WYNNEWOOD
WELL NAME	MOODY NO. 1	HATCHER C NO. 4	ANDERSON B NO. 1
LOCATION	SEC. 6, T3N, R2E	SEC. 28, T4N, R1W	SEC. 23, T2N, R1E
OWNER	SHERFSTER, INC.	CITIES SERVICE OIL CO.	SUPERIOR OIL CO.
COMPLETED	10/19/76	06/17/70	03/08/67
SAMPLED	09/21/77	07/28/70	08/11/67
FORMATION	PERM-ADA	ORDO-SIMPSON	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	2628	4504	2955
WELLHEAD PRESSURE,PSIG	1055	1250	1260
OPEN FLOW, MCFD	3500	35000	12614
COMPONENT, MOLE PCT			
METHANE	80.7	78.6	93.8
ETHANE	2.0	9.8	0.2
PROPANE	TRACE	4.6	TRACE
N-BUTANE	0.1	1.1	0.0
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	16.6	4.4	5.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.15	0.08	0.15
HEATING VALUE*	870	1176	954
SPECIFIC GRAVITY	0.641	0.704	0.580

	INDEX 5128 SAMPLE 14815	INDEX 5129 SAMPLE 15869	INDEX 5130 SAMPLE 13519
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	ALEX NW	ALEX NW	AMBER E
WELL NAME	WEAVER NO. 1	SOUTHERLAND "A" NO. 1	MARSHALL NO. 1
LOCATION	SEC. 21, T6N, R6W	SEC.3, T5N, R6W	SEC. 9, T8N, R6W
OWNER	KERR-MCGEE CORP.	CITIES SERVICE CO	W.C. PAYNE
COMPLETED	04/21/76	NOT GIVEN	12/31/71
SAMPLED	10/15/76	NOT GIVEN	01/30/73
FORMATION	PENN-SPRINGER	PENN-MORROW & SPRINGER	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12997	13216	10464
WELLHEAD PRESSURE,PSIG	4150	4394	1600
OPEN FLOW, MCFD	5117	3650	1100
COMPONENT, MOLE PCT			
METHANE	85.7	88.7	86.9
ETHANE	7.8	6.2	7.2
PROPANE	3.7	2.4	2.8
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.7	1.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.3
HELIUM	0.03	0.03	0.07
HEATING VALUE*	1164	1117	1130
SPECIFIC GRAVITY	0.663	0.637	0.647

	INDEX 5131 SAMPLE 8041	INDEX 5132 SAMPLE 4647	INDEX 5133 SAMPLE 5720
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	BLANCHARD NW	BRADLEY NE	BRADLEY NE
WELL NAME	HILLTOP NO. 2	TOM MAINKA NO. 1	COSTELLO NO. 1
LOCATION	SEC. 17, T8N, R5W	SEC. 12, T5N, R5W	SEC. 14, T5N, R5W
OWNER	CLEARY PETROLEUM INC.	GULF OIL CORP.	GULF OIL CO.
COMPLETED	NOT GIVEN	10/05/48	09/26/54
SAMPLED	06/24/61	12/28/48	10/26/54
FORMATION	ORDO-BROMIDE	ORDO-TULIP CREEK	ORDO-BROMIDE & SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11810	13137	11747
WELLHEAD PRESSURE,PSIG	3560	2560	1200
OPEN FLOW, MCFD	11454	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.4	73.3	82.3
ETHANE	6.1	25.6	9.3
PROPANE	2.4	---	3.8
N-BUTANE	0.8	---	1.2
ISOBUTANE	0.7	---	0.7
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.2	---	0.4
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	1.3	0.4	1.0
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	---	0.0
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	0.04	0.03	0.04
HEATING VALUE*	1139	1201	1212
SPECIFIC GRAVITY	0.656	0.689	0.699

	INDEX 5134 SAMPLE 3643	INDEX 5135 SAMPLE 10744	INDEX 5136 SAMPLE 1211
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CEMENT	CEMENT SE	CHICKASHA
WELL NAME	S. C. LAFLIN NO. 1	RUNKLE UNIT NO. 1	IRWIN NO. 1
LOCATION	SEC. 7, T5N, R8W	SEC. 29, T5N, R8W	NOT GIVEN
OWNER	OHIO OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	05/--/43	06/15/66	NOT GIVEN
SAMPLED	05/08/43	09/29/66	NOT GIVEN
FORMATION	PENN-	PENN-SPRINGER	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5040	15076	3100
WELLHEAD PRESSURE,PSIG	1735	6800	NOT GIVEN
OPEN FLOW, MCFD	41000	23800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	90.0	70.9
ETHANE	7.5	5.3	6.6
PROPANE	---	1.5	---
N-BUTANE	---	0.5	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.3	---
HEXANES PLUS	---	0.5	---
NITROGEN	5.1	0.5	21.2
OXYGEN	1.7	0.0	0.7
ARGON	---	0.0	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	TRACE	TRACE	0.17
HEATING VALUE*	1001	1131	836
SPECIFIC GRAVITY	0.624	0.643	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5137 SAMPLE 1320	INDEX 5138 SAMPLE 1321	INDEX 5139 SAMPLE 1788
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	EDMONDSON	E. C. SMITH	WOODS NO. 4
LOCATION	SEC. 23, T5N, R8W	SEC. 11, T4N, R8W	SEC. 2, T4N, R8W
OWNER	MOBIL OIL CORP.	OKLAHOMA NATURAL GAS CO.	MERIDIAN GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	03/14/29
SAMPLED	11/11/26	11/12/26	06/01/29
FORMATION	PERM-RAMSEY	PERM-NICHOLAS	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2000	1215	2107
WELLHEAD PRESSURE,PSIG	600	100	440
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6415
COMPONENT, MOLE PCT			
METHANE	93.7	79.7	96.1
ETHANE	4.5	5.5	3.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	14.5	0.6
OXYGEN	0.6	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.06	0.19	0.07
HEATING VALUE*	1030	906	1027
SPECIFIC GRAVITY	0.586	0.645	0.575

	INDEX 5140 SAMPLE 1847	INDEX 5141 SAMPLE 1848	INDEX 5142 SAMPLE 3268
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	DRYDEN NO. 4	GOERTE NO. 2	CHARLSON NO. 7
LOCATION	SEC. 35, T5N, R8W	SEC. 26, T4N, R8W	SEC. 22, T5N, R8W
OWNER	OKLAHOMA GAS UTILITIES CO.	OKLAHOMA GAS UTILITIES CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/29	01/01/29	12/10/41
SAMPLED	08/30/29	08/30/29	04/16/42
FORMATION	PENN-	NOT GIVEN	PENN-DEESE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2200	2083	3860
WELLHEAD PRESSURE,PSIG	410	500	1805
OPEN FLOW, MCFD	3000	3500	194000
COMPONENT, MOLE PCT			
METHANE	93.6	83.0	95.4
ETHANE	4.6	5.8	3.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.4	10.9	0.0
OXYGEN	0.0	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	TRACE	0.20	0.08
HEATING VALUE*	1031	945	1036
SPECIFIC GRAVITY	0.587	0.628	0.578

	INDEX 5143 SAMPLE 3560	INDEX 5144 SAMPLE 3864	INDEX 5145 SAMPLE 5242
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	POOLER NO. A5	RIDER NO. 1	GLOVER NO. 4
LOCATION	SEC. 22, T5N, R8W	SEC. 15, T5N, R8W	SEC. 27, T5N, R8W
OWNER	SINCLAIR PRAIRIE OIL CO.	OKLAHOMA NATURAL GAS CO.	LITTLE NICK OIL CO.
COMPLETED	01/30/42	07/05/44	08/--/51
SAMPLED	05/30/42	08/28/44	05/13/52
FORMATION	PENN-CHARLESTON	PERM-BASAL	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4735	3106	8963
WELLHEAD PRESSURE,PSIG	1405	NOT GIVEN	4950
OPEN FLOW, MCFD	157192	6000	25000
COMPONENT, MOLE PCT			
METHANE	93.0	96.2	96.8
ETHANE	6.3	2.8	1.4
PROPANE	---	---	0.2
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	0.1	0.0	1.0
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.6	0.3
HELIUM	0.07	0.02	0.03
HEATING VALUE*	1055	1025	1018
SPECIFIC GRAVITY	0.589	0.576	0.574

	INDEX 5146 SAMPLE 13790	INDEX 5147 SAMPLE 13791	INDEX 5148 SAMPLE 14503
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA N	CHICKASHA N	CHICKASHA NE
WELL NAME	MAIER NO. 1	MAIER NO. 1	CIRCLE BAR M
LOCATION	SEC. 4, T7N, R7W	SEC. 4, T7N, R7W	SEC. 24, T7N, R7W
OWNER	APEXCO, INC.	APEXCO, INC.	COTTON PETROLEUM CORP.
COMPLETED	09/29/73	09/29/73	09/01/75
SAMPLED	10/28/73	10/28/73	10/17/75
FORMATION	NOT GIVEN	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	12938	12930
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7442	7500
OPEN FLOW, MCFD	NOT GIVEN	40000	30000
COMPONENT, MOLE PCT			
METHANE	87.8	87.2	86.4
ETHANE	6.7	6.4	7.4
PROPANE	2.9	2.7	3.1
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.6	1.5	0.7
OXYGEN	TRACE	0.3	0.0
ARGON	0.0	0.2	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1131	1112	1142
SPECIFIC GRAVITY	0.650	0.647	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5149 SAMPLE 12176	INDEX 5150 SAMPLE 8458	INDEX 5151 SAMPLE 10984
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA NW	CHITWOOD	CHITWOOD
WELL NAME	DIETRICH NO. 1	O. CRADDOCK NO. 1	J. D. HOLBROOK NO. 1
LOCATION	SEC. 13, T7N, R8W	SEC. 9134 T5N, R6W	SEC. 35, T5N, R6W
OWNER	PHILLIPS PETROLEUM CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/11/70	01/03/62	10/01/66
SAMPLED	01/26/70	03/09/62	06/08/67
FORMATION	PENN-SPRINGER-CUNNINGHAM	ORDO-BROMIDE	-CUNNINGHAM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14393	16193	11460
WELLHEAD PRESSURE,PSIG	8120	9134	3050
OPEN FLOW, MCFD	28000	45000	22434
COMPONENT, MOLE PCT			
METHANE	91.8	85.7	84.7
ETHANE	4.3	7.1	5.3
PROPANE	1.7	3.5	2.4
N-BUTANE	0.3	1.1	0.9
ISOBUTANE	0.1	0.7	0.3
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.8	0.7	4.0
OXYGEN	TRACE	TRACE	0.8
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.6
HELIUM	0.03	0.02	0.05
HEATING VALUE*	1074	1186	1091
SPECIFIC GRAVITY	0.610	0.678	0.665

	INDEX 5152 SAMPLE 10985	INDEX 5153 SAMPLE 16023	INDEX 5154 SAMPLE 4304
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHITWOOD	HYDRO N W	KNOX
WELL NAME	J. D. HOLBROOK NO. 1	GOUCHER NO. 1	WOODS NO. B-1
LOCATION	SEC. 35, T5N, R6W	SEC. 23, T13N, R14W	SEC. 17, T 3N, R 5W
OWNER	MOBIL OIL CORP.	TRIGG DRILLING CO.	MCCASLAND & RAE
COMPLETED	10/01/66	NOT GIVEN	01/--/47
SAMPLED	06/08/67	07/31/80	03/15/47
FORMATION	ORDO-BROMIDE	PENN-MORROW	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15926	13177	3098
WELLHEAD PRESSURE,PSIG	2750	5640	1200
OPEN FLOW, MCFD	5032	1500	15000
COMPONENT, MOLE PCT			
METHANE	84.5	95.8	79.3
ETHANE	7.3	2.3	17.6
PROPANE	2.9	0.5	---
N-BUTANE	1.0	0.1	---
ISOBUTANE	0.3	TRACE	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.4	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	2.1	0.2	2.6
OXYGEN	0.4	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.9	0.2
HELIUM	0.02	0.04	0.05
HEATING VALUE*	1146	102a	1119
SPECIFIC GRAVITY	0.673	0.581	0.655

	INDEX 5155 SAMPLE 6086	INDEX 5156 SAMPLE 10319	INDEX 5157 SAMPLE 12128
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	KNOX	KNOX	LA VERTY
WELL NAME	HARRISON NO. 2	L. H. HARRISON NO. 16	C. T. WANGENSTEEN NO. 1
LOCATION	SEC. 29, T 3N, R 5W	SEC. 28, T 3N, R 5W	SEC. 19, T6N, R8W
OWNER	BRITISH-AMERICAN OIL CO.	MOBIL OIL CORP.	SUN OIL CO.
COMPLETED	02/14/56	10/13/65	07/20/69
SAMPLED	06/16/56	12/09/65	11/20/69
FORMATION	ORDO-BROMIDE	PERM-	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15120	2366	15816
WELLHEAD PRESSURE,PSIG	6700	500	7850
OPEN FLOW, MCFD	31000	3500	38000
COMPONENT, MOLE PCT			
METHANE	88.9	90.8	92.2
ETHANE	5.5	4.9	4.3
PROPANE	2.7	2.1	1.2
N-BUTANE	0.6	0.6	0.2
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.5	0.1	0.0
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	0.7	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.8
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1151	1107	1065
SPECIFIC GRAVITY	0.647	0.624	0.609

	INDEX 5158 SAMPLE 15594	INDEX 5159 SAMPLE 13344	INDEX 5160 SAMPLE 11943
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	MARLOW W	MIDDLEBURG S	MIDDLEBURG SE
WELL NAME	FRITTS NO. 2	BOYD B NO. 1	SPROWLS NO. 1
LOCATION	SEC. 31, T3N, R8W	SEC. 29, T7N, R5W	SEC. 14, T7N, R5W
OWNER	PETRO-LEWIS CORP.	PHILLIPS PETROLEUM CO.	SENECA OIL CO.
COMPLETED	08/18/78	05/05/72	12/20/68
SAMPLED	03/30/79	08/01/72	06/20/69
FORMATION	PENN-MEDRANO	PENN-HOXBAR-BOYD	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8980	7257	10300
WELLHEAD PRESSURE,PSIG	2376	975	3183
OPEN FLOW, MCFD	1800	31	9964
COMPONENT, MOLE PCT			
METHANE	92.1	50.3	85.5
ETHANE	4.1	6.4	6.3
PROPANE	1.8	7.8	3.3
N-BUTANE	0.5	3.3	0.7
ISOBUTANE	0.2	2.1	0.5
N-PENTANE	0.1	1.0	0.3
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	0.5	27.4	1.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.03	0.09	0.05
HEATING VALUE*	1104	1097	1157
SPECIFIC GRAVITY	0.620	0.904	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5161 SAMPLE 9672	INDEX 5162 SAMPLE 14167	INDEX 5163 SAMPLE 14168
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	MINCO E	MINCO SW	MINCO SW
WELL NAME	STERMER NO. 1	LITTLE NO. 1	MALCOM NO. 1
LOCATION	SEC. 19, T10N, R6W	SEC. 8, T9N, R8W	SEC. 16, T9N, R8W
OWNER	MONSANTO CO.	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.
COMPLETED	10/17/64	04/19/74	11/11/73
SAMPLED	12/14/64	10/04/74	10/04/74
FORMATION	PENN-OSBORNE	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9775	12388	12444
WELLHEAD PRESSURE,PSIG	1645	8253	8306
OPEN FLOW, MCFD	10250	80000	37759
COMPONENT, MOLE PCT			
METHANE	85.0	96.7	96.8
ETHANE	4.3	1.7	1.7
PROPANE	3.2	0.3	0.3
N-BUTANE	0.8	TRACE	TRACE
ISOBUTANE	0.8	0.1	0.1
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	0.7	0.2	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.9	0.8
HELIUM	0.04	0.02	0.02
HEATING VALUE*	1078	1026	1028
SPECIFIC GRAVITY	0.676	0.579	0.578

	INDEX 5164 SAMPLE 15846	INDEX 5165 SAMPLE 15903	INDEX 5166 SAMPLE 15912
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	MINCO W	MINCO W	NAPLES SE
WELL NAME	WEHLING NO. 1	EISENHOUR NO. 14	BARNETT NO. 1
LOCATION	SEC. 21, T10N, R8W	SEC. 12, T9N, R8W	SEC. 14, T6N, R5W
OWNER	NOVA ENERGY CORP.	LADD PETROLEUM CORP.	ARKLA EXPLORATION CO.
COMPLETED	12/19/78	07/02/79	11/17/79
SAMPLED	11/09/79	02/15/80	03/04/80
FORMATION	DEVO-HUNTON	PENN-TONKAWA	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13002	7894	13192
WELLHEAD PRESSURE,PSIG	4856	2350	3900
OPEN FLOW, MCFD	14910	2500	2600
COMPONENT, MOLE PCT			
METHANE	94.8	89.4	85.1
ETHANE	1.1	3.2	7.3
PROPANE	0.2	1.6	3.2
N-BUTANE	0.1	0.4	0.9
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.7	4.5	1.6
OXYGEN	0.2	TRACE	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.1	0.4
HELIUM	0.02	0.13	0.03
HEATING VALUE*	997	1010	1155
SPECIFIC GRAVITY	0.590	0.622	0.671

	INDEX 5167 SAMPLE 12096	INDEX 5168 SAMPLE 13099	INDEX 5169 SAMPLE 13396
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	NEWCASTLE W	NEWCASTLE W	NEWCASTLE W
WELL NAME	SURBECK NO. 1	ENGELKE NO. 1	PLUMLEE UNIT NO. 1
LOCATION	SEC. 13, T9N, R5W	SEC. 3, T9N, R5W	SEC. 2, T9N, R5W
OWNER	CHARLES R. WALBERT ET AL.	MACKELLAR, INC.	AMOCO PRODUCTION CO.
COMPLETED	05/22/69	10/12/71	NOT GIVEN
SAMPLED	11/05/69	11/02/71	09/25/72
FORMATION	PENN-BERRY	PENN-BERRY	PENN-BERRY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8899	8815	8806
WELLHEAD PRESSURE,PSIG	2500	2500	620
OPEN FLOW, MCFD	2526	3577	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.2	85.1	86.9
ETHANE	4.3	5.5	6.0
PROPANE	2.2	3.0	2.7
N-BUTANE	0.5	0.8	0.8
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	1.4	3.8	2.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.06	0.08	0.07
HEATING VALUE*	1123	1126	1116
SPECIFIC GRAVITY	0.643	0.672	0.649

	INDEX 5170 SAMPLE 15561	INDEX 5171 SAMPLE 11629	INDEX 5172 SAMPLE 11630
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	RUSH SPRINGS	RUSH SPRINGS SW	RUSH SPRINGS SW
WELL NAME	RUSH SPRINGS UNIT NO. 4	RUSH SPRINGS UNIT NO. 2	RUSH SPRINGS UNIT NO. 1
LOCATION	SEC. 32, T4N, R7W	SEC. 5, T3N, R7W	SEC. 8, T3N, R7W
OWNER	MACK OIL CO.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	03/24/76	07/08/67	12/01/67
SAMPLED	02/02/79	08/20/68	08/20/68
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16970	16852	16877
WELLHEAD PRESSURE,PSIG	3595	10925	10494
OPEN FLOW, MCFD	1349	30000	6050
COMPONENT, MOLE PCT			
METHANE	93.6	96.9	83.8
ETHANE	3.5	1.5	2.1
PROPANE	0.9	0.3	0.3
N-BUTANE	0.1	0.0	0.2
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.5	0.4	9.8
OXYGEN	0.1	0.0	2.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.7
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1055	1017	923
SPECIFIC GRAVITY	0.603	0.575	0.642

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5173 SAMPLE 14618	INDEX 5174 SAMPLE 14813	INDEX 5175 SAMPLE 14814
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SHOCKEY NO. 1	SIMMS A NO. 1	SIMMS A NO. 1
LOCATION	SEC. 9, T7N, R7W	SEC. 9, T4N, R5W	SEC. 9, T4N, R5W
OWNER	COTTON PETROLEUM CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	01/03/76	08/12/76	08/12/76
SAMPLED	03/--/76	10/15/76	10/15/76
FORMATION	PENN-SPRINGER	ORDO-BROMIDE 1ST	ORDO-BROMIDE 1ST
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13043	15297	15297
WELLHEAD PRESSURE, PSIG	9061	4353	4353
OPEN FLOW, MCFD	37000	13633	13633
COMPONENT, MOLE PCT			
METHANE	86.7	87.6	88.0
ETHANE	7.7	7.0	6.7
PROPANE	2.9	2.8	2.8
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.1	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1132	1145	1140
SPECIFIC GRAVITY	0.649	0.651	0.647

	INDEX 5176 SAMPLE 9718	INDEX 5177 SAMPLE 11370	INDEX 5178 SAMPLE 11371
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	CLYDE SW	DEER CREEK	DEER CREEK
WELL NAME	PITCHER NO. 1	DESTER A NO. 3	LANE B NO. 1
LOCATION	SEC. 10, T27N, R6W	SEC. 27, T27N, R3W	SEC. 22, T27N, R3W
OWNER	VIERSEN & COCHRAN	APPLETON OIL CO.	APPLETON OIL CO.
COMPLETED	12/22/64	06/05/63	08/04/59
SAMPLED	02/05/65	03/13/68	03/13/68
FORMATION	PENN-CHEROKEE	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4828	4162	4335
WELLHEAD PRESSURE, PSIG	1780	160	300
OPEN FLOW, MCFD	4339	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.8	73.0	78.7
ETHANE	6.4	8.9	7.8
PROPANE	2.3	4.7	4.3
N-BUTANE	0.9	1.5	1.5
ISOBUTANE	0.3	0.7	0.7
N-PENTANE	0.3	0.7	0.4
ISOPENTANE	0.2	TRACE	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.4
NITROGEN	9.2	9.6	5.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.13	0.25	0.11
HEATING VALUE*	1060	1149	1190
SPECIFIC GRAVITY	0.684	0.743	0.724

	INDEX 5179 SAMPLE 11372	INDEX 5180 SAMPLE 11373	INDEX 5181 SAMPLE 12532
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	DEER CREEK	DEER CREEK	HAWLEY SW
WELL NAME	HOXSEY NO. 1	LANE A NO. 1	GROENDYKE RANCH NO. 1
LOCATION	SEC. 14, T27N, R3W	SEC. 27, T27N, R3W	SEC. 17, T26N, R8W
OWNER	APPLETON OIL CO.	APPLETON OIL CO.	JONES & PELLOW OIL CO.
COMPLETED	12/01/59	06/18/59	02/18/70
SAMPLED	03/13/68	03/13/68	11/12/70
FORMATION	MISS-	MISS-	DEVO-MISENER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4028	3989	5900
WELLHEAD PRESSURE, PSIG	400	720	2100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5654
COMPONENT, MOLE PCT			
METHANE	82.0	67.9	89.0
ETHANE	7.6	7.4	4.1
PROPANE	3.8	3.9	1.9
N-BUTANE	1.4	1.2	0.7
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.5	0.4	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	3.3	15.8	2.9
OXYGEN	0.0	1.9	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.10	0.22	0.11
HEATING VALUE*	1179	1019	1102
SPECIFIC GRAVITY	0.697	0.752	0.641

	INDEX 5182 SAMPLE 15003	INDEX 5183 SAMPLE 11358	INDEX 5184 SAMPLE 6363
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	MAYFLOWER NW	MEDFORD W	PEARSONIA
WELL NAME	PICKETT NO. 1	BLUBAUGH NO. 1	JOHNSON NO. 1
LOCATION	SEC. 30, T28N, R3W	SEC. 13, T27N, R6W	SEC. 18, T2?N, R8W
OWNER	PETROLEUM RESOURCES CO.	TEXACO INC.	DAVON DRLG. CO.
COMPLETED	12/28/76	12/31/58	05/25/57
SAMPLED	05/19/77	03/07/68	08/10/57
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360 *
DEPTH, FEET	4556	4824	5133
WELLHEAD PRESSURE, PSIG	1288	910	1875
OPEN FLOW, MCFD	5479	1598	15000
COMPONENT, MOLE PCT			
METHANE	78.5	87.5	72.9
ETHANE	6.9	5.7	4.7
PROPANE	2.4	2.5	1.6
N-BUTANE	0.7	1.0	0.8
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.1	1.9	17.6
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.16	0.07	0.06
HEATING VALUE*	1046	1134	940
SPECIFIC GRAVITY	0.687	0.653	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5185 SAMPLE 11361	INDEX 5186 SAMPLE 1979	INDEX 5187 SAMPLE 14670
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	WAKITA TREND	WEBB	WILDCAT
WELL NAME	CARRIE RIXSE NO. 1	WEBB NO. 2	OVERTON NO. 1
LOCATION	SEC. 9, T28N, R7W	SEC. 2, T27N, R3W	SEC. 8, T25N, R7W
OWNER	GULF OIL CO.-U.S.	KAY COUNTY GAS CO.	MACK OIL CO.
COMPLETED	05/12/57	12/14/29	02/10/76
SAMPLED	03/07/58	03/25/30	05/17/76
FORMATION	PENN-CHEROKEE	NOT GIVEN	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4758	4153	6112
WELLHEAD PRESSURE,PSIG	1056	570	2200
OPEN FLOW, MCFD	1348	9500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	78.4	73.5
ETHANE	7.9	18.4	8.0
PROPANE	3.7	---	7.0
N-BUTANE	1.1	---	4.4
ISOBUTANE	0.5	---	1.6
N-PENTANE	0.4	---	1.4
ISOPENTANE	0.0	---	1.2
CYCLOPENTANE	TRACE	---	0.2
HEXANES PLUS	0.3	---	0.6
NITROGEN	9.3	2.6	2.0
OXYGEN	TRACE	0.3	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.44	0.10	0.06
HEATING VALUE*	1087	1126	1422
SPECIFIC GRAVITY	0.707	0.661	0.832

	INDEX 5188 SAMPLE 6575	INDEX 5189 SAMPLE 7309	INDEX 5190 SAMPLE 15016
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GREER	GREER	GREER
FIELD	ERICK GAS AREA	JESTER	WILLOW NE
WELL NAME	TANDY NO. 1	J. W. MCDONALD	KOPECEK NO. 1
LOCATION	SEC. 11, T7N, R24W	SEC. 15, T6N, R24W	SEC. 33, T7N, R22W
OWNER	EL PASO NATURAL GAS CO.	DIAMOND SHAMROCK CORP.	THERMO DYNE, INC.
COMPLETED	09/01/57	08/23/59	NOT GIVEN
SAMPLED	05/04/58	12/12/59	06/08/77
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1650	1260	1500
WELLHEAD PRESSURE,PSIG	429	330	250
OPEN FLOW, MCFD	940	1040	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	65.3	90.6
ETHANE	3.6	0.9	4.2
PROPANE	1.3	0.7	1.8
N-BUTANE	0.4	0.3	0.6
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.2	31.3	2.0
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	1.00	0.08
HEATING VALUE*	1057	723	1089
SPECIFIC GRAVITY	0.609	0.704	0.623

	INDEX 5191 SAMPLE 15240	INDEX 5192 SAMPLE 11723	INDEX 5193 SAMPLE 11325
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BOILING SPRINGS N	BUFFALO	BUFFALO N
WELL NAME	ROOT NO. 1	VIOLET COOK NO. 1	ROBERT R. ROHRER NO. 1
LOCATION	SEC. 9, T25N, R20W	SEC. 6, T27N, R22W	SEC. 6, T28N, R22W
OWNER	SUN PRODUCTION CO.	EASON OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	06/15/77	04/10/68	08/24/59
SAMPLED	03/--/78	12/31/68	03/01/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6676	5891	7220
WELLHEAD PRESSURE,PSIG	2768	2500	1406
OPEN FLOW, MCFD	9966	NOT GIVEN	4053
COMPONENT, MOLE PCT			
METHANE	92.5	91.1	91.8
ETHANE	3.8	3.4	3.7
PROPANE	1.3	1.6	1.6
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	0.9	2.2	0.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.07	0.15	0.09
HEATING VALUE*	1078	1081	1102
SPECIFIC GRAVITY	0.611	0.624	0.623

	INDEX 5194 SAMPLE 11326	INDEX 5195 SAMPLE 11455	INDEX 5196 SAMPLE 15479
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BUFFALO N	BUFFALO N	BUFFALO NW
WELL NAME	ROSA LEE KUHN NO. 1	HALCOMB-MILLER UNIT NO. 2	PROCTOR NO. 15
LOCATION	SEC. 6, T28N, R22W	SEC. 7, T28N, R22W	SEC. 35, T28N, R23W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	KENNEDY & MITCHELL
COMPLETED	03/31/59	01/29/60	10/31/78
SAMPLED	03/01/68	04/16/68	11/09/78
FORMATION	PENN-MISENER	ORDO-VIOLA	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5950	7304	5878
WELLHEAD PRESSURE,PSIG	1469	1362	1684
OPEN FLOW, MCFD	1191	2302	3073
COMPONENT, MOLE PCT			
METHANE	86.0	76.5	84.9
ETHANE	6.7	7.9	5.5
PROPANE	3.5	4.3	3.8
N-BUTANE	1.1	1.4	1.1
ISOBUTANE	1.2	0.7	0.7
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.8	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	2.5	7.7	2.2
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.11	0.11	0.13
HEATING VALUE*	1183	1139	1176
SPECIFIC GRAVITY	0.665	0.721	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5197 SAMPLE 11277	INDEX 5198 SAMPLE 11278	INDEX 5199 SAMPLE 14957
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BUFFALO S	BUFFALO S	BUFFALO SE
WELL NAME	ERPLE PROPHET NO. 1	W. P. WOOD NO. 1	MAPHET NO. 1
LOCATION	SEC. 35, T27N, R23W	SEC. 36, T27N, R23W	SEC. 14, T27N, R22W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.	NATIONAL COOP REFINERY ASSN.
COMPLETED	NOT GIVEN	NOT GIVEN	06/23/76
SAMPLED	02/13/68	02/13/68	03/30/77
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5236	6047
WELLHEAD PRESSURE,PSIG	1490	1421	1528
OPEN FLOW, MCFD	NOT GIVEN	14500	16442
COMPONENT, MOLE PCT			
METHANE	76.4	80.3	94.0
ETHANE	7.4	7.7	2.5
PROPANE	2.8	3.3	0.7
N-BUTANE	1.0	0.9	0.3
ISOBUTANE	0.3	0.4	TRACE
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	9.0	5.8	1.3
OXYGEN	1.6	0.5	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.16	0.19	0.08
HEATING VALUE*	1068	1113	1039
SPECIFIC GRAVITY	0.708	0.687	0.593

	INDEX 5200 SAMPLE 11331	INDEX 5201 SAMPLE 9937	INDEX 5202 SAMPLE 13950
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	CLARK CREEK E	FORT SUPPLY NE	FORT SUPPLY NE
WELL NAME	CLAUDE SHORT NO. 1	DEWEESE NO. 1	SMITH NO. 1
LOCATION	SEC. 22, T29N, R22W	SEC. 21, T25N, R21W	SEC. 23, T25N, R21W
OWNER	MOBIL OIL CORP.	CONTINENTAL OIL CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	07/30/64	03/09/65	01/29/74
SAMPLED	03/04/68	06/23/65	03/13/74
FORMATION	PENN-MORROW	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5595	7026	6994
WELLHEAD PRESSURE,PSIG	1565	1951	1750
OPEN FLOW, MCFD	15713	5601	2900
COMPONENT, MOLE PCT			
METHANE	91.7	90.3	92.5
ETHANE	3.2	4.6	3.6
PROPANE	1.3	1.9	1.4
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	2.2	1.0	0.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.6
HELIUM	0.11	0.08	0.10
HEATING VALUE*	1066	1109	1085
SPECIFIC GRAVITY	0.613	0.633	0.617

	INDEX 5203 SAMPLE 14247	INDEX 5204 SAMPLE 14641	INDEX 5205 SAMPLE 11083
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	FORT SUPPLY NE	KIRBY	LOVEDALE
WELL NAME	DEWEESE NO. 1	RICHARDSON NO. 1	JOHNSON NO. 1
LOCATION	SEC. 22, T25N, R21W	SEC. 24, T27N, R22W	SEC. 5, T26N, R21W
OWNER	DYCO PETROLEUM CORP.	NATIONAL COOPERATIVE REF.	EDWIN L. COX
COMPLETED	10/10/74	11/19/75	05/22/67
SAMPLED	12/30/74	04/23/76	08/05/67
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6946	5959	4929
WELLHEAD PRESSURE,PSIG	1436	1987	1642
OPEN FLOW, MCFD	8250	9038	9182
COMPONENT, MOLE PCT			
METHANE	91.3	87.3	81.1
ETHANE	3.9	4.7	8.1
PROPANE	1.7	3.1	3.8
N-BUTANE	0.4	1.1	1.1
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	1.2	1.9	4.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.10	0.10	0.19
HEATING VALUE*	1040	1151	1156
SPECIFIC GRAVITY	0.618	0.665	0.691

	INDEX 5206 SAMPLE 11356	INDEX 5207 SAMPLE 11578	INDEX 5208 SAMPLE 11636
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE	LOVEDALE	LOVEDALE
WELL NAME	LOCKHART UNIT C	STATE NO. 1	WAITS NO. 1
LOCATION	SEC. 14, T26N, R21W	SEC. 21, T26N, R21W	SEC. 12, T26N, R20W
OWNER	AMOCO PRODUCTION CO.	AIKMAN BROTHERS CORP.	KIRKPATRICK OIL CO.
COMPLETED	10/24/61	05/28/66	NOT GIVEN
SAMPLED	03/08/68	07/22/68	08/23/68
FORMATION	PENN-TONKAWA	PENN-TONKAWA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6250	5104	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1450	1200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	78.7	84.3
ETHANE	8.2	8.1	6.3
PROPANE	4.0	4.7	2.9
N-BUTANE	1.1	1.3	1.1
ISOBUTANE	0.3	0.7	0.2
N-PENTANE	0.4	0.6	0.4
ISOPENTANE	0.3	0.0	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	4.1	4.9	3.9
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.24	0.11
HEATING VALUE*	1161	1182	1135
SPECIFIC GRAVITY	0.694	0.715	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5209 SAMPLE 15233	INDEX 5210 SAMPLE 9049	INDEX 5211 SAMPLE 9710
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE	LOVEDALE NW	LOVEDALE NW
WELL NAME	RUBLE NO. 1	SHARP	BESSIE NO. 1
LOCATION	SEC. 1, T25N, R21W	SEC. 32, T29N, R21W	SEC. 11, T28N, R21W
OWNER	TEXAS OIL & GAS CORP.	DAVE MORGAN OIL CO., ET AL.	GULF OIL CO. U.S.
COMPLETED	12/08/77	12/06/62	11/13/64
SAMPLED	03/21/78	07/22/63	01/19/65
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6724	5668	5678
WELLHEAD PRESSURE,PSIG	2653	1900	1773
OPEN FLOW, MCFD	4800	3500	1449
COMPONENT, MOLE PCT			
METHANE	91.7	92.1	93.5
ETHANE	3.9	4.0	2.4
PROPANE	1.6	1.4	0.9
N-BUTANE	0.5	0.5	0.2
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.1	0.9	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	1.0
HELIUM	0.09	0.10	0.08
HEATING VALUE*	1045	1092	1030
SPECIFIC GRAVITY	0.618	0.619	0.597

	INDEX 5212 SAMPLE 11696	INDEX 5213 SAMPLE 12683	INDEX 5214 SAMPLE 13799
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE NW	LOVEDALE NW	LOVEDALE NW
WELL NAME	WOOLFOLK UNIT NO. 1	ART HEPNER NO. 1-19	O.E. HOWARD NO. 1
LOCATION	SEC. 18, T27N, R20W	SEC. 19, T27N, R20W	SEC. 11, T27N, R21W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	12/22/67	11/17/70	06/12/73
SAMPLED	NOT GIVEN	02/15/71	11/05/73
FORMATION	SILU-CHIMNEYHILL	DEVO-HUNTON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7384	7330	5880
WELLHEAD PRESSURE,PSIG	2452	1830	1850
OPEN FLOW, MCFD	5800	4440	1658
COMPONENT, MOLE PCT			
METHANE	86.9	88.5	91.8
ETHANE	4.0	4.2	3.9
PROPANE	1.7	1.8	1.6
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	5.2	4.0	1.1
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.12	0.13	0.08
HEATING VALUE*	1051	1068	1087
SPECIFIC GRAVITY	0.640	0.633	0.616

	INDEX 5215 SAMPLE 15316	INDEX 5216 SAMPLE 11420	INDEX 5217 SAMPLE 14859
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE NW	MAY E	MAY N
WELL NAME	CANFIELD GAS UNIT NO. 3	EASTERWOOD NO. 1	CRAWFORD NO. 1
LOCATION	SEC. 23, T28N, R21W	SEC. 21, T25N, R23W	SEC. 12, T25N, R24W
OWNER	ATLANTIC RICHFIELD CO.	AMOCO PRODUCTION	HCM
COMPLETED	01/28/78	07/07/64	05/10/76
SAMPLED	07/17/78	03/29/68	11/12/76
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5761	9710	7030
WELLHEAD PRESSURE,PSIG	1300	2040	1850
OPEN FLOW, MCFD	1500	4600	3800
COMPONENT, MOLE PCT			
METHANE	93.9	92.7	90.8
ETHANE	2.9	3.7	4.7
PROPANE	0.7	1.5	2.0
N-BUTANE	0.3	0.4	0.6
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.8	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.09	0.07	0.07
HEATING VALUE*	1042	1095	1122
SPECIFIC GRAVITY	0.596	0.618	0.635

	INDEX 5218 SAMPLE 14860	INDEX 5219 SAMPLE 7160	INDEX 5220 SAMPLE 8363
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MAY N	MOCANE-LAVERNE	MOCANE-LAVERNE
WELL NAME	CARLISLE NO. 1-36	EARL MCATEE UNIT NO. 1	I. L. ADAMS NO. 1
LOCATION	SEC. 36, T26N, R25W	SEC. 31, T28N, R24W	SEC. 28, T28N, R24W
OWNER	HCM	UNITED PRODUCING CO., INC.	MAY EXPLORATION VENTURES
COMPLETED	11/09/76	05/22/59	01/02/62
SAMPLED	11/12/76	07/28/59	NOT GIVEN
FORMATION	PENN-MORROW	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7066	6512	6236
WELLHEAD PRESSURE,PSIG	1327	NOT GIVEN	1741
OPEN FLOW, MCFD	2124	5900	4250
COMPONENT, MOLE PCT			
METHANE	86.3	90.1	90.6
ETHANE	6.9	4.8	4.5
PROPANE	4.7	3.8	2.0
N-BUTANE	1.5	0.7	0.6
ISOBUTANE	0.7	0.0	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.8	0.1	1.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.5
HELIUM	0.08	0.10	0.11
HEATING VALUE*	1208	1148	1107
SPECIFIC GRAVITY	0.689	0.638	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5221 SAMPLE 8364	INDEX 5222 SAMPLE 2224	INDEX 5223 SAMPLE 4380
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HEIRONYMUS NO. 1	HOWELL NO. 1	HEIRONYMUS NO. 1
LOCATION	SEC. 17, T28N, R23E	SEC. 14, T26N, R24W	SEC. 3, T26N, R24W
OWNER	MAY EXPLORATION VENTURES	ATLANTIC RICHFIELD CO.	J. M. HUBER CORP.
COMPLETED	11/02/61	NOT GIVEN	09/01/47
SAMPLED	NOT GIVEN	10/31/30	12/23/47
FORMATION	PENN-MORROW L	PENN-TONKAWA & OSWEGO	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6030	5400	5439
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1459	1495
OPEN FLOW, MCFD	5389	11250	834
COMPONENT, MOLE PCT			
METHANE	89.5	76.7	78.5
ETHANE	4.4	20.5	18.4
PROPANE	2.0	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	1.9	2.7	2.5
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.15	0.21	0.18
HEATING VALUE*	1110	1146	1125
SPECIFIC GRAVITY	0.639	0.668	0.658

	INDEX 5224 SAMPLE 5270	INDEX 5225 SAMPLE 5414	INDEX 5226 SAMPLE 6082
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	M. WOLFE NO. 1	LEROY LONG NO. 1	MCCLUNG A NO. 1
LOCATION	SEC. 4, T25N, R25W	SEC. 3, T25N, R25W	SEC. 11, T26N, R25W
OWNER	SUN OIL CO.	SUN OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	08/31/52	05/25/56
SAMPLED	09/26/56	03/11/53	06/12/56
FORMATION	NOT GIVEN	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7280	5455
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1700	1590
OPEN FLOW, MCFD	NOT GIVEN	640	100000
COMPONENT, MOLE PCT			
METHANE	74.3	80.8	81.1
ETHANE	6.8	7.9	7.5
PROPANE	4.9	5.7	3.7
N-BUTANE	2.0	1.7	1.0
ISOBUTANE	1.0	1.0	0.6
N-PENTANE	1.9	0.4	0.3
ISOPENTANE	2.6	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	1.0	0.2	0.4
NITROGEN	4.1	1.3	4.2
OXYGEN	0.7	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.10	0.09	0.17
HEATING VALUE*	1353	1243	1164
SPECIFIC GRAVITY	0.822	0.720	0.697

	INDEX 5227 SAMPLE 6083	INDEX 5228 SAMPLE 6106	INDEX 5229 SAMPLE 6121
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	MCCLUNG A NO. 1	HILL NO. 1	EFFIE STINSON NO. 1
LOCATION	SEC. 11, T26N, R25W	SEC. 6, T25N, R26W	SEC. 12, T26N, R25W
OWNER	CITIES SERVICE OIL CO.	SUN OIL CO.	MOBIL OIL CORP.
COMPLETED	05/25/56	06/22/56	03/08/56
SAMPLED	06/12/56	07/13/56	08/08/56
FORMATION	MISS-CHESTER	PENN-HOOVER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6945	4346	5540
WELLHEAD PRESSURE,PSIG	1809	1364	1587
OPEN FLOW, MCFD	11500	53000	22500
COMPONENT, MOLE PCT			
METHANE	77.1	48.0	86.1
ETHANE	3.5	16.2	6.6
PROPANE	1.8	18.2	3.3
N-BUTANE	0.8	8.7	1.0
ISOBUTANE	0.6	3.4	0.7
N-PENTANE	0.3	2.2	0.2
ISOPENTANE	0.8	1.8	0.3
CYCLOPENTANE	0.7	0.3	0.1
HEXANES PLUS	1.3	1.2	0.4
NITROGEN	10.0	0.0	0.8
OXYGEN	2.1	0.1	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.3
HELIUM	0.06	0.03	0.08
HEATING VALUE*	1078	1901	1179
SPECIFIC GRAVITY	0.733	1.114	0.672

	INDEX 5230 SAMPLE 6124	INDEX 5231 SAMPLE 6130	INDEX 5232 SAMPLE 6133
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EFFIE STINSON NO. 1	FREEMAN NO. 1	CARLISLE NO. 1
LOCATION	SEC. 12, T26N, R25W	SEC. 6, T27N, R25W	SEC. 25, T26N, R25W
OWNER	MOBIL OIL CORP.	AN-SON PETROLEUM CORP.	SUN OIL CO.
COMPLETED	03/08/56	04/28/56	06/14/56
SAMPLED	08/08/56	08/18/56	08/21/56
FORMATION	PENN-MORROW	PENN-MORROW	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6908	6620	4152
WELLHEAD PRESSURE,PSIG	1754	1320	1360
OPEN FLOW, MCFD	12300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.0	91.4	85.5
ETHANE	6.8	4.7	6.4
PROPANE	3.2	1.8	2.5
N-BUTANE	1.0	0.5	0.7
ISOBUTANE	0.7	0.2	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.4	0.2	0.0
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.5	0.6	3.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.08	0.10	0.19
HEATING VALUE*	1187	1098	1123
SPECIFIC GRAVITY	0.673	0.620	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5233 SAMPLE 6140	INDEX 5234 SAMPLE 6154	INDEX 5235 SAMPLE 6155
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STINSON NO. 1	W. M. STURGEON UNIT NO. 1	W. M. STURGEON UNIT NO. 1
LOCATION	SEC. 34, T26N, R25W	SEC. 2, T26N, R25W	SEC. 2, T26N, R25W
OWNER	SUN OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	07/20/56	08/30/56	08/30/56
SAMPLED	10/02/56	10/01/56	10/01/56
FORMATION	PENN-HOOVER	PENN-HOOVER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7278	4186	6893
WELLHEAD PRESSURE,PSIG	1349	1287	1517
OPEN FLOW, MCFD	6100	17000	3690
COMPONENT, MOLE PCT			
METHANE	86.5	89.1	91.0
ETHANE	6.1	6.4	4.2
PROPANE	2.3	2.5	1.9
N-BUTANE	0.5	0.9	0.4
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.3	0.2
HEXANES PLUS	0.2	0.8	0.4
NITROGEN	3.4	4.0	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.19	0.20	0.06
HEATING VALUE*	1099	1146	1109
SPECIFIC GRAVITY	0.646	0.681	0.631

	INDEX 5236 SAMPLE 6168	INDEX 5237 SAMPLE 6208	INDEX 5238 SAMPLE 6224
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BARBY NO. 1	LOUIS BARBY NO. 1	ELMA A. ODELL NO. 1
LOCATION	SEC. 12, T26N, R26W	SEC. 6, T26N, R25W	SEC. 1, T25N, R25W
OWNER	SUN OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	04/20/56	08/03/56	12/02/56
SAMPLED	10/25/56	12/06/56	12/06/57
FORMATION	PENN-HOOVER	MISS-CHESTER	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4205	6918	4228
WELLHEAD PRESSURE,PSIG	1348	1796	1195
OPEN FLOW, MCFD	3750	27	650
COMPONENT, MOLE PCT			
METHANE	85.0	83.6	85.6
ETHANE	6.4	4.1	5.9
PROPANE	2.4	1.4	3.5
N-BUTANE	0.8	2.8	0.8
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.4	1.6	0.2
ISOPENTANE	0.0	3.2	0.0
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.2	1.1	0.2
NITROGEN	3.9	0.7	3.2
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.17	0.06	0.21
HEATING VALUE*	1102	1338	1116
SPECIFIC GRAVITY	0.657	0.772	0.655

	INDEX 5239 SAMPLE 6253	INDEX 5240 SAMPLE 6511	INDEX 5241 SAMPLE 6512
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STATE UNIT NO. 1	LOVE UNIT NO. 1	LOVE UNIT NO. 1
LOCATION	SEC. 34, T27N, R25W	SEC. 8, T26N, R24W	SEC. 8, T26N, R24W
OWNER	SHELL OIL CO.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	11/28/56	02/24/58	02/24/58
SAMPLED	02/11/57	02/25/58	02/24/58
FORMATION	PENN-HOOVER	PENN-MORROW BASAL	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4180	6904	6956
WELLHEAD PRESSURE,PSIG	1336	1764	1844
OPEN FLOW, MCFD	16000	40000	5000
COMPONENT, MOLE PCT			
METHANE	85.2	85.0	92.2
ETHANE	6.1	6.9	3.5
PROPANE	2.3	3.5	1.3
N-BUTANE	0.6	1.1	0.4
ISOBUTANE	0.4	0.7	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.3	0.7	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	1.1	0.0
CARBON DIOXIDE	0.4	0.0	1.1
HELIUM	0.22	0.10	0.10
HEATING VALUE*	1085	1172	1077
SPECIFIC GRAVITY	0.652	0.676	0.620

	INDEX 5242 SAMPLE 7327	INDEX 5243 SAMPLE 7338	INDEX 5244 SAMPLE 7497
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	A. O. STARBUCK NO. 1	DUNAWAY NO. 1	J. F. MORERLY
LOCATION	SEC. 11, T26N, R24W	SEC. 32, T27N, R25W	SEC. 18, T26N, R23W
OWNER	ATLANTIC RICHFIELD CO.	OKLAHOMA NATURAL GAS CO.	TEXOMA PRODUCTION CO.
COMPLETED	11/09/59	09/28/59	03/14/60
SAMPLED	12/31/59	02/--/60	04/11/60
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5534	6760	5582
WELLHEAD PRESSURE,PSIG	1554	1709	1540
OPEN FLOW, MCFD	12500	10800	14400
COMPONENT, MOLE PCT			
METHANE	79.0	87.8	81.0
ETHANE	7.8	4.9	8.4
PROPANE	4.7	2.9	5.0
N-BUTANE	1.3	1.0	1.0
ISOBUTANE	0.8	0.6	1.5
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.6	0.8	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	5.2	0.5	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1147	1170	1109
SPECIFIC GRAVITY	0.712	0.666	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5245 SAMPLE 7567	INDEX 5246 SAMPLE 7802	INDEX 5247 SAMPLE 10859
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	TAFT NO. 1	STUART UNIT NO. 1	STATE OF OKLAHOMA L NO. 1
LOCATION	SEC. 22, T26N, R26W	SEC. 18, T26N, R25W	SEC. 36, T25N, R25W
OWNER	SHELL OIL CO.	ATLANTIC RICHFIELD CO.	CABOT CORP.
COMPLETED	11/19/60	09/09/60	02/01/66
SAMPLED	05/25/60	12/23/60	01/31/67
FORMATION	MISS-CHESTER	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7193	5419	7850
WELLHEAD PRESSURE,PSIG	1734	1541	1860
OPEN FLOW, MCFD	4000	15250	7100
COMPONENT, MOLE PCT			
METHANE	87.0	82.5	87.6
ETHANE	6.7	8.0	6.2
PROPANE	2.9	3.6	2.9
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.0	3.6	0.7
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.6
HELIUM	0.10	0.20	0.08
HEATING VALUE*	1151	1138	1138
SPECIFIC GRAVITY	0.657	0.675	0.652

	INDEX 5248 SAMPLE 12897	INDEX 5249 SAMPLE 15597	INDEX 5250 SAMPLE 14006
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HASKELL
FIELD	MOCANE-LAVERNE GAS AREA	WILDCAT	KEOTA NE
WELL NAME	MILLER-LOTSPEICH NO. 1	SMITH NO. 1	CARSON NO. 1-30
LOCATION	SEC. 19, T29N, R25W	SEC. 32, T26N, R21W	SEC. 30, T10N, R23E
OWNER	EXXON CO. U.S.A.	NORTHERN NATURAL GAS EXPL.	CLEARY PETROLEUM CO.
COMPLETED	NOT GIVEN	07/06/78	01/24/74
SAMPLED	07/20/71	03/27/79	05/03/74
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-SPIRO
GEOLOGIC PROVINCE CODE	360	360	345
DEPTH, FEET	NOT GIVEN	6564	7396
WELLHEAD PRESSURE,PSIG	300	1878	1571
OPEN FLOW, MCFD	NOT GIVEN	5485	15815
COMPONENT, MOLE PCT			
METHANE	90.9	92.7	96.2
ETHANE	4.6	2.8	0.9
PROPANE	2.1	1.1	0.1
N-BUTANE	0.6	0.4	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.8	1.7	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	2.3
HELIUM	0.08	0.09	0.09
HEATING VALUE*	1111	1065	993
SPECIFIC GRAVITY	0.626	0.610	0.583

	INDEX 5251 SAMPLE 3469	INDEX 5252 SAMPLE 8179	INDEX 5253 SAMPLE 8354
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	E. JOHNSON NO. 1	GLADYS HENDERSON UNIT NO. 1	ADAMS STATE UNIT NO. 1
LOCATION	SEC. 26, T8N, R20E	SEC. 10, T7N, R19E	SEC. 12, T7N, R19E
OWNER	OKLAHOMA NATURAL GAS CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	06/3/27	06/29/61	09/21/61
SAMPLED	06/02/42	08/19/61	01/07/62
FORMATION	-COAL	PENN-CROMWELL	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	837	6522	5788
WELLHEAD PRESSURE,PSIG	245	1391	1231
OPEN FLOW, MCFD	556	2740	1980
COMPONENT, MOLE PCT			
METHANE	96.4	95.4	94.9
ETHANE	1.4	1.3	0.8
PROPANE	---	0.4	0.1
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.9	0.7	2.2
OXYGEN	0.4	TRACE	0.4
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	2.2	1.2
HELIUM	0.04	0.10	0.07
HEATING VALUE*	1002	1000	979
SPECIFIC GRAVITY	0.576	0.589	0.580

	INDEX 5254 SAMPLE 8355	INDEX 5255 SAMPLE 9031	INDEX 5256 SAMPLE 9712
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	ADAMS STATE UNIT NO. 1	E. VAUGHN NO. 1	MCKINNEY UNIT NO. 1
LOCATION	SEC. 12, T7N, R19E	SEC. 7, T7N, R21E	SEC. 32, T8N, R21E
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	EXXON CO. U.S.A.
COMPLETED	09/21/61	08/08/62	11/30/64
SAMPLED	01/07/62	07/05/63	01/20/65
FORMATION	PENN-CROMWELL	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6238	8064	7498
WELLHEAD PRESSURE,PSIG	1409	1145	1500
OPEN FLOW, MCFD	5700	1629	1930
COMPONENT, MOLE PCT			
METHANE	95.8	94.4	95.0
ETHANE	1.2	0.7	0.6
PROPANE	0.3	0.2	0.0
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	0.8	0.2	1.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	3.8	2.7
HELIUM	0.04	0.10	0.07
HEATING VALUE*	1000	1001	9730
SPECIFIC GRAVITY	0.582	0.610	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5257 SAMPLE 9796	INDEX 5258 SAMPLE 9854	INDEX 5259 SAMPLE 10089
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	FEDERAL COLLEGE UNIT NO. 1	GREENWOOD UNIT NO. 1	J. FRED DITTMAN UNIT NO. 1
LOCATION	SEC. 15, T8N, R22E	SEC. 26, T10N, R23E	SEC. 21, T8N, R21E
OWNER	TEXAS PACIFIC OIL CO.	EXXON CO. U.S.A.	EXXON CO. U.S.A.
COMPLETED	11/25/64	04/26/64	06/30/65
SAMPLED	03/12/65	04/22/65	08/30/65
FORMATION	PENN-SPIRO	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5860	5808	6342
WELLHEAD PRESSURE,PSIG	1175	1100	1600
OPEN FLOW, MCFD	4596	1919	3000
COMPONENT, MOLE PCT			
METHANE	95.9	96.8	96.4
ETHANE	0.8	1.0	0.6
PROPANE	0.4	0.2	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.5	1.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.3	1.4
HELIUM	0.07	0.09	0.10
HEATING VALUE*	996	1004	987
SPECIFIC GRAVITY	0.586	0.575	0.577

	INDEX 5260 SAMPLE 10090	INDEX 5261 SAMPLE 10188	INDEX 5262 SAMPLE 10347
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	J. FRED DITTMAN UNIT NO. 1	LONE STAR NO. 1	ABBOTT UNIT A NO. 1
LOCATION	SEC. 21, T8N, R21E	SEC. 8, T8N, R22E	SEC. 22, T8N, R21E
OWNER	EXXON CO. U.S.A.	MONSANTO CO.	AMOCO PRODUCTION CO.
COMPLETED	06/30/65	05/18/65	10/01/65
SAMPLED	08/30/65	10/03/65	12/29/65
FORMATION	PENN-SPIRO	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5932	6286	6570
WELLHEAD PRESSURE,PSIG	1700	1180	1150
OPEN FLOW, MCFD	6000	15000	2600
COMPONENT, MOLE PCT			
METHANE	96.1	96.2	94.4
ETHANE	0.6	0.9	0.7
PROPANE	0.0	0.1	0.6
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.3	0.7	1.3
OXYGEN	0.1	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.0	2.0
HELIUM	0.08	0.07	0.07
HEATING VALUE*	984	9930	984
SPECIFIC GRAVITY	0.580	0.582	0.587

	INDEX 5263 SAMPLE 11719	INDEX 5264 SAMPLE 13758	INDEX 5265 SAMPLE 15727
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	RUSSELVILLE N
WELL NAME	FENTON NO. 1	CARSON NO. 1-29	BROWN "L" NO. 1
LOCATION	SEC. 17, T8N, R21E	SEC. 29, T10N, R23E	SEC. 33, T9N, R18E
OWNER	SUNSET INTERNAT. PETR. CORP.	CLEARY PETROLEUM CORP.	CITIES SERVICE CO.
COMPLETED	11/10/68	07/31/73	03/08/79
SAMPLED	02/10/69	09/27/73	08/17/79
FORMATION	DEVO-HUNTON	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6520	6761	5454
WELLHEAD PRESSURE,PSIG	2250	1532	815
OPEN FLOW, MCFD	3540	8628	1884
COMPONENT, MOLE PCT			
METHANE	95.7	92.5	95.2
ETHANE	0.6	0.9	0.8
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.2	3.9	0.7
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.0	3.1
HELIUM	0.08	0.08	0.09
HEATING VALUE*	983	956	981
SPECIFIC GRAVITY	0.584	0.598	0.592

	INDEX 5266 SAMPLE 15728	INDEX 5267 SAMPLE 14382	INDEX 5268 SAMPLE 14952
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	RUSSELVILLE N	STIGLER	STIGLER W
WELL NAME	BROWN "L" NO. 1	MCCARROLL NO. 1	JOHNSON NO. 1
LOCATION	SEC. 33, T9N, R18E	SEC. 10, T9N, R21E	SEC. 17, T9N, R20E
OWNER	CITIES SERVICE CO.	SOUTHERN UNION PRODUCTION CO	SERVICE DRILLING CO.
COMPLETED	03/09/79	02/01/74	10/12/76
SAMPLED	08/17/79	06/11/75	03/29/77
FORMATION	PENN-ATOKA BASAL	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	9887	4011	3900
WELLHEAD PRESSURE,PSIG	837	1550	1375
OPEN FLOW, MCFD	10391	2200	10310
COMPONENT, MOLE PCT			
METHANE	96.0	96.5	97.0
ETHANE	0.8	1.1	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.8	1.6	1.4
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.5	0.1
HELIUM	0.09	0.09	0.09
HEATING VALUE*	989	1000	1015
SPECIFIC GRAVITY	0.584	0.572	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5269 SAMPLE 15726	INDEX 5270 SAMPLE 3450	INDEX 5271 SAMPLE 3459
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HUGHES	HUGHES
FIELD	STIGLER W	ADAMS DISTRICT	ADAMS DISTRICT
WELL NAME	COLLEGE UNIT NO. 1	M. K. FREAM NO. 1	ADAMS ESTATE NO. 2
LOCATION	SEC. 15, T9N, R20E	SEC. 29, T9N, R9E	SEC. 31, T9N, R9E
OWNER	E. LYLE JOHNSON, INC.	AMERADA HESS CORP.	AMERADA HESS CORP.
COMPLETED	09/20/78	03/30/38	01/11/39
SAMPLED	08/20/79	05/27/42	05/27/42
FORMATION	PENN-WAPANUCKA	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	355	355
DEPTH, FEET	4235	3328	3350
WELLHEAD PRESSURE,PSIG	1394	NOT GIVEN	580
OPEN FLOW, MCFD	10141	14000	27416
COMPONENT, MOLE PCT			
METHANE	96.2	61.2	72.4
ETHANE	1.3	35.0	19.8
PROPANE	0.1	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.7	3.0	7.0
OXYGEN	0.0	0.5	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.11	0.12	0.16
HEATING VALUE*	1009	1247	1088
SPECIFIC GRAVITY	0.578	0.744	0.685

	INDEX 5272 SAMPLE 3461	INDEX 5273 SAMPLE 4431	INDEX 5274 SAMPLE 3472
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	ADAMS DISTRICT	ALABAMA E	ALABAMA SE
WELL NAME	ADAMS ESTATE NO. 1	HENEHA NO. 1	GRANNEMAN NO. 1
LOCATION	SEC. 31, T9N, R9E	SEC. 2, T9N, R11E	SEC. 23, T9N, R11E
OWNER	AMERADA HESS CORP.	MID-CONTINENT PETROLEUM CORP	J. P. WALKER
COMPLETED	04/01/35	08/26/47	06/15/41
SAMPLED	05/27/42	02/04/48	05/25/42
FORMATION	DEVO-MISENER	NOT GIVEN	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4023	2952	2245
WELLHEAD PRESSURE,PSIG	NOT GIVEN	975	685
OPEN FLOW, MCFD	119	8500	7000
COMPONENT, MOLE PCT			
METHANE	49.3	74.7	81.6
ETHANE	48.1	22.8	13.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	1.8	4.2
OXYGEN	0.3	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.07	0.10	0.18
HEATING VALUE*	1361	1165	1067
SPECIFIC GRAVITY	0.804	0.679	0.641

	INDEX 5275 SAMPLE 15649	INDEX 5276 SAMPLE 1302	INDEX 5277 SAMPLE 5103
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	ATWOOD S	BEARDEN	CALVIN
WELL NAME	POOL NO. 1-13	E. BRUNNER NO. 1	A. F. LYONS NO. 1
LOCATION	SEC. 13, T5N, R9E	SEC. 16, T10N, R9E	SEC. 33, T6N, R10E
OWNER	JOHN A. TAYLOR	BURKE-GREIS OIL CO.	SKELLY OIL CO.
COMPLETED	12/03/78	05/--/24	NOT GIVEN
SAMPLED	06/14/79	09/23/26	11/29/51
FORMATION	PENN-GILCREASE	PENN-PAPOOSE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3800	3293	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1300	1250	NOT GIVEN
OPEN FLOW, MCFD	2400	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	57.6	81.0
ETHANE	4.5	26.0	8.8
PROPANE	1.7	---	3.5
N-BUTANE	0.5	---	1.0
ISOBUTANE	0.2	---	0.3
N-PENTANE	0.2	---	0.4
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	2.7	13.3	3.9
OXYGEN	0.3	2.7	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.11	0.06	0.11
HEATING VALUE*	1071	1049	1149
SPECIFIC GRAVITY	0.625	0.758	0.689

	INDEX 5278 SAMPLE 3451	INDEX 5279 SAMPLE 3460	INDEX 5280 SAMPLE 13685
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	CALVIN S	CALVIN S	CALVIN W
WELL NAME	BEAKER NO. 1	SHEMWELL NO. 1	RAPER NO. 1
LOCATION	SEC. 8, T5N, R10E	SEC. 8, T5N, R10E	SEC. 30, T6N, R10E
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	FERGUSON OIL CO., INC.
COMPLETED	03/2A/40	12/22/39	02/21/73
SAMPLED	05/27/42	05/27/42	08/10/73
FORMATION	PENN-CROMWELL	PENN-CROMWELL U	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4398	4361	4398
WELLHEAD PRESSURE,PSIG	1680	1650	1660
OPEN FLOW, MCFD	8609	22500	4500
COMPONENT, MOLE PCT			
METHANE	85.6	87.4	88.7
ETHANE	13.1	11.1	5.4
PROPANE	---	---	2.0
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.4	0.7	2.3
OXYGEN	0.5	0.4	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.11	0.13
HEATING VALUE*	1102	1084	1093
SPECIFIC GRAVITY	0.626	0.617	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5281 SAMPLE 9913	INDEX 5282 SAMPLE 10516	INDEX 5283 SAMPLE 10517
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	DUSTIN	DUSTIN S	DUSTIN S
WELL NAME	COPE NO. 1	BRANNON A NO. 1-LC	BRANNON A NO. 1-UC
LOCATION	SEC. 3, T9N, R12E	SEC. 17, T9N, R12E	SEC. 17, T9N, R12E
OWNER	SNEE & EBERLY	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	12/29/64	12/29/64
SAMPLED	06/09/65	04/07/66	04/07/66
FORMATION	PENN-GILCREASE	PENN-BOOCH	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2660	1972	1362
WELLHEAD PRESSURE,PSIG	1000	640	440
OPEN FLOW, MCFD	15619	7269	2017
COMPONENT, MOLE PCT			
METHANE	90.4	94.6	93.8
ETHANE	4.9	2.0	2.1
PROPANE	1.7	0.5	0.5
N-BUTANE	0.5	0.2	0.2
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.6	2.5	3.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.08	0.10	0.07
HEATING VALUE*	1088	1014	1008
SPECIFIC GRAVITY	0.622	0.583	0.587

	INDEX 5284 SAMPLE 14939	INDEX 5285 SAMPLE 10058	INDEX 5286 SAMPLE 10059
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	DUSTIN S	FUHRMAN SE	FUHRMAN SE
WELL NAME	MCKAY NO. 1-31	MEADORS NO. 1	DARKS NO. 1
LOCATION	SEC. 31, T 9N, R12E	SEC. 36, T9N, R9E	SEC. 36, T9N, R9E
OWNER	N.F.C. PETROLEUM CORP.	WOOD OIL CO.	WOOD OIL CO.
COMPLETED	11/22/76	05/03/65	06/16/65
SAMPLED	03/11/77	08/10/65	08/10/65
FORMATION	PENN-BOOCH	PENN-GILCREASE U	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2820	2836	2519
WELLHEAD PRESSURE,PSIG	454	1160	1100
OPEN FLOW, MCFD	3401	4000	750
COMPONENT, MOLE PCT			
METHANE	83.8	82.9	76.7
ETHANE	6.3	4.4	3.4
PROPANE	2.6	2.3	2.3
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.8	0.1
NITROGEN	4.9	8.8	15.1
OXYGEN	0.6	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	1.0
HELIUM	0.09	0.14	0.13
HEATING VALUE*	1074	1023	946
SPECIFIC GRAVITY	0.655	0.658	0.689

	INDEX 5287 SAMPLE 15814	INDEX 5288 SAMPLE 1307	INDEX 5289 SAMPLE 3463
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GERTY	GILCREST SW	GREASY CREEK
WELL NAME	COSPER NO. 7-1	I.T.T.O. NO. 1	CANARD NO. 2
LOCATION	SEC. 7, T4N, R10E	SEC. 19, T9N, R9E	SEC. 27, T9N, R10E
OWNER	JONES & PELLOW OIL CO.	INDIAN TERR. ILLUM. OIL CO.	DR. T. J. LYNCH
COMPLETED	08/20/79	05/17/26	10/21/41
SAMPLED	10/23/79	09/23/26	05/25/42
FORMATION	PENN-BOOCH	NOT GIVEN	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2910	3370	2310
WELLHEAD PRESSURE,PSIG	956	1100	570
OPEN FLOW, MCFD	2833	8000	3720
COMPONENT, MOLE PCT			
METHANE	89.4	61.2	81.2
ETHANE	3.7	31.5	14.9
PROPANE	1.7	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	4.0	6.6	3.2
OXYGEN	0.0	0.3	0.4
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.17	0.11	0.04
HEATING VALUE*	1058	1184	1090
SPECIFIC GRAVITY	0.626	0.743	0.645

	INDEX 5290 SAMPLE 3473	INDEX 5291 SAMPLE 3754	INDEX 5292 SAMPLE 3896
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	BYRD NO. 1	AUSTIN NO. 1	DANNENBURG NO. 1
LOCATION	SEC. 5, T4N, R11E	SEC. 4, T7N, R10E	SEC. 35, T9N, R10E
OWNER	DR. T. J. LYNCH	ALADDIN PETROLEUM CORP.	CREEKMORE-ROONEY CO.
COMPLETED	39/--/37	01/27/44	03/21/44
SAMPLED	05/25/42	03/30/44	08/29/44
FORMATION	PENN-CALVIN	PENN-CROMWELL	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1540	3482	3172
WELLHEAD PRESSURE,PSIG	420	1445	NOT GIVEN
OPEN FLOW, MCFD	1500	27	1000
COMPONENT, MOLE PCT			
METHANE	91.6	81.4	70.2
ETHANE	4.9	16.3	27.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.8	1.8	1.1
OXYGEN	0.4	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.13	0.13	0.08
HEATING VALUE*	1016	1117	1208
SPECIFIC GRAVITY	0.599	0.645	0.703

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5293 SAMPLE 3905	INDEX 5294 SAMPLE 4130	INDEX 5295 SAMPLE 4391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	BAILEY CONSOLIDATED NO. 1	B. I. PRICE NO. 1	F. MEADORS NO. 1
LOCATION	SEC. 19, T8N, R11E	SEC. 26, T8N, R10E	SEC. 36, T9N, R10E
OWNER	OTHA H. GRIMES	SKELLY OIL CO.	MID-CONTINENT PETROLEUM CORP
COMPLETED	11/29/42	01/19/46	06/30/47
SAMPLED	06/09/44	10/10/46	12/15/47
FORMATION	PENN-GILCREASE	PENN-UNION VALLEY	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2870	3370	2224
WELLHEAD PRESSURE,PSIG	560	1500	715
OPEN FLOW, MCFD	14000	1000	3880
COMPONENT, MOLE PCT			
METHANE	89.6	80.2	79.0
ETHANE	9.0	19.5	17.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.7	0.0	2.9
OXYGEN	0.2	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.10	0.12	0.09
HEATING VALUE*	1069	1162	1114
SPECIFIC GRAVITY	0.606	0.654	0.656

	INDEX 5296 SAMPLE 4392	INDEX 5297 SAMPLE 4474	INDEX 5298 SAMPLE 4557
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	F. MEADORS NO. 1	STEEL NO. 1	SMITH B NO. 1
LOCATION	SEC. 36, T9N, R10E	SEC. 17, T8N, R11E	SEC. 12, T8N, R10E
OWNER	MID-CONTINENT PETROLEUM CORP	OTHA H. GRIMES	CITIES SERVICE OIL CO.
COMPLETED	07/18/47	01/--/48	05/18/48
SAMPLED	12/15/47	04/16/48	09/10/48
FORMATION	PENN-BOOCH	NOT GIVEN	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2242	2972	2330
WELLHEAD PRESSURE,PSIG	800	940	875
OPEN FLOW, MCFD	2100	1050	1100
COMPONENT, MOLE PCT			
METHANE	81.1	89.0	80.1
ETHANE	16.0	8.5	14.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.3	1.7	4.4
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.09	0.09	0.12
HEATING VALUE*	1108	1054	1078
SPECIFIC GRAVITY	0.647	0.609	0.650

	INDEX 5299 SAMPLE 4558	INDEX 5300 SAMPLE 4559	INDEX 5301 SAMPLE 4770
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	NICKS NO. 1	RASBERRY	B. L. PRICE NO. 1
LOCATION	SEC. 12, T8N, R10E	SEC. 12, T8N, R10E	SEC. 26, T8N, R10E
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	SKELLY OIL CO.
COMPLETED	04/16/48	06/16/48	06/22/49
SAMPLED	09/10/48	09/10/48	10/20/49
FORMATION	PENN-BOOCH	PENN-BOOCH	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2305	2333	2360
WELLHEAD PRESSURE,PSIG	800	800	710
OPEN FLOW, MCFD	5540	638	1200
COMPONENT, MOLE PCT			
METHANE	80.7	80.1	88.3
ETHANE	---	15.3	3.7
PROPANE	---	---	2.3
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	0.0	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	3.9	4.1	4.3
OXYGEN	0.1	0.1	0.1
ARGON	0.0	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.11	0.11	0.12
HEATING VALUE*	817	1086	1066
SPECIFIC GRAVITY	0.491	0.650	0.634

	INDEX 5302 SAMPLE 5070	INDEX 5303 SAMPLE 5115	INDEX 5304 SAMPLE 9956
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	MYERS NO. 1	CORDELL NO. 1	TOWNSEND NO. 2
LOCATION	SEC. 9, T7N, R10E	SEC. 2, T8N, R10E	SEC. 29, T8N, R11E
OWNER	WHITE EAGLE OIL CO.	DAVIDOR & DAVIDOR	OTHA H. GRIMES
COMPLETED	03/01/51	NOT GIVEN	03/05/65
SAMPLED	06/01/51	12/03/51	07/06/65
FORMATION	PENN-L	NOT GIVEN	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3580	NOT GIVEN	1722
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	290
OPEN FLOW, MCFD	2144	NOT GIVEN	1660
COMPONENT, MOLE PCT			
METHANE	84.3	89.4	90.0
ETHANE	8.7	3.8	2.9
PROPANE	2.9	2.2	1.5
N-BUTANE	0.7	0.9	0.4
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.3	2.8	4.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.11	0.11	0.10
HEATING VALUE*	1141	1093	1044
SPECIFIC GRAVITY	0.662	0.640	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5305 SAMPLE 9957		INDEX 5306 SAMPLE 3998		INDEX 5307 SAMPLE 3866	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	HUGHES		HUGHES		HUGHES	
FIELD	GREASY CREEK		HILL TOP		HILLTOP	
WELL NAME	ROGERS-BRUNER NO. 1		C. PEARSON NO. 1		M. G. CLARKE A NO. 1	
LOCATION	SEC. 20, T8N, R11E		SEC. 16, T5N, R11E		SEC. 21, T5N, R11E	
OWNER	OTHA H. GRIMES		TEXACO INC.		STANOLIND OIL & GAS CO.	
COMPLETED	11/06/56		01/28/45		07/11/44	
SAMPLED	07/06/65		03/27/45		09/12/44	
FORMATION	PENN-GILCREASE		PENN-CROMWELL		PENN-CROMWELL	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	2898		5428		5463	
WELLHEAD PRESSURE,PSIG	460		1500		NOT GIVEN	
OPEN FLOW, MCFD	1210		2250		30000	
COMPONENT, MOLE PCT						
METHANE	90.2		92.9		93.8	
ETHANE	4.2		6.1		5.1	
PROPANE	1.5		---		---	
N-BUTANE	0.3		---		---	
ISOBUTANE	0.2		---		---	
N-PENTANE	TRACE		---		---	
ISOPENTANE	0.2		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	TRACE		---		---	
NITROGEN	2.7		0.0		0.0	
OXYGEN	0.2		0.3		0.4	
ARGON	TRACE		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.3		0.6		0.7	
HELIUM	0.07		0.10		0.10	
HEATING VALUE*	1053		1050		1042	
SPECIFIC GRAVITY	0.616		0.592		0.589	

	INDEX 5308 SAMPLE 4636		INDEX 5309 SAMPLE 1739		INDEX 5310 SAMPLE 2242	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	HUGHES		HUGHES		HUGHES	
FIELD	HILLTOP N		HOLDENVILLE		HOLDENVILLE	
WELL NAME	DERRICK A NO. 1		JACKSON NO. 1		LOUISA TIGER NO. 1	
LOCATION	SEC. 32, T6N, R11E		SEC. 11, T7N, R8E		SEC. 9, T7N, R8E	
OWNER	PURE OIL CO.		INDEPENDENT OIL & GAS CO.		MID-CONTINENT PETROLEUM CORP	
COMPLETED	07/21/48		02/20/29		10/20/30	
SAMPLED	11/24/48		04/29/29		11/22/30	
FORMATION	PENN-		NOT GIVEN		PENN-HOOCH	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	4866		3020		2950	
WELLHEAD PRESSURE,PSIG	1948		990		NOT GIVEN	
OPEN FLOW, MCFD	2650		55806		10000	
COMPONENT, MOLE PCT						
METHANE	82.2		67.2		76.4	
ETHANE	11.6		24.5		19.7	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	4.6		7.5		3.7	
OXYGEN	0.9		0.3		0.1	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.6		0.5		0.2	
HELIUM	0.07		0.10		0.09	
HEATING VALUE*	1041		1120		1127	
SPECIFIC GRAVITY	0.641		0.713		0.670	

	INDEX 5311 SAMPLE 11655		INDEX 5312 SAMPLE 11656		INDEX 5313 SAMPLE 13640	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	HUGHES		HUGHES		HUGHES	
FIELD	LAMAR E		LAMAR E		LEGAL	
WELL NAME	SANDERS NO. 1		SANDERS NO. 1		MARTIN NO. 1	
LOCATION	SEC. 25, T8N, R11E		SEC. 25, T8N, R11E		SEC. 23, T4N, R11E	
OWNER	LURELL OIL CO.		LURELL OIL CO.		WESTERN DIVERSIFIED MGT. CO.	
COMPLETED	04/14/68		04/14/68		10/13/72	
SAMPLED	09/24/68		09/24/68		01/05/73	
FORMATION	PENN-HARTSHORNE		PENN-WAPANUCKA		PENN-MORROW	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	2406		3466		7300	
WELLHEAD PRESSURE,PSIG	640		910		2600	
OPEN FLOW, MCFD	3500		3000		2600	
COMPONENT, MOLE PCT						
METHANE	88.5		82.5		94.5	
ETHANE	5.8		10.6		2.0	
PROPANE	2.2		3.4		0.4	
N-BUTANE	0.4		0.8		0.1	
ISOBUTANE	0.3		0.4		0.1	
N-PENTANE	0.2		0.4		TRACE	
ISOPENTANE	TRACE		0.0		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.3		0.1	
NITROGEN	2.4		1.2		1.0	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		TRACE		0.6	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		1.1	
HELIUM	0.10		0.08		0.04	
HEATING VALUE*	1091		1187		1017	
SPECIFIC GRAVITY	0.631		0.680		0.586	

	INDEX 5314 SAMPLE 3465		INDEX 5315 SAMPLE 1040		INDEX 5316 SAMPLE 3814	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	HUGHES		HUGHES		HUGHES	
FIELD	NOT GIVEN		PAPOOSE		PAPOOSE	
WELL NAME	A. C. MCKAY NO. 1		ALEXANDER NO. 1		NORTON NO. 1	
LOCATION	SEC. 16, T6N, R11E		SEC. 4, T9N, R9E		SEC. 6, T9N, R10E	
OWNER	MOBIL OIL CORP.		PAPOOSE OIL CO.		KEENER OIL & GAS CO.	
COMPLETED	03/08/41		04/--/24		01/02/42	
SAMPLED	05/25/42		04/28/25		04/25/44	
FORMATION	PENN-CROMWELL U		PENN-		PENN-HOOCH	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	5360		3314		2580	
WELLHEAD PRESSURE,PSIG	2200		20		275	
OPEN FLOW, MCFD	23500		200		500	
COMPONENT, MOLE PCT						
METHANE	90.6		52.9		68.0	
ETHANE	8.5		42.0		21.5	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	TRACE		4.6		10.0	
OXYGEN	0.5		0.7		0.4	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.4		0.0	
HELIUM	0.27		0.06		0.07	
HEATING VALUE*	1077		1289		1074	
SPECIFIC GRAVITY	0.642		0.787		0.704	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5317 SAMPLE 4729	INDEX 5318 SAMPLE 11328	INDEX 5319 SAMPLE 3868
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	PECAN GROVE	STUART SW	WETUMKA DISTRICT EAST
WELL NAME	DAVIS-MURTA NO. 1	WOODFORD NO. 1	JARRETT NO. 1
LOCATION	SEC. 20, T8N, R9E	SEC. 26, T5N, R11E	SEC. 14, T9N, R10E
OWNER	GULF OIL CO. U.S.	LUBELL OIL CO.	MEALY-WOLFE DRILLING CO.
COMPLETED	01/23/49	05/31/59	04/10/44
SAMPLED	05/16/49	02/29/68	08/25/44
FORMATION	PENN-CROMWELL	PENN-HARTSHORNE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3320	3085	2632
WELLHEAD PRESSURE,PSIG	190	640	NOT GIVEN
OPEN FLOW, MCFD	1300	40	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.5	87.3	81.1
ETHANE	19.5	4.8	14.6
PROPANE	6.4	2.4	---
N-BUTANE	1.2	0.6	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	3.5	3.5	3.6
OXYGEN	0.1	0.4	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.02	0.15	0.00
HEATING VALUE*	1292	1082	1083
SPECIFIC GRAVITY	0.777	0.643	0.647

	INDEX 5320 SAMPLE 962	INDEX 5321 SAMPLE 13977	INDEX 5322 SAMPLE 4129
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	JEFFERSON
FIELD	WEWOKA DISTRICT	WILDCAT	OSCAR
WELL NAME	A. LONG NO. 1	WILBANKS NO. 1	W. D. SEAY NO. 40
LOCATION	SEC. 4, T7N, R8E	SEC. 29, T5N, R11E	SEC. 3, T7S, R5W
OWNER	PRAIRIE OIL & G/S CO.	WOODS PETROLEUM CO.	CONTINENTAL OIL CO.
COMPLETED	06/--/24	04/11/74	12/--/45
SAMPLED	01/09/25	04/15/74	10/23/46
FORMATION	PENN-	PENN-THURMAN-BOGGY	PENN-
GEOLOGIC PROVINCE CODE	355	355	350
DEPTH, FEET	3194	1511	845
WELLHEAD PRESSURE,PSIG	12	650	215
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.7	92.6	51.2
ETHANE	84.2	2.2	4.1
PROPANE	---	0.2	---
N-BUTANE	---	TRACE	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	TRACE	---
NITROGEN	9.1	4.6	43.1
OXYGEN	0.6	0.0	0.0
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	TRACE	0.4
HELIUM	0.04	0.17	1.19
HEATING VALUE*	1567	990	592
SPECIFIC GRAVITY	1.017	0.589	0.752

	INDEX 5323 SAMPLE 7576	INDEX 5324 SAMPLE 1751	INDEX 5325 SAMPLE 15717
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	JEFFERSON	KAY	KAY
FIELD	SEAY	BLACKWELL	BRAMAN N
WELL NAME	NO. 6	VICKERY NO. 4	W. A. TAYLOR NO. 1
LOCATION	SEC. 19, T7S, R5W	SEC. 28, T27N, R1E	SEC. 22, T29N, R1W
OWNER	THERMAL PRODUCERS, INC.	HAG OIL CO.	CHASE EXPLORATION CORP.
COMPLETED	02/05/60	03/16/29	11/10/77
SAMPLED	06/10/60	04/22/29	07/28/79
FORMATION	PENN-CISCO	NOT GIVEN	PERM-NEVA
GEOLOGIC PROVINCE CODE	350	355	355
DEPTH, FEET	698	794	900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	75	110
OPEN FLOW, MCFD	NOT GIVEN	100	225
COMPONENT, MOLE PCT			
METHANE	57.7	55.4	62.8
ETHANE	2.4	5.4	3.8
PROPANE	0.1	---	2.0
N-BUTANE	0.1	---	0.5
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	37.5	38.1	29.0
OXYGEN	0.0	0.2	0.0
ARGON	0.1	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	0.5	0.5
HELIUM	0.90	0.62	0.75
HEATING VALUE*	643	658	797
SPECIFIC GRAVITY	0.733	0.743	0.733

	INDEX 5326 SAMPLE 11527	INDEX 5327 SAMPLE 10019	INDEX 5328 SAMPLE 11546
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	BRAMAN NW	BRAMAN W	CHILOCCO E
WELL NAME	CORBIN NO.3	WILLIAMSON NO. 1	WIDENER NO. 2
LOCATION	SEC. 25, T29N, R2W	SEC. 4, T28N, R2W	SEC. 20, T29N, R3E
OWNER	STRURY-KIERNAN	CONSOLIDATED OIL AND GAS CO.	FELL & WOLFE OIL CO.
COMPLETED	NOT GIVEN	07/19/65	NOT GIVEN
SAMPLED	05/31/68	07/31/65	06/20/68
FORMATION	PENN-CHEROKEE	MISS-	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3656	4050	3200
WELLHEAD PRESSURE,PSIG	1536	1300	190
OPEN FLOW, MCFD	2000	2444	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.9	58.8	73.8
ETHANE	6.7	7.1	7.8
PROPANE	3.0	2.8	3.4
N-BUTANE	1.0	0.9	1.2
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.6
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.7
NITROGEN	9.6	28.2	11.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.36	0.84	0.37
HEATING VALUE*	1071	8620	1103
SPECIFIC GRAVITY	0.694	0.765	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5329 SAMPLE 14917	INDEX 5330 SAMPLE 5343	INDEX 5331 SAMPLE 5344
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	OILWORTH	OILWORTH DISTRICT	OILWORTH DISTRICT
WELL NAME	GREEL NO. 1	J. COURTNEY NO. 1	SEIPEL NO. 1
LOCATION	SEC. 6, T28N, R 1E	SEC. 21, T29N, R1E	SEC. 21, T29N, R1E
OWNER	UNIT OPERATIONS, INC.	DAVE MORGAN OIL CO.	DAVE MORGAN OIL CO.
COMPLETED	07/12/76	09/15/52	07/22/52
SAMPLED	02/21/77	12/02/52	12/02/52
FORMATION	PENN-OSWEGO	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2995	3041	3058
WELLHEAD PRESSURE,PSIG	685	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2398	1300	2000
COMPONENT, MOLE PCT			
METHANE	76.6	65.0	64.8
ETHANE	8.3	7.8	7.8
PROPANE	4.0	4.5	4.5
N-BUTANE	1.2	1.1	1.1
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.5	20.3	20.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.18	0.24	0.23
HEATING VALUE*	1109	984	991
SPECIFIC GRAVITY	0.708	0.752	0.758

	INDEX 5332 SAMPLE 13192	INDEX 5333 SAMPLE 4562	INDEX 5334 SAMPLE 10351
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	OILWORTH DISTRICT	GARRETT NW	HARDIN N
WELL NAME	COLE NO. 5	SCHOOLLAND DUCK NO. 1	STATE 16-1
LOCATION	SEC. 18, T29N, R1E	SEC. 13, T27N, R1E	SEC. 16, T27N, R2W
OWNER	PERRY, ADAMS & LEWIS, INC.	CARTER OIL CO.	AMAX PETROLEUM CORP.
COMPLETED	03/03/72	09/06/48	10/18/65
SAMPLED	04/15/72	09/14/48	01/09/66
FORMATION	PENN-OSWEGO	PENN-	PENN-RED FORK
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3019	3562	4229
WELLHEAD PRESSURE,PSIG	1245	1300	1275
OPEN FLOW, MCFD	3000	500	2016
COMPONENT, MOLE PCT			
METHANE	76.4	63.0	87.1
ETHANE	7.7	21.6	6.1
PROPANE	3.6	---	2.4
N-BUTANE	1.0	---	0.8
ISOBUTANE	0.5	---	0.4
N-PENTANE	0.3	---	0.3
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	9.6	14.5	2.0
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.35	0.34	0.08
HEATING VALUE*	1091	1025	1130
SPECIFIC GRAVITY	0.709	0.725	0.654

	INDEX 5335 SAMPLE 1053	INDEX 5336 SAMPLE 1312	INDEX 5337 SAMPLE 6148
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	HUBBARD	HUBBARD	HUNNEWELL W
WELL NAME	NORTH NO. 2	KANEY NO. 1	ANNA LUTZ WELL NO. 1
LOCATION	SEC. NE12, T26N, R2W	SEC. 7, T26N, R1W	SEC. 14, T29N, R2W
OWNER	MARLAND OIL CO.	BLACKWELL OIL & GAS	UNION OIL CO. OF CAL.
COMPLETED	01/05/25	09/10/26	NOT GIVEN
SAMPLED	05/01/25	10/01/26	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2554	874	NOT GIVEN
WELLHEAD PRESSURE,PSIG	650	200	NOT GIVEN
OPEN FLOW, MCFD	45000	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.6	15.4	53.8
ETHANE	31.1	5.4	3.0
PROPANE	---	---	1.8
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.3
NITROGEN	30.4	77.6	36.6
OXYGEN	0.2	0.5	2.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.34	1.04	0.53
HEATING VALUE*	938	253	719
SPECIFIC GRAVITY	0.838	0.903	0.783

	INDEX 5338 SAMPLE 27	INDEX 5339 SAMPLE 35	INDEX 5340 SAMPLE 58
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	NEWKIRK	NEWKIRK	PONCA CITY
WELL NAME	MCMICHAEL NO. 1	NO. 1	MARGUERITE PRIMEAUX NO. 7
LOCATION	SEC. 17, T28N, R3E	SEC. 17, T28N, R3E	SEC. 4, T25N, R2E
OWNER	MARLAND REFINING CO.	MARLAND OIL CO.	MARLAND OIL CO.
COMPLETED	NOT GIVEN	07/--/18	10/10/19
SAMPLED	06/19/19	07/27/19	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	500	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	112	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	51.3	14.0	44.6
ETHANE	11.6	58.2	14.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	32.8	24.6	39.7
OXYGEN	4.7	1.7	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.7	0.1
HELIUM	0.00	TRACE	0.35
HEATING VALUE*	720	1165	717
SPECIFIC GRAVITY	0.771	0.945	0.793

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5341 SAMPLE 929	INDEX 5342 SAMPLE 930	INDEX 5343 SAMPLE 1328
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	THOMAS	THOMAS	THOMAS
WELL NAME	SILES NO. 1	THOMAS NO. 1	THOMAS NO. 7
LOCATION	SEC. 22, T25N, R2W	SEC. 15, T25N, R2W	SEC. 15, T25N, R2W
OWNER	TWIN STATES OIL CO.	MARLAND OIL CO.	MARLAND OIL CO.
COMPLETED	NOT GIVEN	05/20/24	NOT GIVEN
SAMPLED	09/20/24	09/20/24	12/02/26
FORMATION	-WAGGONER	-WAGGONER	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	2063	2573
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	14
OPEN FLOW, MCFD	NOT GIVEN	150000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	32.4	28.5	40.1
ETHANE	5.4	1.9	37.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	60.3	67.6	21.1
OXYGEN	0.7	0.6	1.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.95	1.01	0.23
HEATING VALUE*	425	323	1078
SPECIFIC GRAVITY	0.832	0.843	0.835

	INDEX 5344 SAMPLE 1391	INDEX 5345 SAMPLE 1584	INDEX 5346 SAMPLE 4002
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	THOMAS	THOMAS	THOMAS
WELL NAME	NO. A	FRUITTS NO. 1	FRUITS
LOCATION	SEC. 15, T25N, R2W	SEC. 2, T25N, R2W	SEC. 3, T25N, R2W
OWNER	MARLAND OIL CO.	BARNSDALL & MARGAY OIL COS.	KAY COUNTY GAS CO.
COMPLETED	NOT GIVEN	--/--/28	02/11/45
SAMPLED	05/20/27	03/06/28	NOT GIVEN
FORMATION	NOT GIVEN	-STRAY	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	1156	4356
WELLHEAD PRESSURE,PSIG	190	475	1350
OPEN FLOW, MCFD	NOT GIVEN	1350	10000
COMPONENT, MOLE PCT			
METHANE	37.8	23.7	67.2
ETHANE	16.4	1.6	24.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	44.1	73.4	7.5
OXYGEN	0.9	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.61	0.92	0.19
HEATING VALUE*	677	269	1120
SPECIFIC GRAVITY	0.822	0.866	0.711

	INDEX 5347 SAMPLE 4194	INDEX 5348 SAMPLE 12158	INDEX 5349 SAMPLE 12159
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KINGFISHER	KINGFISHER
FIELD	THOMAS	ALTONA	ALTONA SE
WELL NAME	JUESCHKE NO. 1	FRAKES NO. 1	STANGL A NO. 1
LOCATION	SEC. 3, T25N, R2W	SEC. 28, T16N, R9W	SEC. 23, T15N, R9W
OWNER	C. L. JENKINS, ET AL.	MARION CORP.	MARION CORP.
COMPLETED	08/31/45	NOT GIVEN	NOT GIVEN
SAMPLED	11/09/46	12/22/69	12/22/69
FORMATION	PENN-	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	4411	8592	8822
WELLHEAD PRESSURE,PSIG	1300	2350	2600
OPEN FLOW, MCFD	NOT GIVEN	20000	20000
COMPONENT, MOLE PCT			
METHANE	71.8	92.1	94.4
ETHANE	22.3	3.8	2.9
PROPANE	---	1.7	1.0
N-BUTANE	---	0.5	0.2
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	5.3	0.7	0.7
OXYGEN	0.1	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.20	0.05	0.04
HEATING VALUE*	1127	1100	1054
SPECIFIC GRAVITY	0.692	0.621	0.592

	INDEX 5350 SAMPLE 12160	INDEX 5351 SAMPLE 13124	INDEX 5352 SAMPLE 15927
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	ALTONA SE	COOPER E	EDMOND W
WELL NAME	JUNG	TEDERS NO. 1	H. NAKVINDA NO. 2
LOCATION	SEC. 22, T15N, R9W	SEC. 29, T17N, R9W	SEC. 13, T15N, R5W
OWNER	MARION CORP.	VIERSEN & COCHRAN	UNION TEXAS PETROLEUM
COMPLETED	NOT GIVEN	10/06/71	01/28/80
SAMPLED	12/22/69	12/21/71	03/27/80
FORMATION	MISS-CHESTER	MISS-CHESTER & MANNING	PENN-SKINNER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8908	8174	6460
WELLHEAD PRESSURE,PSIG	2550	3700	1649
OPEN FLOW, MCFD	1800	3500	7288
COMPONENT, MOLE PCT			
METHANE	92.6	68.6	84.3
ETHANE	3.7	11.4	6.2
PROPANE	1.4	9.7	3.8
N-BUTANE	0.3	3.2	1.1
ISOBUTANE	0.1	2.0	0.5
N-PENTANE	0.1	0.9	0.2
ISOPENTANE	0.2	0.6	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	0.8	2.2	2.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.1
HELIUM	0.04	TRACE	0.06
HEATING VALUE*	1077	1420	1166
SPECIFIC GRAVITY	0.611	0.845	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5353 SAMPLE 12162	INDEX 5354 SAMPLE 12163	INDEX 5355 SAMPLE 14666
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	KINGFISHER NW	KINGFISHER NW	LINCOLN SW
WELL NAME	STRACK NO. 25-1	HARTMAN NO. 25-1	SMITH BROTHERS NO. 1
LOCATION	SEC. 25, T17N, R8W	SEC. 25, T17N, R8W	SEC. 6, T16N, R6W
OWNER	WHITE SHIELD OIL & GAS CORP.	WHITE SHIELD OIL & GAS CORP.	AN-SON CORP.
COMPLETED	10/19/69	09/01/69	03/13/76
SAMPLED	12/22/69	12/22/69	04/29/76
FORMATION	MISS-	PENN-RED FORK & MISS	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8006	7459	6934
WELLHEAD PRESSURE,PSIG	1500	2050	1635
OPEN FLOW, MCFD	3506	1187	6597
COMPONENT, MOLE PCT			
METHANE	66.4	81.5	84.3
ETHANE	9.0	9.4	7.4
PROPANE	6.4	3.8	3.6
N-BUTANE	6.5	0.9	1.4
ISOBUTANE	2.7	0.5	0.7
N-PENTANE	3.4	0.2	0.6
ISOPENTANE	1.2	0.2	0.5
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.5	0.3	0.4
NITROGEN	2.1	2.6	0.7
OXYGEN	0.3	0.2	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1596	1176	1222
SPECIFIC GRAVITY	0.944	0.689	0.696

	INDEX 5356 SAMPLE 12678	INDEX 5357 SAMPLE 13743	INDEX 5358 SAMPLE 7219
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	LOYAL E	LYONS SW	OKARCHE N
WELL NAME	WINNIFRED GARMS NO. 1	FLORENE NO. 4	NOT GIVEN
LOCATION	SEC. 36, T18N, R9W	SEC. 5, T19N, R9W	SEC. 19, T15N, R7W
OWNER	INEXCO OIL CO.	HARPER OIL CO.	CALVERT DRILLING, INC.
COMPLETED	02/24/70	08/27/73	08/18/58
SAMPLED	02/--/71	10/05/73	09/15/59
FORMATION	PENN-RED FORK	PENN-OSWEGO	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7447	NOT GIVEN	8198
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2725
OPEN FLOW, MCFD	4000	NOT GIVEN	13164
COMPONENT, MOLE PCT			
METHANE	94.3	84.2	93.1
ETHANE	3.2	7.6	3.8
PROPANE	1.0	4.1	1.4
N-BUTANE	0.2	1.2	0.3
ISOBUTANE	0.1	0.7	0.1
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	0.6	1.1	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.05	0.07	0.04
HEATING VALUE*	1057	1199	1084
SPECIFIC GRAVITY	0.594	0.687	0.611

	INDEX 5359 SAMPLE 7726	INDEX 5360 SAMPLE 9842	INDEX 5361 SAMPLE 13930
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	OKARCHE N	OKARCHE N	OMEGA E
WELL NAME	SIOUX UNIT NO. 1	WIETH UNIT NO. 1	FIRESTONE NO. 1
LOCATION	SEC. 32, T16N, R7W	SEC. 10, T16N, R7W	SEC. 9, T16N, R9W
OWNER	APACHE OIL CORP.	AMOCO PRODUCTION CO.	CAYMAN EXPLORATION CORP.
COMPLETED	06/15/60	02/02/65	03/05/73
SAMPLED	10/10/60	04/11/65	02/28/74
FORMATION	MISS-MANNING	MISS-MANNING	MISS-CHESTER-MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7805	7398	8243
WELLHEAD PRESSURE,PSIG	3000	2650	2659
OPEN FLOW, MCFD	8320	2461	2083
COMPONENT, MOLE PCT			
METHANE	93.6	93.6	92.2
ETHANE	3.6	3.5	3.9
PROPANE	1.0	1.1	1.7
N-BUTANE	0.3	0.3	0.4
ISOBUTANE	0.2	0.1	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.3	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.04	0.05	0.03
HEATING VALUE*	1074	10710	1102
SPECIFIC GRAVITY	0.604	0.603	0.620

	INDEX 5362 SAMPLE 12370	INDEX 5363 SAMPLE 7699	INDEX 5364 SAMPLE 9024
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	OMEGA SE	SOONER TREND	SOONER TREND
WELL NAME	GENE NO. 3-1	HUNTSBERGER NO. 1	NORRIS
LOCATION	SEC. 3, T16N, R9W	SEC. 11, T19N, R7W	SEC. 20, T19N, R9W
OWNER	WHITE SHIELD OIL & GAS CORP.	EXXON CO. U.S.A.	CLEARY PETROLEUM, INC.
COMPLETED	06/24/70	07/01/60	02/09/62
SAMPLED	08/18/70	10/12/60	07/--/63
FORMATION	MISS-CHESTER	MISS-LIME	DEVO-MISENER & HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8146	6992	8333
WELLHEAD PRESSURE,PSIG	900	2137	3000
OPEN FLOW, MCFD	2750	44000	400
COMPONENT, MOLE PCT			
METHANE	93.0	87.2	86.2
ETHANE	3.3	5.4	8.4
PROPANE	1.2	2.1	2.6
N-BUTANE	0.3	0.7	0.7
ISOBUTANE	0.1	0.7	0.3
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	1.0	0.1
NITROGEN	1.1	1.2	1.2
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1069	1191	1143
SPECIFIC GRAVITY	0.607	0.684	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5365 SAMPLE 9353	INDEX 5366 SAMPLE 9809	INDEX 5367 SAMPLE 9810
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	J. HLADIK NO. 1	FOREMAN NO. 1	FOREMAN NO. 1
LOCATION	SEC. 11, T19N, R5W	SEC. 22, T16N, R5W	SEC. 22, T16N, R5W
OWNER	GETTY OIL CO.	RUSSELL MAGUIRE	RUSSELL MAGUIRE
COMPLETED	07/20/63	01/05/65	01/05/65
SAMPLED	05/14/64	NOT GIVEN	NOT GIVEN
FORMATION	MISS-MERAMEC	PENN-SKINNER	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6066	6544	6788
WELLHEAD PRESSURE,PSIG	2000	1600	100
OPEN FLOW, MCFD	1577	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	78.0	77.1
ETHANE	7.9	5.2	10.3
PROPANE	4.4	2.9	5.5
N-BUTANE	1.7	1.0	1.9
ISOBUTANE	0.2	0.3	0.8
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.4	0.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	2.2	10.6	2.5
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.08	0.16	0.05
HEATING VALUE*	1199	1052	1266
SPECIFIC GRAVITY	0.701	0.701	0.745

	INDEX 5368 SAMPLE 9921	INDEX 5369 SAMPLE 10686	INDEX 5370 SAMPLE 10758
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	R. R. RUDD NO. 1	WINANS NO. 1	GEORGE GREEN NO. 1
LOCATION	SEC. 2, T19N, R5W	SEC. 9, T15N, R5W	SEC. 30, T19N, R7W
OWNER	GETTY OIL CO.	CHARLES W. RICHARD	ASHLAND OIL & REFINING CO.
COMPLETED	04/11/65	NOT GIVEN	01/09/66
SAMPLED	06/12/65	07/29/66	10/19/66
FORMATION	PENN-CLEVELAND	PENN-OSWEGO	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6066	6625	7480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1070	1764
OPEN FLOW, MCFD	NOT GIVEN	2100	13699
COMPONENT, MOLE PCT			
METHANE	73.1	80.1	83.0
ETHANE	12.8	8.4	8.6
PROPANE	7.1	4.7	3.7
N-BUTANE	2.3	1.6	1.1
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	1.0	0.8	0.3
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	1.6	2.2	2.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.03	0.06	0.06
HEATING VALUE*	1338	1256	1182
SPECIFIC GRAVITY	0.783	0.730	0.687

	INDEX 5371 SAMPLE 11366	INDEX 5372 SAMPLE 11403	INDEX 5373 SAMPLE 11404
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	HORRS NO. 1	POPE UTAH NO. 2	POPE UTAH NO. 2
LOCATION	SEC. 23, T18N, R8W	SEC. 10, T18N, R9W	SEC. 10, T18N, R9W
OWNER	KING RESOURCES CO.	GULF OIL CO.-U.S.	GULF OIL CO.-U.S.
COMPLETED	NOT GIVEN	01/22/64	01/22/64
SAMPLED	03/09/68	03/14/68	03/14/68
FORMATION	MISS-MANNING	MISS-	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7412	7996	8472
WELLHEAD PRESSURE,PSIG	1600	844	2336
OPEN FLOW, MCFD	607	2000	5690
COMPONENT, MOLE PCT			
METHANE	88.2	78.0	84.2
ETHANE	5.8	7.2	8.8
PROPANE	2.7	4.2	3.2
N-BUTANE	0.9	0.3	0.9
ISOBUTANE	0.3	1.3	0.4
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	1.0	6.5	1.6
OXYGEN	0.0	1.4	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.09	0.03	0.03
HEATING VALUE*	1143	1132	1165
SPECIFIC GRAVITY	0.650	0.714	0.672

	INDEX 5374 SAMPLE 11456	INDEX 5375 SAMPLE 12247	INDEX 5376 SAMPLE 12344
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	J. L. WRIGHT NO. 1	ELOISE M. BOLLENBACH NO. 1	HAZEL S. PETERSEN NO. 1-11
LOCATION	SEC. 16, T19N, R7W	SEC. 8, T18N, R8W	SEC. 11, T19N, R9W
OWNER	ASHLAND OIL & REFINING CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	03/06/62	11/29/69	03/20/70
SAMPLED	04/17/68	04/28/70	08/07/70
FORMATION	PENN-RED FORK	PENN-RED FORK	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6747	7044	8609
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2217	2915
OPEN FLOW, MCFD	NOT GIVEN	32950	14188
COMPONENT, MOLE PCT			
METHANE	90.2	92.9	90.0
ETHANE	3.9	3.5	5.2
PROPANE	1.4	1.4	1.9
N-BUTANE	0.5	0.3	0.6
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.5	0.9	1.1
OXYGEN	0.5	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.04	0.05	0.05
HEATING VALUE*	1071	1071	1111
SPECIFIC GRAVITY	0.628	0.605	0.632

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5377 SAMPLE 12679	INDEX 5378 SAMPLE 11352	INDEX 5379 SAMPLE 1016
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KIOWA	KIOWA
FIELD	SOONER TREND	CARNEGIE W	GOTEBO
WELL NAME	WINNIFRED GARMS NO. 1	CODY NO. 1	NOT GIVEN
LOCATION	SEC. 36, T14N, R9W	SEC. 15, T7N, R14W	SEC. 3, T7N, R17W
OWNER	INEXCO OIL CO.	EXXON CO. U.S.A.	MARLAND OIL CO.
COMPLETED	02/24/70	12/06/57	NOT GIVEN
SAMPLED	02/--/71	03/06/68	NOT GIVEN
FORMATION	MISS-	ORDO-BROMIDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	350	350
DEPTH, FEET	7447	3202	1082
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1141	40
OPEN FLOW, MCFD	4000	4247	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	92.8	79.4
ETHANE	8.1	2.6	17.5
PROPANE	2.2	0.6	---
N-BUTANE	0.6	0.1	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	0.4	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	2.2	2.5	2.5
OXYGEN	0.2	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.04	0.11	0.07
HEATING VALUE*	1120	1055	1118
SPECIFIC GRAVITY	0.651	0.610	0.658

	INDEX 5380 SAMPLE 5276	INDEX 5381 SAMPLE 7021	INDEX 5382 SAMPLE 10719
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KIOWA	KIOWA	LATIMER
FIELD	GOTEBO N	KONAWA	KINTA
WELL NAME	JAMES SHAFER NO. 1	DONLEY MILLIGAN NO. 1	WHITE B NO. 1
LOCATION	SEC. 1, T7N, R16W	SEC. 29, T6N, R17W	SEC. 3, T6N, R18E
OWNER	STANOLIND OIL & GAS CO.	R. E. MAXEY&G. P. LIVERMORE	SKELLY OIL CO.
COMPLETED	05/27/52	NOT GIVEN	06/11/66
SAMPLED	07/23/52	04/08/59	09/09/66
FORMATION	NOT GIVEN	PERM-PONTOTOC	PENN-ATOKA
GEOLOGIC PROVINCE CODE	350	350	345
DEPTH, FEET	5628	800	4999
WELLHEAD PRESSURE,PSIG	2299	240	1082
OPEN FLOW, MCFD	3000	NOT GIVEN	23302
COMPONENT, MOLE PCT			
METHANE	96.3	37.2	87.1
ETHANE	1.4	1.0	2.2
PROPANE	0.5	0.5	0.8
N-BUTANE	0.1	0.4	0.3
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.4	59.3	9.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.3	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.03	0.90	0.07
HEATING VALUE*	1026	433	954
SPECIFIC GRAVITY	0.579	0.820	0.620

	INDEX 5383 SAMPLE 10748	INDEX 5384 SAMPLE 10751	INDEX 5385 SAMPLE 10882
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	KINTA	KINTA	KINTA
WELL NAME	WHITE B NO. 1	C. R. BUTLER UNIT NO. 1	WHITE E NO. 1A
LOCATION	SEC. 3, T6N, R18E	SEC. 29, T7N, R19E	SEC. 13, T6N, R18E
OWNER	SKELLY OIL CO.	MOBIL OIL CORP.	SKELLY OIL CO.
COMPLETED	06/11/66	06/28/66	09/14/66
SAMPLED	10/03/66	10/06/66	02/18/67
FORMATION	PENN-ATOKA	PENN-SPIRO	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6996	10304	7299
WELLHEAD PRESSURE,PSIG	2487	3227	2530
OPEN FLOW, MCFD	13992	13100	25776
COMPONENT, MOLE PCT			
METHANE	90.6	95.6	96.2
ETHANE	6.7	0.7	1.6
PROPANE	1.5	0.1	0.3
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.2	0.3	0.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.3	1.3
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1104	984	1011
SPECIFIC GRAVITY	0.617	0.592	0.582

	INDEX 5386 SAMPLE 16051	INDEX 5387 SAMPLE 4053	INDEX 5388 SAMPLE 8098
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	PANOLA	RED OAK-NORRIS	RED OAK-NORRIS
WELL NAME	FOSTER NO. 1-35	HARDAWAY NO. RO-52	MAXEY NO. 1
LOCATION	SEC. 35, T6N, R20E	SEC. 10, T6N, R22E	SEC. 10, T6N, R22E
OWNER	MUSTANG PRODUCTION CO.	LEFLORE COUNTY GAS & ELEC.	MIDWEST OIL CORP.
COMPLETED	06/28/80	NOT GIVEN	NOT GIVEN
SAMPLED	08/22/80	06/22/45	07/26/61
FORMATION	PENN-SPIRO	PENN-ATOKA BASAL	MISS-RED OAK & PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	12630	5881	6983
WELLHEAD PRESSURE,PSIG	4200	2100	3150
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	96.2	95.7
ETHANE	0.6	2.8	2.2
PROPANE	0.1	---	0.4
N-BUTANE	TRACE	---	TRACE
ISOBUTANE	TRACE	---	TRACE
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	TRACE
NITROGEN	3.3	0.0	0.1
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	5.2	0.9	1.4
HELIUM	0.04	0.01	TRACE
HEATING VALUE*	965	1025	1019
SPECIFIC GRAVITY	0.611	0.578	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5389 SAMPLE 8408	INDEX 5390 SAMPLE 8421	INDEX 5391 SAMPLE 8922
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	RED OAK-NORRIS	RED OAK-NORRIS	RED OAK-NORRIS
WELL NAME	MAXEY NO. 1	ORR NO. 1	LEWIS
LOCATION	SEC. 10, T6N, R22E	SEC. 8, T6N, R22E	SEC. 4, T6N, R22E
OWNER	MIDWEST OIL CORP.	MIDWEST OIL CORP.	MIDWEST OIL CORP.
COMPLETED	07/07/61	03/31/60	02/20/62
SAMPLED	02/13/61	03/01/62	04/05/63
FORMATION	MISS-RED OAK	PENN-SPIRO	PENN-FANSHAWE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7000	11514	6064
WELLHEAD PRESSURE,PSIG	3110	4000	2842
OPEN FLOW, MCFD	5300	15000	550
COMPONENT, MOLE PCT			
METHANE	96.1	92.8	95.9
ETHANE	1.9	0.4	2.5
PROPANE	0.2	0.1	0.4
N-BUTANE	TRACE	TRACE	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.9	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	5.6	0.7
HELIUM	0.03	0.06	0.02
HEATING VALUE*	1013	950	1027
SPECIFIC GRAVITY	0.579	0.616	0.579

	INDEX 5392 SAMPLE 14810	INDEX 5393 SAMPLE 1733	INDEX 5394 SAMPLE 9826
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	RED OAK-NORRIS	WILBURTON	WILBURTON
WELL NAME	SMALLWOOD NO. 1	MCMURRAY NO. 1	J. L. HENLEY UNIT NO. 1
LOCATION	SEC. 28, T6N, R21E	SEC. 15, T5N, R18E	SEC. 25, T5N, R17E
OWNER	MUSTANG PRODUCTION CO.	LIMESTONE OIL & GAS CO.	ATLANTIC RICHFIELD CO.
COMPLETED	08/10/76	DRILL STEM TEST	12/30/64
SAMPLED	10/09/76	04/06/29	04/01/65
FORMATION	PENN-SPIRO	-SAND	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	12181	2518	10022
WELLHEAD PRESSURE,PSIG	4000	125	3750
OPEN FLOW, MCFD	20000	1500	20500
COMPONENT, MOLE PCT			
METHANE	93.2	73.8	96.1
ETHANE	0.4	13.4	1.0
PROPANE	TRACE	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.2	10.4	0.5
OXYGEN	0.0	1.9	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	6.1	0.6	2.4
HELIUM	0.04	0.06	0.05
HEATING VALUE*	951	988	1010
SPECIFIC GRAVITY	0.616	0.681	0.585

	INDEX 5395 SAMPLE 10945	INDEX 5396 SAMPLE 13684	INDEX 5397 SAMPLE 9953
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LE FLORE
FIELD	WILBURTON	WILBURTON	BOKOSHE S
WELL NAME	DOVIF WEAVER B NO. 1	MCKEOWN NO. 1	JOE COCHRAN UNIT NO. 1
LOCATION	SEC. 20, T6N, R19E	SEC. 20, T5N, R19E	SEC. 32, T8N, R24E
OWNER	MOBIL OIL CORP.	FERGUSON OIL CO., INC.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	03/13/73	10/05/64
SAMPLED	04/13/67	08/14/73	07/02/65
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-FANSHAWE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	11174	7450	6651
WELLHEAD PRESSURE,PSIG	3675	1780	2871
OPEN FLOW, MCFD	13000	7300	5400
COMPONENT, MOLE PCT			
METHANE	94.7	93.6	94.9
ETHANE	0.7	3.7	1.8
PROPANE	TRACE	1.2	0.4
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.4	0.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	0.4	1.9
HELIUM	0.04	0.05	0.05
HEATING VALUE*	972	1073	1004
SPECIFIC GRAVITY	0.599	0.603	0.590

	INDEX 5398 SAMPLE 9954	INDEX 5399 SAMPLE 1769	INDEX 5400 SAMPLE 9955
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	BOKOSHE S	CAMERON	CAMERON
WELL NAME	JOE COCHRAN UNIT NO. 1	KRAMER NO. 1	CLYDE CALDWELL UNIT NO. 1
LOCATION	SEC. 32, T8N, R24E	SEC. 7, T7N, R26E	SEC. 21, T8N, R26E
OWNER	AMOCO PRODUCTION CO.	SOONER OIL & GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	10/05/64	12/--/28	09/04/65
SAMPLED	07/02/65	05/03/29	07/02/65
FORMATION	PENN-ATOKA	NOT GIVEN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7940	2200	6326
WELLHEAD PRESSURE,PSIG	2171	90	2054
OPEN FLOW, MCFD	970	NOT GIVEN	6200
COMPONENT, MOLE PCT			
METHANE	96.0	99.2	95.4
ETHANE	1.5	0.1	1.4
PROPANE	0.2	---	0.2
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.4	0.4	1.2
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.8	0.1	1.5
HELIUM	0.10	0.12	0.09
HEATING VALUE*	1005	1007	9970
SPECIFIC GRAVITY	0.583	0.558	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5401 SAMPLE 10918	INDEX 5402 SAMPLE 14538	INDEX 5403 SAMPLE 16146
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	CAMERON	CEDARS	CEDARS E
WELL NAME	HILL NO. 1	CLAWSON NO. 1	FRAZIER UNIT NO. 1
LOCATION	SEC. 31, T8N, R26E	SEC. 34, T10N, R27E	SEC. 16, T9N, R26E
OWNER	GOSE PETROLEUM CO.	LEAR PETROLEUM CORP.	SAMSON RESOURCES CO.
COMPLETED	11/19/66	06/23/75	09/30/80
SAMPLED	04/05/67	11/26/75	12/11/80
FORMATION	PENN-ATOKA	PENN-CROMWELL	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5910	6203	7372
WELLHEAD PRESSURE,PSIG	1410	706	NOT GIVEN
OPEN FLOW, MCFD	6837	6300	2200
COMPONENT, MOLE PCT			
METHANE	96.8	96.0	94.4
ETHANE	1.4	1.2	0.8
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.8	0.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.6	4.1
HELIUM	0.07	0.12	0.10
HEATING VALUE*	1011	999	973
SPECIFIC GRAVITY	0.577	0.580	0.602

	INDEX 5404 SAMPLE 2799	INDEX 5405 SAMPLE 8466	INDEX 5406 SAMPLE 9003
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	KINTA	KINTA
WELL NAME	MCBEE NO. 1	E. D. BURRIS UNIT NO. 1	ZOE HOLT
LOCATION	SEC. 29, T9N, R24E	SEC. 5, T9N, R24E	SEC. 20, T9N, R25E
OWNER	ARKANSAS OKLAHOMA GAS CO.	EXXON CO. U.S.A.	AMOCO PRODUCTION CO.
COMPLETED	04/19/42	09/04/61	NOT GIVEN
SAMPLED	04/01/44	03/19/62	05/30/63
FORMATION	PENN-GILCREASE	PENN-SPIRO	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5240	6184	NOT GIVEN
WELLHEAD PRESSURE,PSIG	949	880	NOT GIVEN
OPEN FLOW, MCFD	55000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	96.0	44.6
ETHANE	0.8	1.1	0.9
PROPANE	---	0.1	0.1
N-BUTANE	---	TRACE	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	1.9	0.5	0.6
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	2.4
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.3	2.3	1.3
HELIUM	0.02	0.10	0.10
HEATING VALUE*	983	995	985
SPECIFIC GRAVITY	0.581	0.585	0.286

	INDEX 5407 SAMPLE 9606	INDEX 5408 SAMPLE 9853	INDEX 5409 SAMPLE 10127
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	KINTA	KINTA
WELL NAME	TACKETT UNIT NO. 1	REES UNIT NO. 1	MILLER UNIT C NO. 1
LOCATION	SEC. 28, T8N, R23E	SEC. 2, T8N, R23E	SEC. 30, T8N, R23E
OWNER	AMOCO PRODUCTION CO.	EXXON CO. U.S.A.	AMOCO PRODUCTION CO.
COMPLETED	04/--/63	11/30/64	09/16/65
SAMPLED	10/13/64	04/22/65	09/16/65
FORMATION	PENN-CROMWELL	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5626	5392	5690
WELLHEAD PRESSURE,PSIG	1220	1000	1115
OPEN FLOW, MCFD	3500	9370	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	96.4	96.1
ETHANE	1.5	0.9	1.0
PROPANE	0.2	0.1	0.4
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.5	0.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.8	1.5
HELIUM	0.10	0.07	0.07
HEATING VALUE*	1000	9950	1002
SPECIFIC GRAVITY	0.580	0.580	0.579

	INDEX 5410 SAMPLE 12165	INDEX 5411 SAMPLE 10382	INDEX 5412 SAMPLE 10383
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	PENO	PENO
WELL NAME	HERBERT SHARO NO. 1	B. E. COBB NO. 1	B. E. COBB NO. 1
LOCATION	SEC. 4, T9N, R25E	SEC. 17, T10N, R27E	SEC. 17, T10N, R27E
OWNER	JAKE L. HAMON	SUN OIL CO.	SUN OIL CO.
COMPLETED	09/01/65	10/15/65	10/15/65
SAMPLED	12/19/69	02/02/66	02/02/66
FORMATION	PENN-SPIRO	PERM-ALMA	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5552	3016	5890
WELLHEAD PRESSURE,PSIG	931	270	990
OPEN FLOW, MCFD	1200	1044	2225
COMPONENT, MOLE PCT			
METHANE	96.9	97.0	94.2
ETHANE	1.8	1.2	1.3
PROPANE	0.2	0.2	0.6
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.3	1.2	2.5
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.3	1.2
HELIUM	0.11	0.11	0.15
HEATING VALUE*	999	1009	993
SPECIFIC GRAVITY	0.584	0.570	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5413 SAMPLE 10627	INDEX 5414 SAMPLE 10628	INDEX 5415 SAMPLE 14423
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	PENO	PENO	PENO
WELL NAME	FORSGREN BROS. NO. 1	FORSGREN BROS. NO. 1	KERR ESTATE NO. 1
LOCATION	SEC. 16, T10N, R27E	SEC. 16, T10N, R27E	SEC. 27, T10N, R27E
OWNER	SUN OIL CO.	SUN OIL CO.	CHEYENNE PETROLEUM CO.
COMPLETED	03/25/66	03/25/66	NOT GIVEN
SAMPLED	06/18/66	06/18/66	07/25/75
FORMATION	PENN-SPIRO	PENN-CROMWELL	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5950	6350	5904
WELLHEAD PRESSURE,PSIG	925	2025	905
OPEN FLOW, MCFD	1020	4600	3758
COMPONENT, MOLE PCT			
METHANE	96.8	93.7	93.5
ETHANE	1.1	1.3	1.3
PROPANE	0.4	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	3.1	2.6
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.7	2.2
HELIUM	0.14	0.10	0.10
HEATING VALUE*	1011	972	973
SPECIFIC GRAVITY	0.575	0.591	0.595

	INDEX 5416 SAMPLE 14604	INDEX 5417 SAMPLE 10784	INDEX 5418 SAMPLE 300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	PENO	POCOLA S	POTEAU-GILMORE
WELL NAME	ARKANSAS VALLEY FARMS NO. 1	HARDIN NO. 1	NO. 14
LOCATION	SEC. 34, T11N, R27E	SEC. 32, T9N, R27E	SEC. 26, T7N, R26E
OWNER	STEPHENS PRODUCTION CO.	MONSANTO CO.	LE FLORE COUNTY GAS & ELEC.
COMPLETED	11/15/75	07/13/66	12/--/18
SAMPLED	02/23/76	11/25/66	05/28/20
FORMATION	PENN-CROMWELL	PENN-SPIRO	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5263	7545	1753
WELLHEAD PRESSURE,PSIG	903	900	278
OPEN FLOW, MCFD	14000	2550	2530
COMPONENT, MOLE PCT			
METHANE	93.1	94.4	95.9
ETHANE	1.3	0.7	0.0
PROPANE	0.1	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.5	0.3	1.7
OXYGEN	0.0	0.0	1.9
ARGON	TRACE	0.0	---
HYDROGEN	0.9	0.0	---
HYDROGEN SULFIDE**	TRACE	0.0	---
CARBON DIOXIDE	4.01	4.5	0.4
HELIUM	0.05	0.12	0.10
HEATING VALUE*	972	971	971
SPECIFIC GRAVITY	0.598	0.604	0.575

	INDEX 5419 SAMPLE 15482	INDEX 5420 SAMPLE 14864	INDEX 5421 SAMPLE 11107
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	RED OAK N	RED OAK-NORRIS	SPIRO
WELL NAME	MACY MCBEE NO. 1	STOUT NO. 1-17	PETTIGREW NO. 1
LOCATION	SEC. 30, T8N, R24E	SEC. 17, T7N, R23E	SEC. 16, T9N, R26E
OWNER	RESERVE OIL, INC.	SNEE AND EBERLY	SOUTHLAND ROYALTY CO.
COMPLETED	NOT GIVEN	09/04/76	12/21/65
SAMPLED	10/26/78	11/30/76	09/13/67
FORMATION	NOT GIVEN	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	11551	7740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1327
OPEN FLOW, MCFD	NOT GIVEN	42199	7200
COMPONENT, MOLE PCT			
METHANE	85.4	90.1	94.2
ETHANE	1.3	0.4	0.8
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	8.8	0.8	0.7
OXYGEN	2.3	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	8.4	4.0
HELIUM	0.04	0.08	0.26
HEATING VALUE*	891	923	969
SPECIFIC GRAVITY	0.630	0.642	0.599

	INDEX 5422 SAMPLE 11552	INDEX 5423 SAMPLE 3939	INDEX 5424 SAMPLE 3320
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LINCOLN	LINCOLN
FIELD	SPIRO SE	AGRA	AGRA N
WELL NAME	GLENN NO. 1	BONEBRAKE NO. 1	MCLAURY NO. 1
LOCATION	SEC. 25, T9N, R25E	SEC. 32, T17N, R5E	SEC. 28, T17N, R5E
OWNER	MONROE CO.	DUDLEY MORGAN	WALMAN OIL CO.
COMPLETED	12/22/67	12/01/42	11/02/41
SAMPLED	06/24/68	12/21/44	09/21/42
FORMATION	PENN-SPIRO	PENN-SKINNER	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	355	355
DEPTH, FEET	8106	3431	3400
WELLHEAD PRESSURE,PSIG	1100	875	1160
OPEN FLOW, MCFD	1250	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	86.8	76.6	76.6
ETHANE	0.5	14.0	17.6
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	7.5	9.1	5.1
OXYGEN	1.5	0.1	0.4
ARGON	0.1	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.3	0.1	0.2
HELIUM	0.10	0.11	0.09
HEATING VALUE*	889	1027	1091
SPECIFIC GRAVITY	0.628	0.662	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5425 SAMPLE 3390	INDEX 5426 SAMPLE 15476	INDEX 5427 SAMPLE 4176
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	ARLINGTON	BARNEY W	DAVENPORT DISTRICT
WELL NAME	FOUQUET NO. 1	STATE ORR NO. 1	E. E. MASTEN NO. 1
LOCATION	SEC. 9, T13N, R6E	SEC. 36, T16N, R2E	SEC. 35, T14N, R4E
OWNER	HERNDON DRILLING CO.	SULLIVAN & CO.	OLSON DRILLING CO.
COMPLETED	04/08/38	08/01/78	09/30/46
SAMPLED	05/13/42	10/26/78	11/12/46
FORMATION	DEVO-HUNTON	PENN-SKINNER	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4105	4500	2995
WELLHEAD PRESSURE,PSIG	1380	1625	1250
OPEN FLOW, MCFD	6525	54000	3399
COMPONENT, MOLE PCT			
METHANE	68.6	79.6	80.4
ETHANE	24.1	7.8	18.4
PROPANE	---	3.9	---
N-BUTANE	---	1.3	---
ISOBUTANE	---	0.7	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.4	---
NITROGEN	4.6	4.8	0.8
OXYGEN	0.4	0.4	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.13	0.08	0.07
HEATING VALUE*	1163	1177	1144
SPECIFIC GRAVITY	0.706	0.713	0.650

	INDEX 5428 SAMPLE 13818	INDEX 5429 SAMPLE 13410	INDEX 5430 SAMPLE 3703
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	FALLIS N	KICKAPOO	KICKAPOO N
WELL NAME	MUFFINE NO. 1	BULLARD NO. 1	N. V. LEONARD
LOCATION	SEC. 20, T15N, R2E	SEC. 26, T12N, R2E	SEC. 10, T12N, R2E
OWNER	PACIFIC OIL & GAS	OKLAHOMA NATURAL GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	NOT GIVEN	02/26/72	04/05/43
SAMPLED	11/10/01	10/03/72	11/19/43
FORMATION	NOT GIVEN	PENN-RED FORK	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	5086	5635
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1850	600
OPEN FLOW, MCFD	NOT GIVEN	4147	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	26.2	67.7	58.6
ETHANE	15.8	9.0	21.6
PROPANE	26.0	5.8	---
N-BUTANE	14.2	1.6	---
ISOBUTANE	5.5	0.6	---
N-PENTANE	4.5	0.4	---
ISOPENTANE	3.4	0.0	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	1.6	0.1	---
NITROGEN	2.1	14.5	19.1
OXYGEN	0.3	TRACE	0.5
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	TRACE	0.13	0.12
HEATING VALUE*	2323	1094	981
SPECIFIC GRAVITY	1.403	0.761	0.743

	INDEX 5431 SAMPLE 3307	INDEX 5432 SAMPLE 3305	INDEX 5433 SAMPLE 4606
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	LAFFOON	LINCREEK DISTRICT	MIDLOTHIAN
WELL NAME	SCHOOL LAND NO. 2	UNGELBY NO. 2	YANCY NO. 1
LOCATION	SEC. 16, T13N, R6E	NOT GIVEN	SEC. 26, T14N, R3E
OWNER	MID-CONTINENT PETROLEUM CORP	UNION OIL CO. OF CAL.	TOKLAN PRODUCTION CO.
COMPLETED	12/20/39	01/10/33	06/--/48
SAMPLED	04/22/42	04/22/42	10/29/48
FORMATION	DEVO-HUNTON	PENN-CLEVELAND	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4051	2070	4117
WELLHEAD PRESSURE,PSIG	446	705	1480
OPEN FLOW, MCFD	18572	796	4150
COMPONENT, MOLE PCT			
METHANE	69.1	74.7	70.8
ETHANE	25.9	20.3	27.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.9	4.5	1.2
OXYGEN	0.4	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.11	0.12	0.05
HEATING VALUE*	1155	1120	1214
SPECIFIC GRAVITY	0.703	0.676	0.699

	INDEX 5434 SAMPLE 11730	INDEX 5435 SAMPLE 13595	INDEX 5436 SAMPLE 11206
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	MIDLOTHIAN SW	MT. VERNON N	MT. VERNON NE
WELL NAME	MILLS NO. 1	ANDERSON NO. 1	GRIMM NO. 1
LOCATION	SEC. 35, T14N, R3E	SEC. 35, T16N, R3E	SEC. 30, T16N, R4W
OWNER	EARLE BARNES	DAUBE EXPLORATION CO.	GREENLAND DRILLING CO.
COMPLETED	11/10/68	10/23/72	NOT GIVEN
SAMPLED	01/01/69	04/27/73	11/03/67
FORMATION	PENN-SKINNER	PENN-PRUE	PENN-RED FORK
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4342	4032	4114
WELLHEAD PRESSURE,PSIG	1700	1624	1480
OPEN FLOW, MCFD	5495	3011	8800
COMPONENT, MOLE PCT			
METHANE	81.8	83.0	76.1
ETHANE	6.7	8.5	6.5
PROPANE	3.0	3.8	3.3
N-BUTANE	1.0	1.0	1.2
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.8	2.4	11.2
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	TRACE	0.2
HELIUM	0.08	0.08	0.10
HEATING VALUE*	1147	1172	1063
SPECIFIC GRAVITY	0.677	0.680	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5437 SAMPLE 5913	INDEX 5438 SAMPLE 3322	INDEX 5439 SAMPLE 5634
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	MT. VERNON SW	NOT GIVEN	OLIVET
WELL NAME	MASON NO. 1	HILMER NO. 1	MOORE NO. 1
LOCATION	SEC. 18, T15N, R3E	SEC. 26, T17N, R3E	SEC. 21, T17N, R2E
OWNER	DAVIDOR & DAVIDOR	SKELLY OIL CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	07/06/55	11--/41	04/05/54
SAMPLED	08/15/55	04/22/42	06/09/54
FORMATION	PENN-PRUE	-DOLOMITE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3945	4420	3607
WELLHEAD PRESSURE,PSIG	1520	1650	1485
OPEN FLOW, MCFD	6400	11000	18000
COMPONENT, MOLE PCT			
METHANE	79.2	68.2	79.5
ETHANE	7.0	20.7	6.9
PROPANE	3.2	---	3.2
N-BUTANE	1.1	---	0.9
ISOBUTANE	0.5	---	0.5
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.4	---	0.2
CYCLOPENTANE	0.2	---	0.1
HEXANES PLUS	0.3	---	0.2
NITROGEN	7.7	10.3	7.8
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	0.27	0.12
HEATING VALUE*	1113	1062	1095
SPECIFIC GRAVITY	0.700	0.701	0.689

	INDEX 5440 SAMPLE 3427	INDEX 5441 SAMPLE 3845	INDEX 5442 SAMPLE 5005
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	PECK DISTRICT	PECK W	RED MOUND
WELL NAME	GRAY	LONG COMMUNITY NO. 1	C. POTTER NO. 1
LOCATION	SEC. 3, T13N, R6E	SEC. 6, T13N, R6E	SEC. 21, T16N, R3E
OWNER	HERNDON DRILLING CO.	JOHN B. HAWLEY, JR.	WILCOX OIL CO,
COMPLETED	01/--/42	03/25/44	11/30/50
SAMPLED	05/13/42	05/22/44	02/08/51
FORMATION	NOT GIVEN	PENN-FLAT-TOP	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4138	4079	3751
WELLHEAD PRESSURE,PSIG	760	1200	2400
OPEN FLOW, MCFD	7650	1000	6500
COMPONENT, MOLE PCT			
METHANE	67.4	65.6	78.0
ETHANE	27.0	24.5	7.3
PROPANE	---	---	3.3
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	5.2	9.4	9.0
OXYGEN	0.1	0.4	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.3
HELIUM	0.10	0.10	0.12
HEATING VALUE*	1167	1104	1074
SPECIFIC GRAVITY	0.712	0.716	0.694

	INDEX 5443 SAMPLE 10963	INDEX 5444 SAMPLE 1062	INDEX 5445 SAMPLE 5144
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	STONE NE	STROUD	STROUD
WELL NAME	STATE NO. 1	ANNA SUKOVATX NO. 1	M. RUEB NO. 1
LOCATION	SEC. 36, T15N, R4E	SEC. 2, T14N, R5E	SEC. 23, T15N, R5E
OWNER	GREENLAND DRILLING CO.	MOBIL OIL CORP.	MID-CONTINENT PETROLEUM CORP
COMPLETED	02/14/67	04/--/25	09/01/51
SAMPLED	05/23/67	05/23/25	12/27/51
FORMATION	PENN-RED FORK	NOT GIVEN	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3979	3345	3327
WELLHEAD PRESSURE,PSIG	1400	1250	1320
OPEN FLOW, MCFD	2230	10000	1920
COMPONENT, MOLE PCT			
METHANE	81.4	73.8	86.1
ETHANE	6.0	21.9	5.8
PROPANE	3.6	---	2.2
N-BUTANE	0.1	---	0.6
ISOBUTANE	1.1	---	0.1
N-PENTANE	0.5	---	0.2
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	6.8	3.9	4.8
OXYGEN	0.1	0.3	0.1
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.09	0.06	0.09
HEATING VALUE*	1101	1140	1071
SPECIFIC GRAVITY	0.683	0.682	0.643

	INDEX 5446 SAMPLE 9905	INDEX 5447 SAMPLE 5222	INDEX 5448 SAMPLE 1906
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	STROUD	STROUD NE	TRYON
WELL NAME	MCCALL NO 1	ENGLISH NO. 1	SCHOOL LAND NO. 1
LOCATION	SEC. 32, T14N, R5E	SEC. 13, T15N, R6E	SEC. 36, T17N, R3E
OWNER	CRAWFORD O&G RESERVES, INC.	NED BIFFLE	CONTINENTAL OIL CO.
COMPLETED	03/17/65	11/12/51	10/06/29
SAMPLED	05/25/65	04/18/52	12/11/29
FORMATION	PENN-RED FORK	NOT GIVEN	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3875	2949	3923
WELLHEAD PRESSURE,PSIG	1375	1100	1600
OPEN FLOW, MCFD	19570	2420	16000
COMPONENT, MOLE PCT			
METHANE	78.2	82.7	69.2
ETHANE	5.7	6.2	22.0
PROPANE	2.9	2.8	---
N-BUTANE	1.1	0.7	---
ISOBUTANE	0.6	0.3	---
N-PENTANE	0.5	0.2	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.1	---
NITROGEN	9.8	6.3	8.4
OXYGEN	0.2	0.1	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.10	0.09	0.10
HEATING VALUE*	1082	1081	1095
SPECIFIC GRAVITY	0.706	0.668	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5449 SAMPLE 9915	INDEX 5450 SAMPLE 3402	INDEX 5451 SAMPLE 13932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LOGAN
FIELD	WELLSTON N	WILZETTA NE	ABELL NW
WELL NAME	STEWARD NO. 1	HICKS NO. 1	EASTWOOD NO. 5
LOCATION	SEC. 18, T14N, R3E	SEC. 30, T13N, R6E	SEC. 8, T18N, R3W
OWNER	REX OIL REFINING, INC.	ALLIED MATERIALS CORP.	GENIE OIL & GAS CORP.
COMPLETED	01/20/65	07/15/41	01/31/74
SAMPLED	06/04/65	05/13/42	03/05/74
FORMATION	PENN-SKINNER	DEVO-HUNTON	-JACK E SAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4400	4075	2652
WELLHEAD PRESSURE,PSIG	1643	1600	1150
OPEN FLOW, MCFD	14924	25800	16000
COMPONENT, MOLE PCT			
METHANE	81.6	72.6	75.0
ETHANE	5.4	18.9	6.0
PROPANE	2.5	---	3.4
N-BUTANE	0.5	---	1.0
ISOBUTANE	0.5	---	0.5
N-PENTANE	TRACE	---	0.2
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	8.8	7.7	13.1
OXYGEN	0.2	0.6	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.14	0.24
HEATING VALUE*	1031	1074	1032
SPECIFIC GRAVITY	0.663	0.684	0.708

	INDEX 5452 SAMPLE 9823	INDEX 5453 SAMPLE 1839	INDEX 5454 SAMPLE 2303
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	COON CREEK NE	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	SHAW 1	QUIGLEY NO. 1	KATSCHOR NO. 1
LOCATION	SEC. 26, T15N, R1E	SEC. 21, T18N, R4W	SEC. 34, T17N, R4W
OWNER	MOORE, MOORE, AND MILLER	BLACKWELL OIL & GAS CO.	EASON OIL CO.
COMPLETED	10/15/65	05/22/29	10/13/30
SAMPLED	03/27/65	08/13/29	05/24/31
FORMATION	DEVO-HUNTON	NOT GIVEN	PENN-LAYTON BASAL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5061	4020	4918
WELLHEAD PRESSURE,PSIG	1740	1550	NOT GIVEN
OPEN FLOW, MCFD	12000	24000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	66.4	67.7
ETHANE	11.0	27.1	30.5
PROPANE	4.7	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	2.3	6.0	1.2
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.05	0.01	0.05
HEATING VALUE*	1215	1158	1232
SPECIFIC GRAVITY	0.710	0.717	0.716

	INDEX 5455 SAMPLE 2646	INDEX 5456 SAMPLE 5044	INDEX 5457 SAMPLE 5726
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	J. T. MILLER NO. 1	POLLARD NO. 1	HILL NO. 1
LOCATION	SEC. 28, T17N, R4W	SEC. 6, T18N, R4W	SEC. 5, T1AN, R4W
OWNER	GYPSY OIL CO.&CARTER OIL CO.	TRIGG DRILLING CO., INC.	E.R.,MERLE W.,& W.C. BAHAN
COMPLETED	07/15/33	12/28/50	09/22/54
SAMPLED	09/22/33	04/17/51	11/05/54
FORMATION	EOCE-WILCOX 1ST	PENN-LAYTON U	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6120	4612	4788
WELLHEAD PRESSURE,PSIG	2814	2000	1800
OPEN FLOW, MCFD	6500	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	0.0	85.9	83.8
ETHANE	66.0	6.4	7.8
PROPANE	---	3.1	3.6
N-BUTANE	---	1.0	0.9
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	7.7	1.9	2.7
OXYGEN	0.4	0.1	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	25.4	0.6	0.2
HELIUM	0.20	0.09	0.07
HEATING VALUE*	1183	1133	1144
SPECIFIC GRAVITY	0.778	0.666	0.669

	INDEX 5458 SAMPLE 5727	INDEX 5459 SAMPLE 10276	INDEX 5460 SAMPLE 11236
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	POLLARD NO. 1	FICKEN NO. 2	ROUT NO. 1
LOCATION	SEC. 5, T1AN, R4W	SEC. 17, T18N, R4W	SEC. 12, T17N, R4W
OWNER	E.R.,MERLE W.,& W.C. BAHAN	EARL R. RAPP	PETROLEUM RESOURCES CO.
COMPLETED	10/27/54	09/24/65	04/21/67
SAMPLED	11/05/54	11/10/65	12/04/67
FORMATION	PENN-LAYTON U	PENN-CARMICHAEL	PENN-PERRY
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4680	3530	4570
WELLHEAD PRESSURE,PSIG	1500	595	1450
OPEN FLOW, MCFD	4500	3500	16595
COMPONENT, MOLE PCT			
METHANE	85.2	81.7	78.9
ETHANE	6.6	7.5	8.6
PROPANE	3.2	4.0	4.2
N-BUTANE	1.1	1.4	1.4
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	2.6	3.6	5.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.09	0.11	0.10
HEATING VALUE*	1151	1179	1166
SPECIFIC GRAVITY	0.672	0.699	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5461 SAMPLE 11738	INDEX 5462 SAMPLE 4363	INDEX 5463 SAMPLE 10507
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	EDMOND W	ICONIUM S
WELL NAME	POSTON NO. 3	R. N. CHRISTNER NO. 2	KIGHTLINGER
LOCATION	SEC. 16, T18N, R4W	SEC. 30, T15N, R4W	SEC. 21, T16N, R1E
OWNER	H. E. R. DRILLING CO.	STANOLIND OIL & GAS CO.	OK & B DRILLING CO.
COMPLETED	11/12/68	04/24/47	02/08/66
SAMPLED	01/15/69	10/07/47	04/06/66
FORMATION	PENN-CARMICHAEL	DEVO-HUNTON	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3548	6527	4787
WELLHEAD PRESSURE,PSIG	1035	2800	1740
OPEN FLOW, MCFD	10200	20000	6000
COMPONENT, MOLE PCT			
METHANE	78.0	76.8	82.3
ETHANE	6.8	22.0	8.6
PROPANE	3.8	---	3.6
N-BUTANE	1.2	---	1.2
ISOBUTANE	0.6	---	0.4
N-PENTANE	0.4	---	0.4
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.4
NITROGEN	8.4	0.6	2.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.14	0.04	0.07
HEATING VALUE*	1111	1172	1189
SPECIFIC GRAVITY	0.706	0.671	0.694

	INDEX 5464 SAMPLE 3411	INDEX 5465 SAMPLE 3419	INDEX 5466 SAMPLE 3760
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	NAVINA	NAVINA	PLEASANT VALLEY
WELL NAME	ICIA LINEGER NO. 1	BABCOCK NO. 1	SCHOOL LAND NO. 1
LOCATION	SEC. 17, T15N, R3W	SEC. 10, T15N, R4W	SEC. 16, T15N, R2W
OWNER	CONTINENTAL OIL CO.	CITIES SERVICE OIL CO.	EASON OIL CO.
COMPLETED	07/03/41	12/30/41	08/15/43
SAMPLED	05/14/42	05/14/42	04/02/44
FORMATION	ORDO-WILCOX 1ST	PENN-LAYTON	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6201	5012	5677
WELLHEAD PRESSURE,PSIG	2489	1155	1520
OPEN FLOW, MCFD	550	2250	4000
COMPONENT, MOLE PCT			
METHANE	78.2	44.2	69.0
ETHANE	20.3	54.9	25.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	0.2	4.4
OXYGEN	0.3	0.4	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.08	0.02	0.06
HEATING VALUE*	1156	1432	1154
SPECIFIC GRAVITY	0.662	0.832	0.706

	INDEX 5467 SAMPLE 5855	INDEX 5468 SAMPLE 14713	INDEX 5469 SAMPLE 9824
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PLEASANT VALLEY NE	PRAIRIE BELL	WELLSTON W
WELL NAME	POTEET NO. 1	VAUGHTER NO. 1	GRAHAM NO. 1
LOCATION	SEC. 11, T15N, R2W	SEC. 31, T15N, R3W	SEC. 35, T15N, R1E
OWNER	POWELL BRISCOE, INC.	FERGUSON OIL CO.	MOORE, MOORE, AND MILLER
COMPLETED	11/01/54	01/06/76	02/03/65
SAMPLED	06/7/55	06/27/76	03/27/65
FORMATION	PENN-LAYTON	PENN-LAYTON	PENN-CHECKERBOARD
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4580	NOT GIVEN	4034
WELLHEAD PRESSURE,PSIG	2300	1700	900
OPEN FLOW, MCFD	15	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	81.7	71.7
ETHANE	5.0	8.9	12.0
PROPANE	2.2	3.8	7.5
N-BUTANE	0.7	1.2	3.1
ISOBUTANE	0.4	0.5	1.1
N-PENTANE	0.3	0.4	0.8
ISOPENTANE	0.1	0.4	0.7
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.3	0.6
NITROGEN	12.1	2.7	2.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.20	0.06	0.03
HEATING VALUE*	1011	1196	1380
SPECIFIC GRAVITY	0.682	0.698	0.809

	INDEX 5470 SAMPLE 9825	INDEX 5471 SAMPLE 14471	INDEX 5472 SAMPLE 7728
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOVE	LOVE
FIELD	WELLSTON W	ENVILLE NW	ENVILLE SW
WELL NAME	GRAHAM NO. 1	STATE TRACT 5 NO. 1	E. L. SADLER UNIT NO. 1
LOCATION	SEC. 35, T15N, R1E	SEC. 13, T6S, R2E	SEC. 13, T7S, R2E
OWNER	MOORE, MOORE AND MILLER	APCO OIL CORP.	TEXACO INC.
COMPLETED	03/05/65	05/09/75	08/24/60
SAMPLED	03/27/65	09/18/75	10/19/60
FORMATION	PENN-BARTLESVILLE	PENN-SPRINGER	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	355	350	350
DEPTH, FEET	4990	9526	10979
WELLHEAD PRESSURE,PSIG	1700	4715	5072
OPEN FLOW, MCFD	2113	3147	57000
COMPONENT, MOLE PCT			
METHANE	83.1	93.1	84.6
ETHANE	7.0	3.2	6.9
PROPANE	3.0	1.6	2.9
N-BUTANE	0.9	0.3	1.5
ISOBUTANE	0.4	0.2	0.8
N-PENTANE	0.2	0.1	0.8
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	1.1
NITROGEN	4.6	0.9	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.09	0.04	0.02
HEATING VALUE*	1124	1072	1248
SPECIFIC GRAVITY	0.675	0.608	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5473 SAMPLE 11353		INDEX 5474 SAMPLE 11933		INDEX 5475 SAMPLE 11359	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	LOVE		LOVE		LOVE	
FIELD	ENVILLE SW		ENVILLE SW		ENVILLE W	
WELL NAME	E. L. SADLER NO. 1		TIPPETT NO. 1		CLEMMIE S. STEVENS	
LOCATION	SEC. 7, T7S, R3E		SEC. 2, T7S, R2E		SEC. 32, T6S, R3E	
OWNER	SHELL OIL CO., ET AL.		EDWIN L. COX		MOBIL OIL CORP.	
COMPLETED	09/04/58		04/26/69		01/23/61	
SAMPLED	03/04/68		06/13/69		03/08/68	
FORMATION	ORDO-OIL CREEK		ORDO-OIL CREEK		ORDO-OIL CREEK	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	8175		7611		10400	
WELLHEAD PRESSURE,PSIG	2600		3682		3331	
OPEN FLOW, MCFD	41000		29502		10547	
COMPONENT, MOLE PCT						
METHANE	87.7		86.4		90.2	
ETHANE	6.1		6.2		4.7	
PROPANE	2.7		3.1		1.7	
N-BUTANE	1.1		1.0		0.7	
ISOBUTANE	0.2		0.5		0.2	
N-PENTANE	0.2		0.6		0.2	
ISOPENTANE	0.2		0.0		0.0	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.5		0.2	
NITROGEN	1.5		1.4		1.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.2	
HELIUM	0.03		0.05		0.07	
HEATING VALUE*	1143		1173		1095	
SPECIFIC GRAVITY	0.654		0.669		0.628	

	INDEX 5476 SAMPLE 6813		INDEX 5477 SAMPLE 12434		INDEX 5478 SAMPLE 12435	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	LOVE		MAJOR		MAJOR	
FIELD	OVERBROOKS		AMES SE		AMES SE	
WELL NAME	TUCKER NO. 1		BISEL NO. 1		BISEL NO. 1	
LOCATION	SEC. 32, T6S, R2E		SEC. 5, T20N, R9W		SEC. 5, T20N, R9W	
OWNER	ATLANTIC RICHFIELD CO.		HARPER OIL CO.		HARPER OIL CO.	
COMPLETED	04/--/58		02/12/70		08/14/69	
SAMPLED	09/24/58		10/09/70		10/09/70	
FORMATION	ORDO-OIL CREEK		DEVO-HUNTON		MISS-LIME	
GEOLOGIC PROVINCE CODE	350		360		360	
DEPTH, FEET	10620		8155		7483	
WELLHEAD PRESSURE,PSIG	5274		2100		1575	
OPEN FLOW, MCFD	14		40300		78	
COMPONENT, MOLE PCT						
METHANE	89.7		77.5		81.4	
ETHANE	4.8		11.0		7.7	
PROPANE	1.7		5.0		4.7	
N-BUTANE	0.7		1.4		1.8	
ISOBUTANE	0.3		0.7		0.9	
N-PENTANE	0.2		0.6		0.7	
ISOPENTANE	0.3		0.1		0.6	
CYCLOPENTANE	TRACE		0.2		0.2	
HEXANES PLUS	0.1		0.5		0.6	
NITROGEN	1.7		2.8		1.0	
OXYGEN	0.1		TRACE		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	TRACE		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	0.03		0.07		0.04	
HEATING VALUE*	1099		1246		1270	
SPECIFIC GRAVITY	0.631		0.732		0.731	

	INDEX 5479 SAMPLE 7923		INDEX 5480 SAMPLE 12294		INDEX 5481 SAMPLE 13459	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	CAMPBELL		CAMPBELL		CAMPBELL	
WELL NAME	BARNES UNIT B		JACQUITH NO. 1		PHILLIPS NO. 13-1	
LOCATION	SEC. 29, T23N, R15W		SEC. 12, T23N, R16W		SEC. 13, T22N, R15W	
OWNER	AMOCO PRODUCTION CO.		W. B. OSBORN OPERATOR		HARPER OIL CO.	
COMPLETED	08/29/60		05/04/70		03/20/72	
SAMPLED	04/11/61		05/12/70		10/25/72	
FORMATION	DEVO-HUNTON		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8023		5994		7502	
WELLHEAD PRESSURE,PSIG	2650		2334		1300	
OPEN FLOW, MCFD	9100		4861		1690	
COMPONENT, MOLE PCT						
METHANE	82.4		92.5		88.0	
ETHANE	8.4		2.7		5.9	
PROPANE	3.1		1.1		2.4	
N-BUTANE	1.5		0.5		0.9	
ISOBUTANE	0.5		0.2		0.5	
N-PENTANE	0.4		0.2		0.4	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.1		0.2		0.4	
NITROGEN	2.9		1.7		0.9	
OXYGEN	0.1		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.2	
HELIUM	0.10		0.06		0.04	
HEATING VALUE*	1168		1064		1157	
SPECIFIC GRAVITY	0.687		0.611		0.657	

	INDEX 5482 SAMPLE 14712		INDEX 5483 SAMPLE 14731		INDEX 5484 SAMPLE 7006	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	CAMPBELL		CAMPBELL		CEDARDALE	
WELL NAME	BOUMA NO. 1		COY NO. 1		EARL E. SPAFFORD	
LOCATION	SEC. 14, T23N, R16W		SEC. 1, T23N, R16W		SEC. 33, T23N, R16W	
OWNER	L. R. FRENCH JR.		W. B. OSBORN OPERATOR		ATLANTIC RICHFIELD CO.	
COMPLETED	10/07/75		06/01/76		02/06/59	
SAMPLED	06/28/76		08/12/76		03/23/59	
FORMATION	MISS-		MISS-		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7113		7860		8271	
WELLHEAD PRESSURE,PSIG	1526		2225		3015	
OPEN FLOW, MCFD	1165		4000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	92.3		92.3		94.0	
ETHANE	2.6		2.8		2.0	
PROPANE	0.9		1.0		0.6	
N-BUTANE	0.4		0.5		0.1	
ISOBUTANE	0.1		0.1		0.5	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.1		0.2		0.0	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	2.5		1.7		1.6	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.8		0.6	
HELIUM	0.25		0.25		TRACE	
HEATING VALUE*	1040		1062		1047	
SPECIFIC GRAVITY	0.666		0.616		0.602	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5485 SAMPLE 6485	INDEX 5486 SAMPLE 10106	INDEX 5487 SAMPLE 10300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	ANNA M. HARRIS NO. 1	SCHLARB UNIT NO. 2	KEPNER UNIT B NO. 1
LOCATION	SEC. 13, T22N, R16W	SEC. 22, T22N, R16W	SEC. 24, T22N, R16W
OWNER	AMOCO PRODUCTION CO.	UNION OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	11/26/57	06/26/65	10/07/65
SAMPLED	01/19/58	09/08/65	11/30/65
FORMATION	PENN-COTTAGE GROVE	PENN-OSWEGO	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6209	6936	7442
WELLHEAD PRESSURE,PSIG	2152	2350	2375
OPEN FLOW, MCFD	17300	3500	4075
COMPONENT, MOLE PCT			
METHANE	94.2	94.2	90.7
ETHANE	2.9	2.8	3.4
PROPANE	1.4	0.9	1.9
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	0.1	0.2	TRACE
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.2	0.5	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	2.7
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1074	1072	1068
SPECIFIC GRAVITY	0.599	0.605	0.635

	INDEX 5488 SAMPLE 12777	INDEX 5489 SAMPLE 13186	INDEX 5490 SAMPLE 14732
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	JOHNSON NO. 2	SMITH NO. 1	ANGELL NO. 1-36
LOCATION	SEC. 4, T21N, R15W	SEC. 14, T22N, R16W	SEC. 36, T23N, R16W
OWNER	APACHE CORP.	FERGUSON OIL CO., INC.	JOSEPH I. O'NEILL JR.
COMPLETED	09/19/70	12/28/71	03/25/76
SAMPLED	04/22/71	04/11/72	08/13/76
FORMATION	PENN-RED FORK	PENN-OSWEGO	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7120	6600	7376
WELLHEAD PRESSURE,PSIG	1600	2372	2219
OPEN FLOW, MCFD	16204	NOT GIVEN	11200
COMPONENT, MOLE PCT			
METHANE	81.6	94.1	92.3
ETHANE	6.3	2.9	3.7
PROPANE	3.8	1.1	1.3
N-BUTANE	0.9	0.3	0.4
ISOBUTANE	0.7	0.2	0.1
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	4.6	0.4	1.2
OXYGEN	0.7	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.09	0.04	0.04
HEATING VALUE*	1132	1073	1083
SPECIFIC GRAVITY	0.693	0.603	0.616

	INDEX 5491 SAMPLE 11327	INDEX 5492 SAMPLE 13490	INDEX 5493 SAMPLE 13949
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHESTER W	CHESTER W	CHESTER W
WELL NAME	C. A. SEVERN UNIT NO. 1	MCCOLLUM NO. 1-27	HAYNES NO. 1-28
LOCATION	SEC. 6, T20N, R16W	SEC. 27, T21N, R16W	SEC. 28, T21N, R16W
OWNER	ATLANTIC RICHFIELD CO.	ASHLAND OIL, INC.	ASHLAND OIL, INC.
COMPLETED	01/12/62	06/24/72	10/15/73
SAMPLED	03/01/68	12/27/72	NOT GIVEN
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8093	7844	7792
WELLHEAD PRESSURE,PSIG	472	2220	2739
OPEN FLOW, MCFD	1157	3765	4103
COMPONENT, MOLE PCT			
METHANE	94.4	92.0	93.8
ETHANE	2.8	4.0	3.3
PROPANE	0.8	1.5	1.1
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.6	0.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	0.06	0.04	0.04
HEATING VALUE*	1063	1085	1077
SPECIFIC GRAVITY	0.600	0.615	0.607

	INDEX 5494 SAMPLE 6988	INDEX 5495 SAMPLE 9856	INDEX 5496 SAMPLE 11744
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY
WELL NAME	FAIRVIEW NO. 1	C. G. CASE NO. 1	PHILLIPS NO. 1
LOCATION	SEC. 32, T22N, R14W	SEC. 11, T21N, R15W	SEC. 19, T22N, R14W
OWNER	CITIES SERVICE OIL CO.	AMOCO PRODUCTION CO.	MIDWEST OIL CORP.
COMPLETED	11/17/58	03/25/65	12/04/68
SAMPLED	03/02/59	04/26/65	01/28/69
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6856	7502	7537
WELLHEAD PRESSURE,PSIG	2000	2025	2293
OPEN FLOW, MCFD	NOT GIVEN	2169	14500
COMPONENT, MOLE PCT			
METHANE	94.5	86.4	89.4
ETHANE	0.8	5.4	4.7
PROPANE	0.6	3.3	2.1
N-BUTANE	0.7	1.0	0.5
ISOBUTANE	0.4	0.8	0.4
N-PENTANE	0.5	0.3	0.3
ISOPENTANE	0.6	0.2	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.5	0.3
NITROGEN	0.6	1.4	1.5
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.30	0.08	0.05
HEATING VALUE*	1110	1169	1107
SPECIFIC GRAVITY	0.622	0.675	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5497 SAMPLE 12388	INDEX 5498 SAMPLE 12389	INDEX 5499 SAMPLE 12391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY
WELL NAME	EDWARD SUTTER NO. 1	ORVILLE RYFIELD NO. 1	EDWARDS NO. 1
LOCATION	SEC. 20, T22N, R13W	SEC. 31, T22N, R13W	SEC. 20, T21N, R14W
OWNER	ASHLAND OIL, INC.	ASHLAND OIL, INC.	SOUTHERN UNION PRODUCING CO.
COMPLETED	06/08/70	09/25/69	06/21/70
SAMPLED	08/25/70	08/25/70	08/27/70
FORMATION	MISS-	MISS-	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7498	7558	7323
WELLHEAD PRESSURE,PSIG	2180	2310	2413
OPEN FLOW, MCFD	5897	9671	6705
COMPONENT, MOLE PCT			
METHANE	86.8	87.3	92.7
ETHANE	6.6	6.0	4.1
PROPANE	3.1	2.9	1.2
N-BUTANE	0.7	0.9	0.2
ISOBUTANE	0.7	0.6	0.1
N-PENTANE	0.4	0.4	TRACE
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	1.2	0.9	1.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1161	1177	1063
SPECIFIC GRAVITY	0.662	0.668	0.602

	INDEX 5500 SAMPLE 12403	INDEX 5501 SAMPLE 12404	INDEX 5502 SAMPLE 13952
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY
WELL NAME	NELLIE E. NOBLE NO. 1	NELLIE F. NOBLE NO. 1	SUTTER NO. 1
LOCATION	SEC. 10, T22N, R14W	SEC. 10, T22N, R14W	SEC. 27, T22N, R13W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	L.R. FRENCH, JR.
COMPLETED	04/15/70	04/15/70	06/13/73
SAMPLED	09/02/70	09/02/70	03/13/74
FORMATION	MISS-	PENN-RED FORK	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7370	6536	8100
WELLHEAD PRESSURE,PSIG	1952	1639	3100
OPEN FLOW, MCFD	4817	8627	80000
COMPONENT, MOLE PCT			
METHANE	85.5	88.4	61.3
ETHANE	7.0	4.6	16.4
PROPANE	3.8	2.9	11.4
N-BUTANE	0.9	0.7	5.1
ISOBUTANE	0.7	0.6	1.7
N-PENTANE	0.3	0.3	1.6
ISOPENTANE	0.2	0.3	1.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.4	0.7
NITROGEN	1.0	1.3	0.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.07	0.07	TRACE
HEATING VALUE*	1180	1147	1595
SPECIFIC GRAVITY	0.670	0.656	0.928

	INDEX 5503 SAMPLE 8920	INDEX 5504 SAMPLE 9711	INDEX 5505 SAMPLE 12233
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CLEO SPRINGS	DANE	DANE
WELL NAME	O. H. CORNELSEN UNIT NO. 1	HUBBLE NO. 1	MARTENS NO. 1
LOCATION	SEC. 5, T22N, R12W	SEC. 26, T21N, R13W	SEC. 17, T21N, R13W
OWNER	ASHLAND OIL & REFINING CO.	AMOCO PRODUCTION CO.	CHAMPLIN EXPLORATION, INC.
COMPLETED	02/10/63	11/16/64	NOT GIVEN
SAMPLED	04/10/63	01/22/65	04/07/70
FORMATION	MISS-MANNING	MISS-CHESTER	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6642	7260	8785
WELLHEAD PRESSURE,PSIG	2100	2820	670
OPEN FLOW, MCFD	1500	3120	3640
COMPONENT, MOLE PCT			
METHANE	90.8	92.9	86.2
ETHANE	4.7	4.0	6.0
PROPANE	1.9	1.4	3.1
N-BUTANE	0.7	0.3	1.0
ISOBUTANE	0.2	0.2	0.7
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	0.7	0.4	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.10	0.03	0.03
HEATING VALUE*	1110	1080	1182
SPECIFIC GRAVITY	0.626	0.607	0.677

	INDEX 5506 SAMPLE 13084	INDEX 5507 SAMPLE 13085	INDEX 5508 SAMPLE 13181
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	DANE	DANE	DANE
WELL NAME	MCGEE NO. 1	MCGEE NO. 1	NUEFELD NO. 1
LOCATION	SEC. 24, T21N, R13W	SEC. 24, T21N, R13W	SEC. 11, T21N, R13W
OWNER	PUBLISHERS PETROLEUM CO.	PUBLISHERS PETROLEUM	L. R. FRENCH, JR.
COMPLETED	08/09/71	08/09/71	NOT GIVEN
SAMPLED	10/--/71	10/--/71	04/11/72
FORMATION	PENN-RED FORK	MISS-CHESTER	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7036	7186	7622
WELLHEAD PRESSURE,PSIG	2340	2986	1500
OPEN FLOW, MCFD	1759	3700	2826
COMPONENT, MOLE PCT			
METHANE	92.2	89.6	82.1
ETHANE	3.3	5.0	8.2
PROPANE	1.8	2.5	4.8
N-BUTANE	0.5	0.6	1.7
ISOBUTANE	0.2	0.4	0.9
N-PENTANE	TRACE	0.1	0.5
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	1.9	1.0	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.05	0.03
HEATING VALUE*	1057	1119	1244
SPECIFIC GRAVITY	0.606	0.633	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5509 SAMPLE 15040	INDEX 5510 SAMPLE 14991	INDEX 5511 SAMPLE 7925
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	DANE	FAIRVIEW W	OKEENE NW
WELL NAME	MARTIN NO. 2-32	EDWARDS NO. 1	FREED UNIT NO. 1
LOCATION	SEC. 32, T20N, R13W	SEC. 28, T21N, R14W	SEC. 28, T20N, R11W
OWNER	UNIVERSAL RESOURCES CORP.	TEXAS OIL & GAS CORP.	AMOCO PRODUCTION CO.
COMPLETED	11/20/76	08/21/76	11/18/60
SAMPLED	06/29/77	05/09/77	04/11/61
FORMATION	MISS-CHESTER	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7919	7264	7330
WELLHEAD PRESSURE,PSIG	2700	1650	3575
OPEN FLOW, MCFD	6700	3950	4700
COMPONENT, MOLE PCT			
METHANE	91.2	89.2	90.2
ETHANE	4.5	4.9	4.6
PROPANE	1.9	2.4	1.9
N-BUTANE	0.6	0.8	0.9
ISOBUTANE	0.2	0.4	0.6
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	0.8	1.1	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.04	0.07	0.04
HEATING VALUE*	1102	1121	1151
SPECIFIC GRAVITY	0.624	0.641	0.647

	INDEX 5512 SAMPLE 8225	INDEX 5513 SAMPLE 8547	INDEX 5514 SAMPLE 8548
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	REAMES UNIT C	KRAUSE	KRAUSE
LOCATION	SEC. 32, T20N, R11W	SEC. 18, T20N, R11W	SEC. 18, T20N, R11W
OWNER	AMOCO PRODUCTION CO.	KINGWOOD OIL CO.	KINGWOOD OIL CO.
COMPLETED	08/20/61	11/16/61	11/16/61
SAMPLED	10/09/61	05/07/62	05/08/62
FORMATION	MISS-	MISS-CHESTER	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7357	7287	7144
WELLHEAD PRESSURE,PSIG	3700	3442	3377
OPEN FLOW, MCFD	11200	1500	3000
COMPONENT, MOLE PCT			
METHANE	92.6	91.5	91.4
ETHANE	4.2	4.5	4.5
PROPANE	1.3	1.8	1.7
N-BUTANE	0.2	0.5	0.5
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.4	0.2	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.3
HELIUM	0.04	0.03	0.04
HEATING VALUE*	1067	1113	1114
SPECIFIC GRAVITY	0.605	0.624	0.627

	INDEX 5515 SAMPLE 8809	INDEX 5516 SAMPLE 10482	INDEX 5517 SAMPLE 10483
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	KARBER NO. 1	MOLLIE EWING NO. 1	MOLLIE EWING NO. 1
LOCATION	SEC. 22, T20N, R12W	SEC. 9, T20N, R11W	SEC. 9, T20N, R11W
OWNER	AMOCO PRODUCTION CO.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	10/18/62	02/19/66	02/15/66
SAMPLED	12/17/62	03/29/66	03/29/66
FORMATION	MISS-CHESTER	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7438	7133	7260
WELLHEAD PRESSURE,PSIG	3475	2800	2750
OPEN FLOW, MCFD	7120	11990	1082
COMPONENT, MOLE PCT			
METHANE	89.6	91.8	91.9
ETHANE	3.8	4.0	4.0
PROPANE	1.1	1.4	1.4
N-BUTANE	0.1	0.5	0.5
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.4	0.3
NITROGEN	3.7	0.8	0.8
OXYGEN	0.9	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.07	0.06	0.06
HEATING VALUE*	1011	1102	1094
SPECIFIC GRAVITY	0.611	0.624	0.620

	INDEX 5518 SAMPLE 11312	INDEX 5519 SAMPLE 11319	INDEX 5520 SAMPLE 11324
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	TAYLOR NO. 1	MOLLIE EWING NO. 1	MOLLIE EWING NO. 1
LOCATION	SEC. 9, T20N, R12W	SEC. 9, T20N, R11W	SEC. 9, T20N, R11W
OWNER	WOODS PETROLEUM CORP.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	01/01/68	02/19/66	02/15/66
SAMPLED	02/27/68	02/29/68	02/29/68
FORMATION	DEVO-HUNTON	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8583	7133	7260
WELLHEAD PRESSURE,PSIG	3090	2274	2180
OPEN FLOW, MCFD	22642	1490	1230
COMPONENT, MOLE PCT			
METHANE	94.4	86.3	85.7
ETHANE	2.4	3.6	3.8
PROPANE	0.6	1.9	2.0
N-BUTANE	0.4	1.3	1.3
ISOBUTANE	0.1	0.9	0.8
N-PENTANE	0.2	0.9	1.0
ISOPENTANE	0.1	1.4	1.0
CYCLOPENTANE	0.1	0.5	0.7
HEXANES PLUS	0.3	1.9	2.3
NITROGEN	1.0	0.9	1.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.03	0.06	0.06
HEATING VALUE*	1064	1277	1289
SPECIFIC GRAVITY	0.603	0.729	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5521 SAMPLE 11461		INDEX 5522 SAMPLE 15248		INDEX 5523 SAMPLE 4303	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	OKEENE NW		ORION SE		RINGWOOD	
WELL NAME	EWING NO. 1		THOMPSON UNIT NO. 1		OTT NO. 1	
LOCATION	SEC. 24, T20N, R12W		SEC. 21, T20N, R15W		SEC. 4, T21N, R9W	
OWNER	EASON OIL CO.		CRESLENN OIL CO.		R. OLSEN OIL CO.	
COMPLETED	07/--/62		07/09/77		12/15/46	
SAMPLED	09/29/68		04/05/78		04/20/47	
FORMATION	PENN-RED FORK		MISS-		NOT GIVEN	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7220		9146		8012	
WELLHEAD PRESSURE,PSIG	800		NOT GIVEN		1700	
OPEN FLOW, MCFD	NOT GIVEN		5170		13000	
COMPONENT, MOLE PCT						
METHANE	92.7	----------	87.4	----------	81.2	----------
ETHANE	3.6		6.1		14.5	
PROPANE	1.1	----------	2.7	----------	---	----------
N-BUTANE	0.4		0.9		---	
ISOBUTANE	0.1	----------	0.4	----------	---	----------
N-PENTANE	0.2		0.2		---	
ISOPENTANE	0.3	----------	0.2	----------	---	----------
CYCLOPENTANE	0.2		0.1		---	
HEXANES PLUS	0.6	----------	0.2	----------	---	----------
NITROGEN	0.5		1.4		3.8	
OXYGEN	0.0	----------	0.0	----------	0.3	----------
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0	----------	0.0	----------	---	----------
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2	----------	0.4	----------	0.2	----------
HELIUM	0.04		0.04		0.02	
HEATING VALUE*	1109	----------	1140	----------	1082	----------
SPECIFIC GRAVITY	0.622		0.656		0.645	

	INDEX 5524 SAMPLE 4691		INDEX 5525 SAMPLE 5009		INDEX 5526 SAMPLE 9513	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	HAYES 58-22		BATMAN NO. 1		SPEECE NO. 1	
LOCATION	SEC. 22, T22N, R10W		SEC. 13, T21N, R11W		SEC. 17, T22N, R10W	
OWNER	SUPERIOR OIL CO.		MAZDA OIL CORP.		CLEARY PETROLEUM, INC.	
COMPLETED	09/20/48		NOT GIVEN		04/28/64	
SAMPLED	02/28/49		03/20/51		07/29/64	
FORMATION	PENN-		NOT GIVEN		MISS-MANNING	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6704		NOT GIVEN		6710	
WELLHEAD PRESSURE,PSIG	1700		NOT GIVEN		1420	
OPEN FLOW, MCFD	3		NOT GIVEN		5480	
COMPONENT, MOLE PCT						
METHANE	91.9	----------	89.4	----------	91.3	----------
ETHANE	4.2		4.3		4.1	
PROPANE	1.5	----------	2.5	----------	1.6	----------
N-BUTANE	0.6		1.1		0.7	
ISOBUTANE	0.0	----------	0.5	----------	0.2	----------
N-PENTANE	0.3		0.3		0.4	
ISOPENTANE	0.1	----------	0.2	----------	0.1	----------
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.3	----------	0.3	----------	0.5	----------
NITROGEN	0.8		0.9		0.5	
OXYGEN	0.1	----------	0.1	----------	TRACE	----------
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2	----------	0.4	----------	0.3	----------
HELIUM	0.04		0.06		0.05	
HEATING VALUE*	1096	----------	1138	----------	1125	----------
SPECIFIC GRAVITY	0.623		0.650		0.634	

	INDEX 5527 SAMPLE 9522		INDEX 5528 SAMPLE 10189		INDEX 5529 SAMPLE 10191	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	DIETZ NO. 1		FRICKEL NO. 1		FRICKEL NO. 1	
LOCATION	SEC. 29, T23N, R12W		SEC. 6, T22N, R11W		SEC. 6, T22N, R11W	
OWNER	LIVINGSTON OIL CO.		CLEARY PETROLEUM, INC.		CLEARY PETROLEUM, INC.	
COMPLETED	04/11/64		09/01/65		09/01/65	
SAMPLED	08/--/64		09/30/65		09/30/65	
FORMATION	MISS-MANNING		PENN-OSWEGO		MISS-MANNING	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7419		6216		6593	
WELLHEAD PRESSURE,PSIG	1550		2516		1923	
OPEN FLOW, MCFD	1900		3098		1815	
COMPONENT, MOLE PCT						
METHANE	88.4	----------	89.2	----------	89.5	----------
ETHANE	5.4		5.3		5.2	
PROPANE	2.3	----------	2.2	----------	2.2	----------
N-BUTANE	1.0		0.8		0.7	
ISOBUTANE	0.5	----------	0.3	----------	0.3	----------
N-PENTANE	0.4		0.2		0.2	
ISOPENTANE	0.2	----------	0.4	----------	0.2	----------
CYCLOPENTANE	0.2		0.1		0.1	
HEXANES PLUS	0.6	----------	0.3	----------	0.4	----------
NITROGEN	0.8		1.0		1.0	
OXYGEN	0.6	----------	0.0	----------	0.0	----------
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2	----------	0.1	----------	0.1	----------
HELIUM	0.05		0.06		0.06	
HEATING VALUE*	1166	----------	1138	----------	1132	----------
SPECIFIC GRAVITY	0.662		0.645		0.641	

	INDEX 5530 SAMPLE 10211		INDEX 5531 SAMPLE 10297		INDEX 5532 SAMPLE 10363	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	LECRONE A NO. 1-C		WARFIELD NO. 1		WARFIELD 1	
LOCATION	SEC. 10, T23N, R10W		SEC. 5, T22N, R11W		SEC. 5, T22N, R11W	
OWNER	CHAMPLIN PETROLEUM CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	05/22/65		06/08/65		06/28/65	
SAMPLED	10/14/65		11/14/65		01/17/66	
FORMATION	PENN-RED FORK		PENN-CHEROKEE		PENN-OSWEGO	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6300		6490		6238	
WELLHEAD PRESSURE,PSIG	1965		1980		2000	
OPEN FLOW, MCFD	NOT GIVEN		9400		1620	
COMPONENT, MOLE PCT						
METHANE	91.2	----------	86.7	----------	79.8	----------
ETHANE	2.7		7.4		7.7	
PROPANE	0.6	----------	3.8	----------	4.0	----------
N-BUTANE	2.1		0.7		1.9	
ISOBUTANE	0.1	----------	0.2	----------	0.6	----------
N-PENTANE	0.1		0.2		1.1	
ISOPENTANE	TRACE	----------	0.2	----------	0.6	----------
CYCLOPENTANE	TRACE		TRACE		0.5	
HEXANES PLUS	0.1	----------	0.2	----------	1.9	----------
NITROGEN	4.6		1.3		1.4	
OXYGEN	0.0	----------	0.0	----------	0.1	----------
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3	----------	0.2	----------	0.3	----------
HELIUM	0.19		0.05		0.05	
HEATING VALUE*	1040	----------	1141	----------	1323	----------
SPECIFIC GRAVITY	0.602		0.652		0.768	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5533 SAMPLE 10739	INDEX 5534 SAMPLE 10762	INDEX 5535 SAMPLE 10763
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	ROSE NO. 1-12	BLASER NO. 1	BLASER NO. 1
LOCATION	SEC. 12, T22N, R12W	SEC. 18, T22N, R12W	SEC. 18, T22N, R12W
OWNER	CLEARY PETROLEUM INC.	EARLSBORO OIL & GAS CO.,INC.	EARLSBORO OIL & GAS CO.,INC.
COMPLETED	NOT GIVEN	05/03/66	04/29/66
SAMPLED	10/02/66	10/26/66	10/26/66
FORMATION	PENN-	PENN-RED FORK	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6424	6587	7128
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1890	1943
OPEN FLOW, MCFD	16200	1339	2809
COMPONENT, MOLE PCT			
METHANE	85.8	86.0	85.6
ETHANE	7.4	5.3	6.2
PROPANE	3.5	3.8	3.3
N-BUTANE	1.0	1.3	1.0
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.9	1.7	2.6
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.06	0.02	0.06
HEATING VALUE*	1175	1162	1157
SPECIFIC GRAVITY	0.671	0.673	0.677

	INDEX 5536 SAMPLE 11306	INDEX 5537 SAMPLE 11314	INDEX 5538 SAMPLE 11315
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	K.E. FISHER NO. 1	REXROAT NO. 1	BIERIG C
LOCATION	SEC. 3, T20N, R10W	SEC. 9, T22N, R11W	SEC. 33, T21N, R10W
OWNER	MIDWEST OIL CORP.	LIVINGSTON OIL CO.	LIVINGSTON OIL CO.
COMPLETED	12/08/67	11/22/60	03/03/64
SAMPLED	02/24/68	02/27/68	02/27/68
FORMATION	DEVO-HUNTON	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8014	6530	7267
WELLHEAD PRESSURE,PSIG	2475	1298	1215
OPEN FLOW, MCFD	9400	7281	3882
COMPONENT, MOLE PCT			
METHANE	81.3	83.1	86.2
ETHANE	9.7	8.3	7.3
PROPANE	3.5	3.8	2.8
N-BUTANE	1.3	1.1	1.1
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	2.4	1.7	1.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.07	0.05	0.05
HEATING VALUE*	1195	1191	1154
SPECIFIC GRAVITY	0.699	0.691	0.662

	INDEX 5539 SAMPLE 11316	INDEX 5540 SAMPLE 12097	INDEX 5541 SAMPLE 12151
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	UNIT 28 NO. 1	BIERIG C NO. 1	ARCHIE F. DICKSON
LOCATION	SEC. 28, T22N, R11W	SEC. 33, T21N, R10W	SEC. 27, T20N, R10W
OWNER	LIVINGSTON OIL CO.	LVO CORP.	TENNECO OIL CO.
COMPLETED	02/17/62	10/05/68	09/18/69
SAMPLED	02/27/68	11/04/69	12/16/69
FORMATION	MISS-MANNING	PENN-OSWEGO	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6878	6575	8371
WELLHEAD PRESSURE,PSIG	575	2073	2302
OPEN FLOW, MCFD	NOT GIVEN	21096	3030
COMPONENT, MOLE PCT			
METHANE	90.9	80.0	77.7
ETHANE	4.0	8.1	9.5
PROPANE	1.5	5.3	4.5
N-BUTANE	0.5	1.2	1.5
ISOBUTANE	0.1	0.7	1.3
N-PENTANE	0.1	0.3	1.7
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.1	0.3	1.3
NITROGEN	2.2	3.2	1.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.06	0.11	0.03
HEATING VALUE*	1073	1210	1323
SPECIFIC GRAVITY	0.621	0.716	0.768

	INDEX 5542 SAMPLE 12264	INDEX 5543 SAMPLE 12265	INDEX 5544 SAMPLE 12889
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	RUTH B. DAVIS UNIT NO. 1	V. J. BURHAM UNIT NO. 1	SCANNELL C NO. 1
LOCATION	SEC. 15, T23N, R9W	SEC. 22, T23N, R9W	SEC. 11, T21N, R11W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	SUN OIL CO.
COMPLETED	07/27/64	05/22/65	04/12/71
SAMPLED	05/19/70	05/19/70	06/24/71
FORMATION	MISS-	MISS-	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6470	6533	7882
WELLHEAD PRESSURE,PSIG	2165	1570	2107
OPEN FLOW, MCFD	23800	1290	7400
COMPONENT, MOLE PCT			
METHANE	88.3	85.9	87.3
ETHANE	5.6	6.4	7.2
PROPANE	2.4	3.1	2.7
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	1.8	2.1	1.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1126	1154	1138
SPECIFIC GRAVITY	0.646	0.667	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5545 SAMPLE 10190	INDEX 5546 SAMPLE 5268	INDEX 5547 SAMPLE 7151
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD NW	SEILING NE	SEILING NE
WELL NAME	FRICKEL NO. 1	KIMBALL NO. 1	BRANSTETTER NO. 1
LOCATION	SEC. 6, T22N, R11W	SEC. 34, T20N, R16W	SEC. 14, T20N, R16W
OWNER	CLEARY PETROLEUM, INC.	CONTINENTAL OIL CO.	CALVERT DRILLING, INC.
COMPLETED	09/01/65	04/03/52	NOT GIVEN
SAMPLED	09/30/65	07/02/52	07/23/59
FORMATION	PENN-CHEROKEE	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6460	8362	8268
WELLHEAD PRESSURE,PSIG	2037	2491	NOT GIVEN
OPEN FLOW, MCFD	6821	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	80.1	85.8
ETHANE	6.6	7.9	6.4
PROPANE	2.6	1.7	3.4
N-BUTANE	0.6	1.3	0.9
ISOBUTANE	0.4	0.0	0.7
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	2.6	0.8
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.8	0.3
NITROGEN	2.8	3.7	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	1.4	0.2
HELIUM	0.10	0.08	0.10
HEATING VALUE*	1112	1204	1179
SPECIFIC GRAVITY	0.652	0.735	0.677

	INDEX 5548 SAMPLE 7210	INDEX 5549 SAMPLE 7211	INDEX 5550 SAMPLE 14542
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	SEILING NE	SEILING NE	SEILING NE
WELL NAME	EARL E. SPAFFORD NO. 1	LOUTHAN NO. 1-22	JELLISON NO. 1-6
LOCATION	SEC. 33, T23N, R16W	SEC. 22, T20N, R16W	SEC. 6, T20N, R15W
OWNER	ATLANTIC RICHFIELD	SHELL OIL CO.	PIONEER PRODUCTION CORP.
COMPLETED	02/06/59	03/04/59	NOT GIVEN
SAMPLED	09/18/59	08/24/59	12/11/75
FORMATION	MISS-CHESTER	PENN-MUSSELEM	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8271	6956	9895
WELLHEAD PRESSURE,PSIG	2997	2265	1600
OPEN FLOW, MCFD	32921	12000	4179
COMPONENT, MOLE PCT			
METHANE	94.4	79.9	94.1
ETHANE	1.9	9.3	2.4
PROPANE	0.5	4.7	0.7
N-BUTANE	0.2	1.3	0.2
ISOBUTANE	0.2	0.8	0.1
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	1.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.9	1.9	1.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.7
HELIUM	0.04	0.10	0.04
HEATING VALUE*	1031	1235	1038
SPECIFIC GRAVITY	0.595	0.722	0.597

	INDEX 5551 SAMPLE 14543	INDEX 5552 SAMPLE 8699	INDEX 5553 SAMPLE 12035
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	SEILING NE	SOONER TREND	SOONER TREND
WELL NAME	JELLISON NO. 1-6	SCHEFFE NO. 1	MAY 36-1
LOCATION	SEC. 6, T20N, R15W	SEC. 36, T22N, R9W	SEC. 36, T21N, R9W
OWNER	PIONEER PRODUCTION CORP.	HARPER OIL CO.	WHITE SHIELD OIL & GAS CORP.
COMPLETED	NOT GIVEN	10/15/61	12/12/68
SAMPLED	12/11/75	10/09/62	09/11/69
FORMATION	MISS-CHESTER	PENN-RED FORK	MISS-MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7996	6466	6958
WELLHEAD PRESSURE,PSIG	1300	1850	2050
OPEN FLOW, MCFD	1464	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	77.7	93.1	86.0
ETHANE	9.6	3.5	6.7
PROPANE	6.2	0.7	3.1
N-BUTANE	2.2	0.2	0.9
ISOBUTANE	1.4	0.1	0.5
N-PENTANE	0.4	TRACE	0.2
ISOPENTANE	0.9	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.0	1.8	1.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.04	0.10	0.04
HEATING VALUE*	1311	1053	1150
SPECIFIC GRAVITY	0.758	0.600	0.663

	INDEX 5554 SAMPLE 11415	INDEX 5555 SAMPLE 11416	INDEX 5556 SAMPLE 11417
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	AYLESWORTH	AYLESWORTH	AYLESWORTH
WELL NAME	M. A. NEFF	DRUMMOND "A"	A. A. DRUMMOND N
LOCATION	SEC. 12, T6S, R6E	SEC. 12, T6S, R6E	SEC. 11, T6S, R6E
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	05/26/57	05/23/65	10/23/67
SAMPLED	04/29/68	03/28/68	03/28/68
FORMATION	MISS-WOODFORD	MISS-SYCAMORE	ORDO-TULIP CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9536	3560	5005
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.5	74.3	74.7
ETHANE	9.7	10.2	11.3
PROPANE	5.7	7.4	7.7
N-BUTANE	1.6	2.6	1.9
ISOBUTANE	0.2	0.6	0.8
N-PENTANE	0.5	0.8	0.6
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	2.1	2.9	2.4
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1218	1327	1230
SPECIFIC GRAVITY	0.720	0.773	0.758

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5557 SAMPLE 11418	INDEX 5558 SAMPLE 11812	INDEX 5559 SAMPLE 3429
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	AYLESWORTH	AYLESWORTH	CUMBERLAND
WELL NAME	J. F. HENDRICKS	DRUMMOND-NOBLE UNIT NO. 1	LITTLE 106 NO. 3
LOCATION	SEC. 12, T6S, R6E	SEC. 3, T6S, R6E	SEC. 34, T5S, R7E
OWNER	TEXACO INC.	ROY A. GODFREY	UNION OIL CO. OF CAL.
COMPLETED	02/20/57	09/24/67	NOT GIVEN
SAMPLED	03/28/68	04/09/69	05/22/42
FORMATION	DEVO-HUNTON	ORDO-OIL CREEK	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3550	4278	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1670	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	9995	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	84.6	87.7
ETHANE	10.7	5.9	8.4
PROPANE	8.7	3.8	---
N-BUTANE	2.7	1.2	---
ISOBUTANE	0.9	0.3	---
N-PENTANE	0.6	0.4	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	4.1	2.8	2.1
OXYGEN	0.0	0.1	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.4	1.5
HELIUM	0.04	0.09	0.08
HEATING VALUE*	1310	1148	1039
SPECIFIC GRAVITY	0.790	0.677	0.619

	INDEX 5560 SAMPLE 3436	INDEX 5561 SAMPLE 3437	INDEX 5562 SAMPLE 3438
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	CUMBERLAND	CUMBERLAND	CUMBERLAND
WELL NAME	WILLIAM 109 NO. 1	LITTLE 100 NO. 1	LITTLE 106 NO. 3
LOCATION	SEC. 20, T5S, R7E	SEC. 28, T5S, R7E	SEC. 34, T5S, R7E
OWNER	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.	UNION OIL CO. OF CAL.
COMPLETED	04/01/42	04/13/40	03/04/41
SAMPLED	05/22/42	05/22/42	05/22/42
FORMATION	ORDO-MCLISH	ORDO-BROMIDE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5891	4857	4860
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1298	4214	3475
COMPONENT, MOLE PCT			
METHANE	80.0	82.4	80.0
ETHANE	16.9	15.2	17.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	1.8	1.7
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.07	0.05
HEATING VALUE*	1113	1107	1129
SPECIFIC GRAVITY	0.651	0.640	0.652

	INDEX 5563 SAMPLE 3439	INDEX 5564 SAMPLE 10480	INDEX 5565 SAMPLE 11813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	CUMBERLAND	MADILL	MADILL
WELL NAME	CHRISMAN 104 NO. 2	R. L. GRIFFIN NO. 5	DILLEY UNIT NO. 1
LOCATION	SEC. 20, T5S, R7E	SEC. 16, T5S, R5E	SEC. 32, T5S, R6E
OWNER	UNION OIL CO. OF CAL.	ATLANTIC RICHFIELD CO.	ROY A. GODFREY
COMPLETED	07/08/41	12/26/65	07/20/67
SAMPLED	05/22/42	03/28/66	04/09/69
FORMATION	ORDO-BROMIDE	ORDO-OIL CREEK	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4983	7446	4703
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2600	1730
OPEN FLOW, MCFD	266	42847	6753
COMPONENT, MOLE PCT			
METHANE	61.6	81.4	85.3
ETHANE	37.1	8.7	5.8
PROPANE	---	4.1	3.6
N-BUTANE	---	1.4	1.2
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.3	0.4
ISOPENTANE	---	0.3	0.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.7	2.6	2.7
OXYGEN	0.3	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.05	0.04	0.10
HEATING VALUE*	1289	1191	1143
SPECIFIC GRAVITY	0.744	0.700	0.670

	INDEX 5566 SAMPLE 16059	INDEX 5567 SAMPLE 12081	INDEX 5568 SAMPLE 7131
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MAYES
FIELD	POWELL S	WILDCAT	WILDCAT
WELL NAME	FEDERAL NO. 1	DUKE NO. 1	NO. 1
LOCATION	SEC. 11, T4S, R4E	SEC. 21, T5S, R4E	SEC. 29, T20N, R19E
OWNER	AMERICAN QUASAR PET. CO.	UNION OIL CO. OF CALIF.	US GOVERNMENT
COMPLETED	12/99/79	DRILL STEM TEST	NOT GIVEN
SAMPLED	09/03/80	10/10/69	06/24/59
FORMATION	ORDO-OIL CREEK	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	355
DEPTH, FEET	16162	7515	NOT GIVEN
WELLHEAD PRESSURE,PSIG	9800	3648	NOT GIVEN
OPEN FLOW, MCFD	4400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.6	91.7	66.5
ETHANE	2.5	4.1	0.4
PROPANE	0.7	2.1	0.0
N-BUTANE	0.3	0.4	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.9	0.9	24.3
OXYGEN	TRACE	0.1	3.3
ARGON	TRACE	TRACE	0.3
HYDROGEN	0.0	0.01	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	5.1
HELIUM	0.02	0.09	0.20
HEATING VALUE*	1061	1087	681
SPECIFIC GRAVITY	0.599	0.612	0.727

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5569 SAMPLE 6084	INDEX 5570 SAMPLE 9987	INDEX 5571 SAMPLE 11742
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	BYARS SW	DIBBLE N	DIBBLE N
WELL NAME	CAMPBELL NO. 1	PETERS NO. 1	MARY JO TURNER NO. 1
LOCATION	SEC. 33, T5N, R2E	SEC. 10, T7N, R4W	SEC. 35, T4N, R4W
OWNER	SUN OIL CO.	J.M. HUBER CORP.	SUN OIL CO.
COMPLETED	02/29/56	01/29/64	11/10/68
SAMPLED	06/12/56	07/14/65	01/24/69
FORMATION	PENN-LAYTON	-OSBORNE	-OSBORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3244	9400	9458
WELLHEAD PRESSURE,PSIG	1300	2984	2286
OPEN FLOW, MCFD	1788	7390	8300
COMPONENT, MOLE PCT			
METHANE	75.4	85.9	85.2
ETHANE	7.6	7.1	7.3
PROPANE	3.6	2.9	3.1
N-BUTANE	1.0	0.8	1.0
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.0	0.1	0.5
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	10.2	1.7	1.5
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.12	0.10	0.06
HEATING VALUE*	1088	1140	1171
SPECIFIC GRAVITY	0.703	0.661	0.676

	INDEX 5572 SAMPLE 11138	INDEX 5573 SAMPLE 15600	INDEX 5574 SAMPLE 14111
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	FREENY N	NEW CASTLE W	NEWCASTLE
WELL NAME	KIDWELL NO. 1	DUNNING NO. 1	BABB NO. 1-19
LOCATION	SEC. 23, T4N, R4W	SEC. 30, T9N, R4W	SEC. 19, T9N, R4W
OWNER	SUN OIL CO.	NATIONAL COOPERATIVE REF.	MESA PETROLEUM CO.
COMPLETED	02/17/66	01/31/79	11/05/73
SAMPLED	09/27/67	04/09/79	07/--/74
FORMATION	ORDO-OIL CREEK	PENN-	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	10925	9036	9040
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3000	NOT GIVEN
OPEN FLOW, MCFD	4059	3493	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.8	86.0	87.4
ETHANE	5.9	7.0	5.8
PROPANE	2.5	3.1	2.4
N-BUTANE	0.7	0.8	0.6
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	4.7	1.5	2.5
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.05	0.06	0.08
HEATING VALUE*	1096	1158	1107
SPECIFIC GRAVITY	0.659	0.665	0.645

	INDEX 5575 SAMPLE 6122	INDEX 5576 SAMPLE 13724	INDEX 5577 SAMPLE 11123
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	NEWCASTLE NE	NEWCASTLE W	PAOLI N
WELL NAME	MARTHA SMITH	VON HARDEGEN NO. 1	HANNER NO. 1
LOCATION	SEC. 2, T9N, R4W	SEC. 18, T9N, R4W	SEC. 25, T5N, R1W
OWNER	GREAT SWEET GRASS OILS CO.	MIDWEST OIL CORP.	EDWIN L. COX
COMPLETED	05/16/56	11/06/72	12/27/66
SAMPLED	08/08/56	09/19/73	09/19/67
FORMATION	PENN-BARTLESVILLE	PERM-HART	PERM-HART
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8075	8874	5770
WELLHEAD PRESSURE,PSIG	2380	2357	1722
OPEN FLOW, MCFD	24000	5100	10760
COMPONENT, MOLE PCT			
METHANE	36.4	88.2	74.5
ETHANE	19.1	5.5	12.5
PROPANE	20.7	2.2	5.3
N-BUTANE	10.8	0.6	1.3
ISOBUTANE	4.3	0.3	0.7
N-PENTANE	3.0	0.1	0.5
ISOPENTANE	2.7	0.3	0.1
CYCLOPENTANE	0.5	0.1	0.1
HEXANES PLUS	1.8	0.2	0.3
NITROGEN	0.4	2.0	4.2
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	TRACE	0.07	0.09
HEATING VALUE*	2113	1111	1229
SPECIFIC GRAVITY	1.258	0.642	0.738

	INDEX 5578 SAMPLE 11307	INDEX 5579 SAMPLE 11838	INDEX 5580 SAMPLE 12351
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCURTAIN
FIELD	WASHINGTON E	WASHINGTON N	GLOVER NE
WELL NAME	MADDEN NO. 1	L. C. GILES NO. 1	WEYERHAEUSER NO. 25-1
LOCATION	SEC. 2, T7N, R3W	SEC. 4, T7N, R3W	SEC. 25, T5S, R23E
OWNER	MONSANTO CO.	UNION TEXAS PETROLEUM	VIERSEN & COCHRAN
COMPLETED	12/31/63	08/12/68	08/02/70
SAMPLED	02/22/64	04/25/69	08/12/70
FORMATION	-OSBORNE	-OSBORNE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	400
DEPTH, FEET	8140	9100	7000
WELLHEAD PRESSURE,PSIG	1161	2929	62
OPEN FLOW, MCFD	8393	2750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	85.2	53.4
ETHANE	4.2	7.3	1.4
PROPANE	1.3	2.9	0.1
N-BUTANE	1.1	1.0	0.0
ISOBUTANE	0.4	0.2	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	1.5	1.7	40.4
OXYGEN	0.2	0.2	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.1	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.4	3.5
HELIUM	0.27	0.07	0.66
HEATING VALUE*	1171	1150	570
SPECIFIC GRAVITY	0.676	0.667	0.759

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5581 SAMPLE 12352		INDEX 5582 SAMPLE 3318		INDEX 5583 SAMPLE 3771	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MCCURTAIN		MCINTOSH		MCINTOSH	
FIELD	GLOVER NE		CHECOTAH		CHECOTAH	
WELL NAME	WEYERHAEUSER NO. 25-1		ALTUS RHYME		SOUTH CHECOTAH NO. 1	
LOCATION	SEC. 25, T5S, R23E		SEC. 30, T11N, R17E		SEC. 6, T11N, R17E	
OWNER	VIERSEN & COCHRAN		OKLAHOMA NATURAL GAS CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	08/02/70		--/--/15		05/24/42	
SAMPLED	08/12/70		04/23/42		04/06/44	
FORMATION	NOT GIVEN		EOCE-GREEN RIVER		NOT GIVEN	
GEOLOGIC PROVINCE CODE	400		355		355	
DEPTH, FEET	7000		1923		1503	
WELLHEAD PRESSURE,PSIG	62		70		100	
OPEN FLOW, MCFD	NOT GIVEN		320		11	
COMPONENT, MOLE PCT						
METHANE	53.4		87.9		91.0	
ETHANE	1.6		9.8		6.9	
PROPANE	0.1		---		---	
N-BUTANE	0.0		---		---	
ISOBUTANE	0.0		---		---	
N-PENTANE	0.0		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	0.0		---		---	
HEXANES PLUS	0.0		---		---	
NITROGEN	39.9		1.3		1.3	
OXYGEN	0.2		0.4		0.4	
ARGON	0.1		---		---	
HYDROGEN	0.5		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	3.6		0.4		0.2	
HELIUM	0.67		0.16		0.21	
HEATING VALUE*	574		1066		1045	
SPECIFIC GRAVITY	0.760		0.613		0.597	

	INDEX 5584 SAMPLE 12754		INDEX 5585 SAMPLE 2485		INDEX 5586 SAMPLE 11783	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MCINTOSH		MCINTOSH		MCINTOSH	
FIELD	HANNA W		HOFFMAN		RAIFORD W	
WELL NAME	WELLS NO. 1-4		S. BARNETT		CITIES SERVICE NO. 2	
LOCATION	SEC. 4, T8N, R13E		SEC. 19, T12N, R14E		SEC. 9, T9N, R14E	
OWNER	LUBELL OIL CO.		R. D. THOMPSON & JOHN PENROD		RAPP OIL & GAS CO.	
COMPLETED	09/05/70		03/01/32		11/05/68	
SAMPLED	04/01/71		03/28/32		02/28/69	
FORMATION	PENN-CROMWELL		ORDO-WILCOX		PENN-GILCREASE	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	4120		3072		2667	
WELLHEAD PRESSURE,PSIG	1820		1320		774	
OPEN FLOW, MCFD	12000		15		5421	
COMPONENT, MOLE PCT						
METHANE	93.7		65.0		92.8	
ETHANE	3.8		12.8		4.0	
PROPANE	0.7		---		0.6	
N-BUTANE	0.1		---		0.3	
ISOBUTANE	0.1		---		0.0	
N-PENTANE	0.1		---		0.0	
ISOPENTANE	0.0		---		0.0	
CYCLOPENTANE	TRACE		---		0.0	
HEXANES PLUS	0.1		---		0.0	
NITROGEN	0.8		21.2		1.9	
OXYGEN	0.0		0.3		0.0	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.6		0.3		0.3	
HELIUM	0.07		0.37		0.10	
HEATING VALUE*	1052		888		1038	
SPECIFIC GRAVITY	0.597		0.708		0.595	

	INDEX 5587 SAMPLE 10828		INDEX 5588 SAMPLE 11322		INDEX 5589 SAMPLE 12660	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MCINTOSH		MURRAY		MURRAY	
FIELD	ULAN N		DAVIS		DAVIS NE	
WELL NAME	DES NO. 1		H. N. HORNER NO. 1		O. C. DAVIS NO. 6	
LOCATION	SEC. 14, T8N, R13E		SEC. 32, T1N, R2E		SEC. 14, T1N, R2E	
OWNER	TRIDEN OIL INC.		SOHIO PETROLEUM CO.		SUN OIL CO.	
COMPLETED	01/15/66		08/14/62		07/14/70	
SAMPLED	01/03/67		02/28/68		11/--/70	
FORMATION	PENN-CROMWELL		ORDO-BROMIDE		ORDO-OIL CREEK	
GEOLOGIC PROVINCE CODE	355		350		350	
DEPTH, FEET	4180		5400		2004	
WELLHEAD PRESSURE,PSIG	1750		2000		1997	
OPEN FLOW, MCFD	4000		NOT GIVEN		3690	
COMPONENT, MOLE PCT						
METHANE	94.6		84.4		97.3	
ETHANE	3.5		4.8		0.1	
PROPANE	0.7		2.8		0.2	
N-BUTANE	0.2		0.5		TRACE	
ISOBUTANE	0.0		0.3		0.2	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.1		0.0	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		TRACE	
NITROGEN	0.6		5.5		1.3	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		1.3		0.8	
HELIUM	0.09		0.05		0.01	
HEATING VALUE*	1046		1054		1004	
SPECIFIC GRAVITY	0.593		0.660		0.576	

	INDEX 5590 SAMPLE 3468		INDEX 5591 SAMPLE 2571		INDEX 5592 SAMPLE 3471	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MUSKOGEE		MUSKOGEE		MUSKOGEE	
FIELD	AKTAHA		HASKELL		WARNER	
WELL NAME	REINHARDT NO. 1		BARNETT NO. 1		L. POOLE NO. 1892	
LOCATION	SEC. 21, T13N, R17E		SEC. 34, T16N, R15E		SEC. 31, T12N, R19E	
OWNER	CLAUDE GARRETT		W. B. PINE		OKLAHOMA NATURAL GAS CO.	
COMPLETED	05/--/41		09/24/32		06/13/30	
SAMPLED	06/02/42		11/23/32		06/02/42	
FORMATION	PENN-DUTCHER		NOT GIVEN		-GAS SAND	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	1385		1081		539	
WELLHEAD PRESSURE,PSIG	465		63		120	
OPEN FLOW, MCFD	2250		877		787	
COMPONENT, MOLE PCT						
METHANE	85.0		66.2		90.0	
ETHANE	12.2		29.8		7.9	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	2.1		3.4		1.1	
OXYGEN	0.4		0.4		0.4	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.1		0.4	
HELIUM	0.24		0.09		0.15	
HEATING VALUE*	1080		1205		1053	
SPECIFIC GRAVITY	0.626		0.719		0.603	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5593 SAMPLE 15275	INDEX 5594 SAMPLE 11987	INDEX 5595 SAMPLE 9073
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MUSKOGEE	NOBLE	NOBLE
FIELD	WHITEFIELD	BILLINGS E	ECHO E
WELL NAME	HOLCOMB NO. 1	BELLMAN NO. 1	MASON NO. 1
LOCATION	SEC. 29, T10N, R19E	SEC. 30, T24N, R1W	SEC. 13, T23N, R2W
OWNER	SERVICE DRILLING CO.	KETAL OIL PRODUCING CO.	NATURAL GAS DRILLING CO.
COMPLETED	09/22/77	07/21/69	06/--/61
SAMPLED	05/01/78	07/28/69	08/30/63
FORMATION	PENN-SPIRO	PENN-TONKAWA	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2995	2692	804
WELLHEAD PRESSURE,PSIG	1450	900	75
OPEN FLOW, MCFD	1146	1000	50
COMPONENT, MOLE PCT			
METHANE	94.8	56.8	79.9
ETHANE	1.0	6.3	7.6
PROPANE	0.2	3.4	3.9
N-BUTANE	0.0	0.8	1.4
ISOBUTANE	0.0	0.4	0.6
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.3
NITROGEN	3.5	31.8	5.3
OXYGEN	0.3	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.12	0.38	0.11
HEATING VALUE*	984	823	1172
SPECIFIC GRAVITY	0.578	0.770	0.712

	INDEX 5596 SAMPLE 2650	INDEX 5597 SAMPLE 4957	INDEX 5598 SAMPLE 8997
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	LUCIEN	LUCIEN	LUCIEN
WELL NAME	SCHOENWALD NO. 1	FREDERICK NO. 2	MCCRACKEN NO. 2
LOCATION	SEC. 20, T20N, R2W	SEC. 34, T20N, R2W	SEC. 26, T21N, R2W
OWNER	SHELL OIL CO. ET AL.	THOMAS N. BERRY & CO.	TOTO GAS CO.
COMPLETED	08/25/33	07/16/50	10/23/61
SAMPLED	10/17/33	11/18/50	06/03/63
FORMATION	ORDO-BROMIDE	PENN-TONKAWA	PENN-AVANT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5070	3100	3519
WELLHEAD PRESSURE,PSIG	700	1200	1320
OPEN FLOW, MCFD	9000	4000	150
COMPONENT, MOLE PCT			
METHANE	16.1	66.9	82.5
ETHANE	76.7	3.2	6.1
PROPANE	---	1.9	3.4
N-BUTANE	---	0.7	1.2
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	6.4	26.1	5.1
OXYGEN	0.3	0.1	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	0.05	0.26	0.10
HEATING VALUE*	1538	832	1128
SPECIFIC GRAVITY	0.965	0.721	0.682

	INDEX 5599 SAMPLE 1858	INDEX 5600 SAMPLE 2983	INDEX 5601 SAMPLE 9074
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	NOT GIVEN	PERRY DISTRICT	PERRY DISTRICT
WELL NAME	MCCORMICK NO. 1	WALTERMIRE NO. 1	DAUMAN
LOCATION	SEC. 33, T21N, R1W	SEC. 33, T21N, R1W	SEC. 32, T21N, R1W
OWNER	INDIAN TERR. ILLUM. OIL CO.	KAY COUNTY GAS CO.	TOTO GAS CO.
COMPLETED	08/18/29	NOT GIVEN	06/--/62
SAMPLED	09/04/29	11/17/41	08/30/63
FORMATION	NOT GIVEN	PENN-HOOVER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3365	2295	3000
WELLHEAD PRESSURE,PSIG	1400	670	1420
OPEN FLOW, MCFD	18000	2700	450
COMPONENT, MOLE PCT			
METHANE	72.8	9.3	65.0
ETHANE	12.4	14.9	4.3
PROPANE	---	---	2.8
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	14.5	75.0	25.3
OXYGEN	0.0	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.22	0.52	0.30
HEATING VALUE*	960	361	891
SPECIFIC GRAVITY	0.676	0.938	0.746

	INDEX 5602 SAMPLE 15055	INDEX 5603 SAMPLE 11470	INDEX 5604 SAMPLE 4472
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	PERRY LAKE S	PERRY NW	POLO
WELL NAME	MARTIN KNORI "A" NO. 1	W. S. MCGUIRE NO. 5	ALICE BRADBURY NO. 1
LOCATION	SEC. 7, T20N, R 1W	SEC. 6, T21N, R1W	SEC. 29, T22N, R1
OWNER	MURRAY DRILLING CO.	GULF OIL CO. U.S.	ATLANTIC RICHFIELD
COMPLETED	10/24/76	06/07/65	10/06/47
SAMPLED	07/13/78	05/07/68	04/27/48
FORMATION	PENN-CAMPBELL	PENN-AVANT	MISS-LIME
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1835	3325	4710
WELLHEAD PRESSURE,PSIG	725	750	860
OPEN FLOW, MCFD	18108	2727	686
COMPONENT, MOLE PCT			
METHANE	67.2	76.9	65.2
ETHANE	6.3	6.2	24.0
PROPANE	3.7	3.7	---
N-BUTANE	1.2	1.2	---
ISOBUTANE	.6	0.5	---
N-PENTANE	.4	0.3	---
ISOPENTANE	.2	0.3	---
CYCLOPENTANE	.1	0.1	---
HEXANES PLUS	.3	0.2	---
NITROGEN	13.8	10.2	9.9
OXYGEN	.7	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	.4	0.1	---
HYDROGEN SULFIDE**	.1	0.0	---
CARBON DIOXIDE	.1	0.1	0.5
HELIUM	.27	0.19	0.16
HEATING VALUE*	955	1083	1091
SPECIFIC GRAVITY	0.753	0.709	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5605 SAMPLE 4793	INDEX 5606 SAMPLE 1202	INDEX 5607 SAMPLE 8622
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	POLO	SAMS	THREE SANDS E
WELL NAME	ELLWOOD A-1	A. WOLLSESON NO. 1	W. CASE A NO. 2
LOCATION	SEC. 26, T22N, R2W	SEC. 21, T21N, R2E	SEC. 7, T24N, R1E
OWNER	ANDERSON-PRICHARD OIL CORP.	MOBIL OIL CORP.	OLYMPIC PETROLEUM CO.
COMPLETED	09/21/49	NOT GIVEN	03/23/61
SAMPLED	11/18/49	11/15/25	07/26/62
FORMATION	PENN-BARTLESVILLE	NOT GIVEN	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4732	2396	4221
WELLHEAD PRESSURE,PSIG	1568	NOT GIVEN	550
OPEN FLOW, MCFD	1000	NOT GIVEN	750
COMPONENT, MOLE PCT			
METHANE	73.3	50.0	78.3
ETHANE	9.8	12.6	7.5
PROPANE	4.7	---	4.1
N-BUTANE	1.3	---	1.3
ISOBUTANE	0.4	---	0.7
N-PENTANE	0.5	---	0.3
ISOPENTANE	TRACE	---	0.4
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.3
NITROGEN	9.1	36.7	6.5
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.12	0.40	0.17
HEATING VALUE*	1138	732	1150
SPECIFIC GRAVITY	0.735	0.770	0.715

	INDEX 5608 SAMPLE 3326	INDEX 5609 SAMPLE 230	INDEX 5610 SAMPLE 15309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOWATA	NOWATA	OKFUSKEE
FIELD	HOGSHOOTER	LUDOWICI-CELADON	ALABAMA
WELL NAME	BUNCH NO. 1	TAYLOR NO. 5	DOUGLAS NO. 2
LOCATION	SEC. 1, T25N, R14E	SEC. 16, T20N, R16E	SEC. 34, T10N, R11E
OWNER	T.S. & C.R. COLPITT	LUDOWICI-CELADON TILE CO.	ESTORIL PRODUCING CORP.
COMPLETED	08/19/37	--/--/18	02/28/78
SAMPLED	04/24/42	04/29/20	06/27/78
FORMATION	MISS-CHAT	PENN-	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1390	687	2124
WELLHEAD PRESSURE,PSIG	525	70	825
OPEN FLOW, MCFD	3000	40	2825
COMPONENT, MOLE PCT			
METHANE	95.8	96.5	84.8
ETHANE	1.3	0.0	5.0
PROPANE	---	---	2.6
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	1.1	2.7	5.1
OXYGEN	0.3	0.7	0.3
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	0.1	0.3
HELIUM	0.09	TRACE	0.11
HEATING VALUE*	994	978	1081
SPECIFIC GRAVITY	0.580	0.570	0.660

	INDEX 5611 SAMPLE 4274	INDEX 5612 SAMPLE 4116	INDEX 5613 SAMPLE 3784
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	BEARDEN NE	CANARD	CASTLE E
WELL NAME	SAM NO. 1	ROLY CANARD NO. 1	TANNER NO. 1
LOCATION	SEC. 10, T10N, R9E	SEC. 16, T10N, R10E	SEC. 28, T12N, R9E
OWNER	SUN OIL CO.	AMERADA HESS CORP.	TEXACO INC.
COMPLETED	11/30/46	08/18/45	03/12/44
SAMPLED	01/28/47	10/18/46	04/13/44
FORMATION	PENN-	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3056	3309	3272
WELLHEAD PRESSURE,PSIG	550	1180	1300
OPEN FLOW, MCFD	1500	8574	13140
COMPONENT, MOLE PCT			
METHANE	79.3	66.9	68.6
ETHANE	15.5	27.6	20.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.1	3.8	10.2
OXYGEN	0.4	0.9	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.6	0.2
HELIUM	0.09	0.15	0.00
HEATING VALUE*	1081	1172	1062
SPECIFIC GRAVITY	0.656	0.717	0.702

	INDEX 5614 SAMPLE 1837	INDEX 5615 SAMPLE 1838	INDEX 5616 SAMPLE 4122
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	CLEARVIEW DISTRICT	CLEARVIEW DISTRICT	DUSTIN
WELL NAME	DOLLY DINDY NO.1	DOLLY DINDY NO. C-1	ROSE NO. 1
LOCATION	SEC. 31, T11N, R11E	SEC. 31, T11N, R11E	SEC. 28, T10N, R12E
OWNER	MID-CONTINENT OIL CORP.	MID-CONTINENT OIL CORP.	PUBLIC SERVICE CO. OF OKLA.
COMPLETED	07/13/28	07/01/29	02/07/46
SAMPLED	08/12/29	08/12/29	09/29/46
FORMATION	MISS-JEFFERSON	MISS-JEFFERSON	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3071	3088	2360
WELLHEAD PRESSURE,PSIG	1100	1100	930
OPEN FLOW, MCFD	25000	25000	3500
COMPONENT, MOLE PCT			
METHANE	58.0	60.5	81.6
ETHANE	32.8	31.8	16.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.4	6.6	0.8
OXYGEN	0.2	0.5	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.6	0.4
HELIUM	0.01	0.01	0.09
HEATING VALUE*	1175	1183	1119
SPECIFIC GRAVITY	0.758	0.748	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5617 SAMPLE 4478	INDEX 5618 SAMPLE 1054	INDEX 5619 SAMPLE 4182
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	DUSTIN	DUSTIN NE	GREENLEASE
WELL NAME	ROSE NO. 1	NO. 1	OVERALL NO. 2
LOCATION	SEC. 31, T10N, R12E	SEC. 36, T10N, R12E	SEC. 15, T11N, R9E
OWNER	W. R. WELLS	CARTER OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/01/47	06/--/24	08/28/45
SAMPLED	03/1A/48	05/07/25	11/08/46
FORMATION	NOT GIVEN	NOT GIVEN	PENN-BASAL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	3235	NOT GIVEN
WELLHEAD PRESSURE,PSIG	560	1100	650
OPEN FLOW, MCFD	980	2110	716
COMPONENT, MOLE PCT			
METHANE	83.8	75.9	68.0
ETHANE	14.4	22.1	27.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.6	1.2	4.2
OXYGEN	0.2	0.5	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.05	0.12
HEATING VALUE*	1103	1165	1102
SPECIFIC GRAVITY	0.636	0.674	0.711

	INDEX 5620 SAMPLE 3329	INDEX 5621 SAMPLE 4117	INDEX 5622 SAMPLE 10169
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	GREGORY	HICKORY RIDGE NW	IRON POST
WELL NAME	GREGORY NO. 3	E. I. BARRY NO. 1	WIGINTON NO. 1
LOCATION	SEC. 36, T10N, R11E	SEC. 23, T10N, R10E	SEC. 11, T13N, R7E
OWNER	EAGLE PICHER CO.	AMERADA HESS CORP.	TURLEY OIL CO.
COMPLETED	02/13/34	09/01/45	08/01/65
SAMPLED	04/24/42	10/18/46	09/26/65
FORMATION	PENN-GILCREASE	PENN-WAPANUCKA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2513	3157	3940
WELLHEAD PRESSURE,PSIG	850	942	1450
OPEN FLOW, MCFD	1500	4394	4500
COMPONENT, MOLE PCT			
METHANE	40.3	66.7	79.9
ETHANE	52.9	27.7	7.3
PROPANE	---	---	3.5
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	6.0	4.0	6.6
OXYGEN	0.4	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	1.1	0.1
HELIUM	0.12	0.12	0.10
HEATING VALUE*	1356	1172	1125
SPECIFIC GRAVITY	0.846	0.721	0.697

	INDEX 5623 SAMPLE 10170	INDEX 5624 SAMPLE 3309	INDEX 5625 SAMPLE 326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	IRON POST	MASON	MORGAN
WELL NAME	WIGINTON NO. 1	ROSE NO. 1	BARNETT NO. 1
LOCATION	SEC. 11, T13N, R7E	SEC. 10, T12N, R9E	SEC. 3, T12N, R11E
OWNER	TURLEY OIL CO.	BURKE-GRIES OIL CO.	EAGLE PICHER CO.
COMPLETED	08/01/65	12/30/40	01/--/20
SAMPLED	09/26/65	04/24/42	06/03/20
FORMATION	PENN-DUTCHER	DEVO-HUNTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3500	3891	1840
WELLHEAD PRESSURE,PSIG	1250	1200	420
OPEN FLOW, MCFD	6525	4500	5000
COMPONENT, MOLE PCT			
METHANE	78.4	44.8	88.3
ETHANE	5.2	49.6	10.3
PROPANE	4.4	---	---
N-BUTANE	1.4	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	8.9	5.0	0.6
OXYGEN	0.0	0.4	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.13	0.13	0.10
HEATING VALUE*	1104	1343	1079
SPECIFIC GRAVITY	0.709	0.823	0.611

	INDEX 5626 SAMPLE 15263	INDEX 5627 SAMPLE 932	INDEX 5628 SAMPLE 1303
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	MORGAN	OKEMAH	OKEMAH
WELL NAME	CHILDERS NO. 2-A	NO. 1 J. C. LOWRY	NO. 2
LOCATION	SEC. 4, T12N, R11E	SEC. 30, T11N, R10E	SEC. 36, T11N, R9E
OWNER	LOGS OIL INC.	SHAFFER OIL & RFG. CO.	ATLANTIC RICHFIELD CO.
COMPLETED	10/10/77	05/01/24	12/--/25
SAMPLED	04/22/78	09/24/24	09/22/26
FORMATION	PENN-DUTCHER	PERM-LYONS	DEVO-MISENER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2666	3156	3841
WELLHEAD PRESSURE,PSIG	600	1225	1450
OPEN FLOW, MCFD	3400	13000	16000
COMPONENT, MOLE PCT			
METHANE	75.0	65.7	53.4
ETHANE	11.7	30.1	42.6
PROPANE	5.8	---	---
N-BUTANE	1.5	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	4.5	3.8	3.0
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.09	0.16	0.07
HEATING VALUE*	1218	1205	1304
SPECIFIC GRAVITY	0.735	0.720	0.787

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5629 SAMPLE 3987	INDEX 5630 SAMPLE 12112	INDEX 5631 SAMPLE 1819
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	OKEMAH	OKEMAH	OKEMAH N
WELL NAME	WIND NO. 1	ALEXANDER NO. 1	SPORELEADER NO. 2
LOCATION	SEC. 31, T11N, R10E	SEC. 35, T11N, R9E	SEC. 29, T12N, R10E
OWNER	WILCOX OIL CO.	ROY D. MCANINCH	MINNEHOMA OIL & GAS CO.
COMPLETED	12/16/44	04/23/69	NOT GIVEN
SAMPLED	03/13/45	11/14/69	07/15/29
FORMATION	PENN-GILCREASE	DEVO-HUNTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2920	3660	3090
WELLHEAD PRESSURE,PSIG	365	1300	NOT GIVEN
OPEN FLOW, MCFD	8000	7340	27000
COMPONENT, MOLE PCT			
METHANE	72.5	71.0	66.2
ETHANE	27.0	12.9	29.3
PROPANE	---	7.0	---
N-BUTANE	---	1.6	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	0.0	5.6	3.1
OXYGEN	0.0	TRACE	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.0	1.2
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1218	1260	1196
SPECIFIC GRAVITY	0.693	0.769	0.725

	INDEX 5632 SAMPLE 3303	INDEX 5633 SAMPLE 3302	INDEX 5634 SAMPLE 3412
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	OKEMAH N	OKEMAH W	PAYDEN
WELL NAME	MARTIN NO. 1	WESLEY NO. 1	WASHINGTON NO. 1
LOCATION	SEC. 7, T11N, R10E	SEC. 21, T11N, R9E	SEC. 21, T13N, R7E
OWNER	TEXACO INC.	SKELLY OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	10/25/40	02/21/41	11/--/36
SAMPLED	04/24/42	04/24/42	05/13/42
FORMATION	PENN-GILCREASE	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2958	4009	4105
WELLHEAD PRESSURE,PSIG	1200	1100	1245
OPEN FLOW, MCFD	4300	20	1222
COMPONENT, MOLE PCT			
METHANE	77.0	55.2	67.9
ETHANE	16.1	39.8	24.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.1	4.0	6.6
OXYGEN	0.2	0.7	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.18	0.09	0.13
HEATING VALUE*	1069	1272	1130
SPECIFIC GRAVITY	0.663	0.773	0.709

	INDEX 5635 SAMPLE 3844	INDEX 5636 SAMPLE 3846	INDEX 5637 SAMPLE 13760
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	PETTIQUAH	PETTIQUAH	WELEETKA DISTRICT E
WELL NAME	JEPSON NO. 1	KLOBZUBU NO. 1	NAZZARENA NO. 5
LOCATION	SEC. 7, T13N, R7E	SEC. 7, T13N, R7E	SEC. 6, T10N, R12E
OWNER	JOHN B. HAWLEY, JR.	JOHN B. HAWLEY, JR.	OKFUSKEE ENTERPRISES, INC.
COMPLETED	01/15/44	03/15/44	08/03/73
SAMPLED	05/22/44	05/22/44	10/16/73
FORMATION	PENN-FLAT-TOP	PENN-FLAT-TOP	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4026	3226	2940
WELLHEAD PRESSURE,PSIG	800	500	825
OPEN FLOW, MCFD	500	NOT GIVEN	3489
COMPONENT, MOLE PCT			
METHANE	67.0	67.0	77.7
ETHANE	24.3	23.0	12.6
PROPANE	---	---	4.1
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	8.2	9.5	2.9
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.9
HELIUM	TRACE	TRACE	0.10
HEATING VALUE*	1114	1091	1174
SPECIFIC GRAVITY	0.712	0.711	0.703

	INDEX 5638 SAMPLE 13761	INDEX 5639 SAMPLE 13762	INDEX 5640 SAMPLE 349
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	WELEETKA DISTRICT E	WELEETKA DISTRICT E	YOUNGTOWN
WELL NAME	HOLT NO. 2	NAZZARENA NO. 5	WARDEN NO. 2
LOCATION	SEC. 6, T10N, R12E	SEC. 6, T10N, R12E	SEC. 3, T13N, R11E
OWNER	OKFUSKEE ENTERPRISES, INC.	OKFUSKEE ENTERPRISES, INC.	KING WOOD OIL CO.
COMPLETED	08/16/73	08/10/73	06/--/20
SAMPLED	10/16/73	10/16/73	06/07/20
FORMATION	MISS-JEFFERSON	PENN-UNION VALLEY	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3090	2816	1885
WELLHEAD PRESSURE,PSIG	905	788	355
OPEN FLOW, MCFD	1334	1500	11000
COMPONENT, MOLE PCT			
METHANE	75.8	79.7	85.9
ETHANE	13.4	12.2	10.4
PROPANE	5.2	4.0	---
N-BUTANE	1.3	0.6	---
ISOBUTANE	0.6	0.4	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.4	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	2.6	2.5	3.2
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1238	1177	1057
SPECIFIC GRAVITY	0.727	0.688	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5641 SAMPLE 11321	INDEX 5642 SAMPLE 15048	INDEX 5643 SAMPLE 4300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	BRITTON	CHOCTAW	EDMOND NE
WELL NAME	GLASS NO. 1	DARRON "A" NO. 1	PAULINE NO. 1
LOCATION	SEC. 18, T13N, R3W	SEC. 14, T12N, R1W	SEC. 23, T14N, R2W
OWNER	ASHLAND OIL & REFINING CO.	BEARD OIL CO.	GULF OIL CORP.
COMPLETED	01/11/52	NOT GIVEN	02/19/47
SAMPLED	02/28/68	06/29/77	04/18/47
FORMATION	PENN-BARTLESVILLE	PENN-OSWEGO	PENN-L
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6917	5570	5632
WELLHEAD PRESSURE,PSIG	760	1450	2080
OPEN FLOW, MCFD	1782	NOT GIVEN	1920
COMPONENT, MOLE PCT			
METHANE	83.6	89.7	71.4
ETHANE	8.5	8.2	25.3
PROPANE	3.6	3.3	---
N-BUTANE	1.1	1.0	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	1.9	1.5	2.0
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.2	0.9
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1181	1170	1177
SPECIFIC GRAVITY	0.681	0.672	0.699

	INDEX 5644 SAMPLE 3952	INDEX 5645 SAMPLE 15062	INDEX 5646 SAMPLE 15063
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	EDMOND W	EDMOND W	EDMOND W
WELL NAME	GAFFNEY NO. 1	SNYDER NO. 1	SNYDER NO. 1
LOCATION	SEC. 28, T14N, R4W	SEC. 2, T14N, R4W	SEC. 2, T14N, R4W
OWNER	CITIES SERVICE OIL CO.	CALVERT DRILLING CO.	CALVERT DRILLING CO.
COMPLETED	10/14/44	12/--/76	12/--/76
SAMPLED	11/--/44	07/28/77	07/28/77
FORMATION	PENN-BARTLESVILLE	PENN-PRUE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6829	6180	6400
WELLHEAD PRESSURE,PSIG	2922	1500	307
OPEN FLOW, MCFD	12800	9275	1027
COMPONENT, MOLE PCT			
METHANE	82.3	83.5	81.8
ETHANE	17.3	8.8	9.6
PROPANE	---	3.9	4.4
N-BUTANE	---	1.1	1.5
ISOBUTANE	---	0.4	0.5
N-PENTANE	---	0.3	0.5
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.0	1.4	0.9
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1144	1191	1236
SPECIFIC GRAVITY	0.643	0.683	0.707

	INDEX 5647 SAMPLE 3702	INDEX 5648 SAMPLE 1721	INDEX 5649 SAMPLE 1775
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	LUTHER S	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	HUNTER L. JOHNSON NO. 1	TROSPER NO. 1	E. FORTSON NO. 1
LOCATION	SEC. 9, T13N, R1E	SEC. 13, T11N, R3W	SEC. 24, T11N, R3W
OWNER	AMOCO PRODUCTION CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	NOT GIVEN	02/21/29	--/--/29
SAMPLED	11/19/43	02/27/29	05/13/29
FORMATION	DEVO-HUNTON	NOT GIVEN	PENN-HOOVER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5550	3986	3900
WELLHEAD PRESSURE,PSIG	1450	1500	1350
OPEN FLOW, MCFD	NOT GIVEN	6000	38000
COMPONENT, MOLE PCT			
METHANE	77.8	66.3	66.4
ETHANE	16.7	20.0	15.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.8	12.9	18.1
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.5	0.2
HELIUM	0.12	0.11	0.11
HEATING VALUE*	1087	1030	945
SPECIFIC GRAVITY	0.661	0.713	0.708

	INDEX 5650 SAMPLE 1776	INDEX 5651 SAMPLE 1792	INDEX 5652 SAMPLE 1808
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	HODINE NO. 1	A. HODINE NO. 2	TROSPER NO. 1
LOCATION	SEC. 24, T11N, R3W	SEC. 24, T11N, R3W	SEC. 13, T11N, R3W
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	--/--/29	--/--/29	06/05/29
SAMPLED	05/14/29	06/07/29	07/07/29
FORMATION	PENN-LAYTON	PENN-BIG LIME & OSWEGO	PENN-BIG LIME
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4850	6100	6140
WELLHEAD PRESSURE,PSIG	1750	2200	2300
OPEN FLOW, MCFD	70000	20000	100000
COMPONENT, MOLE PCT			
METHANE	76.1	78.2	73.9
ETHANE	23.9	20.3	23.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	1.2	2.8
OXYGEN	0.5	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.07	0.28	0.10
HEATING VALUE*	1138	1156	1141
SPECIFIC GRAVITY	0.702	0.644	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5653 SAMPLE 1929	INDEX 5654 SAMPLE 2315	INDEX 5655 SAMPLE 2762
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	UNSELL-KRAGER NO. 3	FORTSON FARLEY NO. 2	E. FORTSON NO. 1
LOCATION	SEC. 23, T11W, R3W	SEC. 24, T11N, R3W	SEC. 24, T11N, R3W
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	DRILL STEM TEST	10/25/30	NOT GIVEN
SAMPLED	01/28/30	04/20/31	08/05/37
FORMATION	PENN-CHECKERBOARD	PENN-	PENN-PAWHUSKA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5540	5385	3040
WELLHEAD PRESSURE,PSIG	2000	1650	NOT GIVEN
OPEN FLOW, MCFD	32000	10500	17000
COMPONENT, MOLE PCT			
METHANE	70.3	55.5	16.8
ETHANE	24.9	40.7	8.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.5	2.8	73.3
OXYGEN	0.2	0.9	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.6
HELIUM	0.07	0.05	0.28
HEATING VALUE*	1158	1292	330
SPECIFIC GRAVITY	0.700	0.773	0.907

	INDEX 5656 SAMPLE 11534	INDEX 5657 SAMPLE 11652	INDEX 5658 SAMPLE 4929
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	ORCHARD CITY NE	WITCHER
WELL NAME	INLAND HARM NO. 2	F. B. WAFFORD NO. 1	LEHMER
LOCATION	SEC. 27, T12N, R3W	SEC. 5, T11N, R1E	SEC. 13, T12N, R2W
OWNER	SUN OIL CO.	UNION OIL CO. OF CALIFORNIA	ANDERSON-PRICHARD OIL CORP.
COMPLETED	07/20/65	11/14/57	05/27/50
SAMPLED	06/07/68	09/23/68	08/10/50
FORMATION	PENN-CLEVELAND	-UNCONFORMITY SAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5722	5802	5453
WELLHEAD PRESSURE,PSIG	508	1118	NOT GIVEN
OPEN FLOW, MCFD	1207	307	675
COMPONENT, MOLE PCT			
METHANE	83.5	66.5	80.0
ETHANE	7.5	8.3	3.5
PROPANE	3.7	5.7	1.9
N-BUTANE	1.3	1.3	0.6
ISOBUTANE	0.4	0.9	0.2
N-PENTANE	0.6	0.5	0.1
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	2.2	15.2	12.9
OXYGEN	0.0	1.2	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.07	0.11
HEATING VALUE*	1187	1071	970
SPECIFIC GRAVITY	0.689	0.767	0.664

	INDEX 5659 SAMPLE 4761	INDEX 5660 SAMPLE 12161	INDEX 5661 SAMPLE 15265
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKMULGEE	OKMULGEE
FIELD	WITCHER E	BALD HILL	BRINTON
WELL NAME	MAGGIE PERKINS NO. 1	FOSTER NO. 1	HALEY NO. 2-A
LOCATION	SEC. 34, T13N, R2W	SEC. 27, T15N, R14E	SEC. 21, T13N, R12E
OWNER	GULF OIL CO. U.S.	WATSON + ROE	BILL WADLEY & SON DRILLING
COMPLETED	05/31/49	11/12/69	06/13/77
SAMPLED	10/20/49	12/28/69	04/27/78
FORMATION	PENN-CLEVELAND	PENN-DUTCHER	PENN-DUTCHER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5539	1707	2188
WELLHEAD PRESSURE,PSIG	1984	347	605
OPEN FLOW, MCFD	3176	2400	28000
COMPONENT, MOLE PCT			
METHANE	79.1	88.0	81.6
ETHANE	4.7	7.3	9.5
PROPANE	2.7	0.2	3.7
N-BUTANE	0.8	0.1	0.8
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.5	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	11.1	2.9	3.2
OXYGEN	0.1	0.5	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.10	0.02	0.09
HEATING VALUE*	1027	1062	1148
SPECIFIC GRAVITY	0.688	0.622	0.674

	INDEX 5662 SAMPLE 348	INDEX 5663 SAMPLE 330	INDEX 5664 SAMPLE 331
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	HENRYETTA DISTRICT	LYONS-QUINN	LYONS-QUINN
WELL NAME	PINE NO. 2	RHODA BEAM NO. 1	TISHIE BEAM NO. 1
LOCATION	SEC. 33, T12N, R12E	SEC. 34, T11N, R12E	SEC. 33, T11N, R12E
OWNER	W. B. PINE	KINGWOOD OIL CO.	KINGWOOD OIL CO.
COMPLETED	05/--/20	01/--/20	01/--/20
SAMPLED	06/07/20	06/08/20	06/08/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2210	900	940
WELLHEAD PRESSURE,PSIG	600	395	250
OPEN FLOW, MCFD	500	106	829
COMPONENT, MOLE PCT			
METHANE	78.1	79.8	93.3
ETHANE	18.4	16.7	4.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.6	3.3	1.8
OXYGEN	0.6	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	TRACE	0.0	0.2
HELIUM	0.14	0.11	0.10
HEATING VALUE*	1121	1108	1026
SPECIFIC GRAVITY	0.658	0.650	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5665 SAMPLE 1034	INDEX 5666 SAMPLE 327	INDEX 5667 SAMPLE 14861
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	MARTIN	OKMULGEE DISTRICT	POLLYANNA S
WELL NAME	WEBSTER NO. 2	DWYER NO. 1	LEE ESTATE NO. 3
LOCATION	SEC. 33, T13N, R12E	SEC. 32, T13N, R13E	SEC. 11, T15N, R11E
OWNER	EAGLE PITCHER LEAD CO.	LVO CORP	MCADAMS PIPE AND SUPPLY CO.
COMPLETED	03/12/25	10/--/14	08/12/76
SAMPLED	04/23/25	06/05/20	11/22/76
FORMATION	NOT GIVEN	NOT GIVEN	PENN-DUTCHER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	745	1428	2320
WELLHEAD PRESSURE,PSIG	250	120	750
OPEN FLOW, MCFD	2000	1532	12500
COMPONENT, MOLE PCT			
METHANE	90.7	74.2	78.1
ETHANE	2.4	22.1	6.3
PROPANE	---	---	2.9
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	6.5	1.9	9.8
OXYGEN	0.3	0.5	1.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	1.2	0.8
HELIUM	0.10	0.10	0.09
HEATING VALUE*	962	1148	1020
SPECIFIC GRAVITY	0.599	0.686	0.690

	INDEX 5668 SAMPLE 9747	INDEX 5669 SAMPLE 11270	INDEX 5670 SAMPLE 13590
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	ATLANTIC	AVANT	AVANT W
WELL NAME	A. G. OLIPHANT NO. 8 WS	OSAGE 11569 NO. 3	STUART ESTATE NO. 10-A
LOCATION	SEC. 19, T25N, R8E	SEC. 2, T23N, R11E	SEC. 7, T23N, R11E
OWNER	TEXACO INC.	W.C.MCBRIDE, INC.	DYCO PETROLEUM CORP.
COMPLETED	02/14/56	02/06/68	01/18/73
SAMPLED	05/19/25	02/06/68	04/25/73
FORMATION	PENN-PERU & BIG LIME	PENN-CLEVELAND	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1938	936	2084
WELLHEAD PRESSURE,PSIG	100	315	680
OPEN FLOW, MCFD	1508	229	1700
COMPONENT, MOLE PCT			
METHANE	82.0	93.4	88.3
ETHANE	4.3	0.4	0.5
PROPANE	0.6	0.9	TRACE
N-BUTANE	TRACE	0.6	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	9.9	3.6	8.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	0.3	1.9
HELIUM	0.19	0.06	0.31
HEATING VALUE*	947	1022	904
SPECIFIC GRAVITY	0.654	0.603	0.611

	INDEX 5671 SAMPLE 13592	INDEX 5672 SAMPLE 13593	INDEX 5673 SAMPLE 28
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	AVANT W	AVANT W	BARNSDALL
WELL NAME	OSAGE NO. 1-B	OSAGE NO. 1-B	NOT GIVEN
LOCATION	SEC. 36, T23N, R11E	SEC. 36, T23N, R11E	SEC. --, T20N, R12E
OWNER	DYCO PETROLEUM CORP.	DYCO PETROLEUM CORP.	NONE GIVEN
COMPLETED	02/18/73	02/18/73	NOT GIVEN
SAMPLED	05/03/73	05/03/73	NOT GIVEN
FORMATION	PENN-BURGESS	ORDO-SIMPSON	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1868	2132	NOT GIVEN
WELLHEAD PRESSURE,PSIG	620	720	NOT GIVEN
OPEN FLOW, MCFD	1600	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	84.9	77.2
ETHANE	2.8	1.9	9.3
PROPANE	1.6	0.2	---
N-BUTANE	0.2	TRACE	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	5.2	12.0	12.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.3	0.8
HELIUM	0.13	0.29	0.22
HEATING VALUE*	1028	910	949
SPECIFIC GRAVITY	0.627	0.621	0.661

	INDEX 5674 SAMPLE 7718	INDEX 5675 SAMPLE 3325	INDEX 5676 SAMPLE 103
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	BIG BEND N	BIRCH CREEK S	BOULANGER
WELL NAME	DAVIS NO. 2	OSAGE WELL 469	NO. 60
LOCATION	SEC. 8, T25N, R3E	SEC. 4, T23N, R10E	SEC. 5, T27N, R10E
OWNER	CHARLES W. OLIPHANT	CITIES SERVICE OIL CO.	AMERICAN PIPELINE CO.
COMPLETED	10/10/60	12/27/39	10/--/19
SAMPLED	10/01/60	NOT GIVEN	02/11/20
FORMATION	MISS-CHAT	MISS-	MISS-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3776	2098	1700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	396	600
OPEN FLOW, MCFD	NOT GIVEN	2310	4000
COMPONENT, MOLE PCT			
METHANE	75.2	60.6	86.0
ETHANE	9.1	22.3	7.3
PROPANE	3.6	---	---
N-BUTANE	1.9	---	---
ISOBUTANE	1.6	---	---
N-PENTANE	2.2	---	---
ISOPENTANE	2.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	9.6	16.0	5.9
OXYGEN	2.2	0.5	0.1
ARGON	TRACE	---	---
HYDROGEN	1.5	---	---
HYDROGEN SULFIDE**	1.5	---	---
CARBON DIOXIDE	0.4	0.3	0.5
HELIUM	0.10	0.27	0.19
HEATING VALUE*	1183	1014	1002
SPECIFIC GRAVITY	1.779	0.735	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5677 SAMPLE 3793	INDEX 5678 SAMPLE 96	INDEX 5679 SAMPLE 14821
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	BULLDOG DISTRICT N	BURBANK	CANDY CREEK
WELL NAME	OSAGE GAS LEASE NO. 485	NO. 1	OAKLAND NO. 1A-4
LOCATION	SEC. 16, T24N, R9E	SEC. 36, T27N, R5E	SEC. 4, T24N, R12E
OWNER	CITIES SERVICE OIL CO.	KAY COUNTY GAS CO.	HELMERICH & PAYNE, INC.
COMPLETED	11/21/42	08/--/19	03/18/76
SAMPLED	04/14/44	02/07/20	10/28/76
FORMATION	PENN-BURGESS	PENN-OSWEGO	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2256	1800	1720
WELLHEAD PRESSURE,PSIG	350	550	625
OPEN FLOW, MCFD	5000	3121	423
COMPONENT, MOLE PCT			
METHANE	41.3	52.7	94.5
ETHANE	43.6	26.6	1.5
PROPANE	---	---	0.7
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	13.9	20.2	1.8
OXYGEN	0.4	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.0	0.4
HELIUM	0.15	0.45	0.03
HEATING VALUE*	1200	1011	1037
SPECIFIC GRAVITY	0.835	0.769	0.595

	INDEX 5680 SAMPLE 15005	INDEX 5681 SAMPLE 3331	INDEX 5682 SAMPLE 3403
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	OOGA	DOMES POND CREEK	DOMES POND CREEK
WELL NAME	TATE NO. 2120	OSAGE NO. 73	OSAGE NO. 89
LOCATION	SEC. 17, T24N, R4E	SEC. 5, T27N, R10E	SEC. 30, T26N, R10E
OWNER	CEJA CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	11/10/20	12/18/23
SAMPLED	05/12/77	04/24/42	04/28/42
FORMATION	MISS-CHAT	MISS-	MISS-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3415	1730	1959
WELLHEAD PRESSURE,PSIG	1300	242	275
OPEN FLOW, MCFD	NOT GIVEN	470	161
COMPONENT, MOLE PCT			
METHANE	66.3	80.6	91.1
ETHANE	8.3	13.0	1.7
PROPANE	3.9	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	18.4	4.7	5.0
OXYGEN	0.0	0.4	0.6
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	1.0	1.2
HELIUM	0.33	0.28	0.37
HEATING VALUE*	1007	1049	953
SPECIFIC GRAVITY	0.751	0.649	0.597

	INDEX 5683 SAMPLE 111	INDEX 5684 SAMPLE 112	INDEX 5685 SAMPLE 1273
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DOMES-POND CREEK	DOMES-POND CREEK	DOMES-POND CREEK
WELL NAME	NO. 186	NO. 193	NO. 284
LOCATION	SEC. 15, T29N, R10E	SEC. 15, T29N, R10E	SEC. 5, T26N, R12E
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	--/--/16	--/--/16	NOT GIVEN
SAMPLED	02/16/20	02/16/20	05/31/26
FORMATION	PENN-	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1758	1834	NOT GIVEN
WELLHEAD PRESSURE,PSIG	290	375	607
OPEN FLOW, MCFD	7000	787	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	92.7	94.2
ETHANE	0.6	1.8	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	3.6	1.3
OXYGEN	0.6	0.6	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.6	2.8
HELIUM	0.33	0.67	0.03
HEATING VALUE*	974	971	976
SPECIFIC GRAVITY	0.579	0.584	0.596

	INDEX 5686 SAMPLE 1299	INDEX 5687 SAMPLE 11902	INDEX 5688 SAMPLE 14159
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DOMES-POND CREEK	DOMES-POND CREEK	DOMES-POND CREEK
WELL NAME	DALLAS - NO. 250	KEITH NO. 1-C	FRIEND NO. E-2
LOCATION	SEC. 18, T27N, R11E	SEC. 33, T26N, R11E	SEC. 17, T27N, R11E
OWNER	INDIAN TERR. ILLUM. OIL CO.	BBR OIL CORP.	PRODUCERS OIL CO.
COMPLETED	NOT GIVEN	04/22/69	05/28/74
SAMPLED	09/17/26	06/02/69	09/30/74
FORMATION	NOT GIVEN	MISS-CHAT	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	1840	1900
WELLHEAD PRESSURE,PSIG	800	630	280
OPEN FLOW, MCFD	NOT GIVEN	2400	50000
COMPONENT, MOLE PCT			
METHANE	74.8	96.3	85.6
ETHANE	2.4	0.4	4.6
PROPANE	---	TRACE	1.5
N-BUTANE	---	0.0	0.6
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.1
NITROGEN	18.8	1.0	2.0
OXYGEN	2.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.3	2.1	4.6
HELIUM	0.70	0.03	0.04
HEATING VALUE*	801	983	1052
SPECIFIC GRAVITY	0.665	0.580	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5689 SAMPLE 14862	INDEX 5690 SAMPLE 14396	INDEX 5691 SAMPLE 1705
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DRUM CREEK	KEYSTONE E	MANION
WELL NAME	HADDEN NO. 2	REVCO-M NO. 1	NO. 393
LOCATION	SEC. 15, T25N, R4E	SEC. 28, T20N, R10E	SEC. 29, T23N, R9E
OWNER	INTERMOUNTAIN PETROLEUM CO.	KEYANCE OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	11/--/76	04/29/75	--/--/28
SAMPLED	11/--/76	06/20/75	11/13/28
FORMATION	MISS-CHAT	PENN-TUCKER	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3433	2324	1000
WELLHEAD PRESSURE,PSIG	1140	830	300
OPEN FLOW, MCFD	260000	12300	1000
COMPONENT, MOLE PCT			
METHANE	66.9	76.1	94.6
ETHANE	8.8	6.7	2.6
PROPANE	3.4	3.6	---
N-BUTANE	1.0	0.8	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	18.3	11.9	2.0
OXYGEN	0.0	0.2	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	TRACE	0.4
HELIUM	0.31	0.08	0.15
HEATING VALUE*	1002	1038	1005
SPECIFIC GRAVITY	0.747	0.698	0.581

	INDEX 5692 SAMPLE 1706	INDEX 5693 SAMPLE 127	INDEX 5694 SAMPLE 14307
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	MANION	MYERS	MYERS DOME
WELL NAME	NO. 393-BRADEN HEAD	NO. 2	LEBSACK NO. 1-G
LOCATION	SEC. 29, T23N, R9E	SEC. 12, T26N, R8E	SEC. 11, T26N, R8E
OWNER	INDIAN TERR. ILLUM. OIL CO.	AMERICAN PIPELINE CO.	SERVICE DRILLING CO.
COMPLETED	--/--/28	06/--/16	11/15/74
SAMPLED	11/14/28	03/03/20	03/--/75
FORMATION	NOT GIVEN	PENN-	PENN-BURGESS
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	600	560	2500
WELLHEAD PRESSURE,PSIG	115	70	780
OPEN FLOW, MCFD	800	15	4000
COMPONENT, MOLE PCT			
METHANE	88.6	84.1	78.9
ETHANE	3.3	0.0	6.5
PROPANE	---	---	3.3
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	7.2	15.4	8.7
OXYGEN	0.5	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.0	0.3
HELIUM	0.27	0.43	0.36
HEATING VALUE*	957	852	1067
SPECIFIC GRAVITY	0.604	0.616	0.686

	INDEX 5695 SAMPLE 126	INDEX 5696 SAMPLE 1566	INDEX 5697 SAMPLE 3399
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	MYERS NE	NAVAL RESERVE	NAVAL RESERVE
WELL NAME	NO. 50	KAY CO. NO. 2	NO. 10 C
LOCATION	SEC. 31, T27N, R9E	SEC. 22, T24N, R7E	SEC. 22, T24N, R7E
OWNER	AMERICAN PIPELINE CO.	KAY COUNTY GAS CO.	KAY COUNTY GAS CO.
COMPLETED	05/--/19	NOT GIVEN	04/13/40
SAMPLED	03/03/20	01/11/28	04/30/42
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1228	1140	2585
WELLHEAD PRESSURE,PSIG	185	387	940
OPEN FLOW, MCFD	330	21000	1500
COMPONENT, MOLE PCT			
METHANE	86.3	49.8	57.6
ETHANE	0.0	2.3	17.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.7	47.0	24.1
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.46	0.42	0.35
HEATING VALUE*	874	546	894
SPECIFIC GRAVITY	0.610	0.762	0.742

	INDEX 5698 SAMPLE 3401	INDEX 5699 SAMPLE 11788	INDEX 5700 SAMPLE 1309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	NAVAL RESERVE	OSAGE CITY DISTRICT E	OSAGE-HOMINY DISTRICT
WELL NAME	NO. 11 O	OTTO HAMILTON NO. 4	NOT GIVEN
LOCATION	SEC. 23, T24N, R7E	SEC. 4, T21N, R9E	SEC. 32, T24N, R8E
OWNER	KAY COUNTY GAS CO.	JOHN T. SANFORD	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	02/20/42	12/18/69	--/--/24
SAMPLED	04/30/42	02/27/69	09/24/26
FORMATION	NOT GIVEN	PENN-BARTLESVILLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2560	2220	756
WELLHEAD PRESSURE,PSIG	900	600	145
OPEN FLOW, MCFD	2250	1050	300
COMPONENT, MOLE PCT			
METHANE	57.1	65.4	55.5
ETHANE	19.4	8.5	4.7
PROPANE	---	5.2	---
N-BUTANE	---	1.2	---
ISOBUTANE	---	0.8	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.3	---
NITROGEN	22.6	17.5	38.7
OXYGEN	0.6	0.0	0.5
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.39	0.14	0.36
HEATING VALUE*	926	1066	646
SPECIFIC GRAVITY	0.746	0.775	0.740

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5701 SAMPLE 105	INDEX 5702 SAMPLE 107	INDEX 5703 SAMPLE 4442
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PAWHUSKA	PAWHUSKA	PAWHUSKA NE
WELL NAME	NO. 51	NO. 25	OSAGE NO. 509
LOCATION	SEC. 23, T26N, R9E	SEC. 15, T24N, R8E	SEC. 36, T26N, R9E
OWNER	AMERICAN PIPELINE CO.	PAWHUSKA OIL & GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	08/--/19	--/--/18	11/20/47
SAMPLED	02/11/20	02/13/20	01/12/48
FORMATION	PENN-BARTLESVILLE	PENN-OSWEGO	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2100	1933	1074
WELLHEAD PRESSURE,PSIG	740	790	395
OPEN FLOW, MCFD	5250	12500	1900
COMPONENT, MOLE PCT			
METHANE	12.1	87.0	85.5
ETHANE	81.1	6.5	2.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.1	5.1	11.5
OXYGEN	1.1	0.8	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	0.09	0.09	0.22
HEATING VALUE*	1576	998	909
SPECIFIC GRAVITY	0.984	0.616	0.616

	INDEX 5704 SAMPLE 13600	INDEX 5705 SAMPLE 3875	INDEX 5706 SAMPLE 81
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PAWHUSKA NE	PAXTON SE	PEARSONIA
WELL NAME	LOOKOUT 443A	JOSEPHINE KIPP NO. 146	NO. 6
LOCATION	SEC. 36, T26N, R9E	SEC. 17, T22N, R8E	SEC. 20, T27N, R8E
OWNER	WACHTMAN-SCHROEDER ET AL	OKLAHOMA POWER & WATER CO.	AMERICAN PIPELINE CO.
COMPLETED	DRILL STEM TEST	12/--/43	--/--/17
SAMPLED	05/21/73	08/24/44	02/06/20
FORMATION	MISS-CHAT	PENN-SKINNER	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1991	2304	806
WELLHEAD PRESSURE,PSIG	705	NOT GIVEN	195
OPEN FLOW, MCFD	2738	450	200
COMPONENT, MOLE PCT			
METHANE	88.9	72.8	58.1
ETHANE	3.7	20.7	0.0
PROPANE	1.6	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.5	5.8	39.0
OXYGEN	0.0	0.1	2.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.1	0.5	0.2
HELIUM	0.08	0.08	0.62
HEATING VALUE*	1049	1108	589
SPECIFIC GRAVITY	0.638	0.686	0.725

	INDEX 5707 SAMPLE 128	INDEX 5708 SAMPLE 131	INDEX 5709 SAMPLE 136
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PEARSONIA	PEARSONIA	PEARSONIA E
WELL NAME	NO. 46	NO. 26	NO. 53
LOCATION	SEC. 20, T27N, R8E	SEC. 17, T27N, R8E	SEC. 22, T27N, R8E
OWNER	AMERICAN PIPELINE CO.	AMERICAN PIPELINE CO.	AMERICAN PIPELINE CO.
COMPLETED	01/--/18	03/--/17	06/--/18
SAMPLED	03/05/20	03/05/20	03/06/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	951	915	1444
WELLHEAD PRESSURE,PSIG	200	220	150
OPEN FLOW, MCFD	171	375	720
COMPONENT, MOLE PCT			
METHANE	78.5	61.8	71.9
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.3	36.3	27.2
OXYGEN	1.5	1.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.50	0.62	0.55
HEATING VALUE*	795	626	728
SPECIFIC GRAVITY	0.641	0.708	0.665

	INDEX 5710 SAMPLE 13625	INDEX 5711 SAMPLE 108	INDEX 5712 SAMPLE 3783
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	WHITETAIL	WYNONA	WYNONA
WELL NAME	BIGHEART NO. 1 A	NO. 244	OSAGE GAS LEASE NO. 482
LOCATION	SEC. 4, T27N, R10E	SEC. 32, T24N, R9E	SEC. 15, T24N, R9E
OWNER	WACHTMAN-SCHROEDER	INDIAN TERR. ILLUM. OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	DRILL STEM TEST	--/--/19	12/16/41
SAMPLED	06/10/73	02/13/20	04/14/44
FORMATION	MISS-CHAT	PENN-BARTLESVILLE	MISS-LIME
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1648	2153	2224
WELLHEAD PRESSURE,PSIG	NOT GIVEN	840	770
OPEN FLOW, MCFD	1700	12500	630
COMPONENT, MOLE PCT			
METHANE	82.6	68.3	55.4
ETHANE	4.1	9.2	17.6
PROPANE	2.0	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	8.2	17.7	25.7
OXYGEN	0.0	4.0	0.6
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.0	0.7	0.2
HELIUM	0.38	0.08	0.45
HEATING VALUE*	1023	857	877
SPECIFIC GRAVITY	0.664	0.701	0.751

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5713 SAMPLE 1084	INDEX 5714 SAMPLE 964	INDEX 5715 SAMPLE 1004
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	HALLETT	MARAMEC	MASHAM
WELL NAME	GILLESPIE NO. 1	DONOHOE NO. 3	NO. 7
LOCATION	SEC. 9, T20N, R7E	SEC. 15, T20N, R6E	SEC. 22, T23N, R5E
OWNER	SUPERIOR OIL CORP.	PRAIRIE OIL & GAS CO.	J. L. DONAHOE
COMPLETED	03/--/25	06/--/23	NOT GIVEN
SAMPLED	06/30/25	01/14/25	02/23/25
FORMATION	PENN-SKINNER	PENN-	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2580	3032	3917
WELLHEAD PRESSURE,PSIG	NOT GIVEN	65	NOT GIVEN
OPEN FLOW, MCFD	7500	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	58.2	65.8	3.8
ETHANE	25.8	23.7	8.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.3	9.8	86.2
OXYGEN	0.5	0.3	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.11	0.07	0.81
HEATING VALUE*	1052	1091	191
SPECIFIC GRAVITY	0.750	0.716	0.953

	INDEX 5716 SAMPLE 3476	INDEX 5717 SAMPLE 3772	INDEX 5718 SAMPLE 4003
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	OSAGE CITY DIST. SE	RALSTON DISTRICT	WATCHORN
WELL NAME	FINLEY NO. 1	CAMPBELL NO. 1	COHN NO. 1
LOCATION	SEC. 5, T20N, R9E	SEC. 2, T23N, R5E	SEC. 36, T26N, R3E
OWNER	WOOD OIL CO.	ALADDIN PETROLEUM CORP.	KAY COUNTY GAS CO.
COMPLETED	05/21/40	11/28/42	06/04/44
SAMPLED	06/04/42	04/13/44	04/09/45
FORMATION	-GAS SAND	PENN-OSWEGO	PENN-STALNAKER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1794	2685	1807
WELLHEAD PRESSURE,PSIG	265	900	710
OPEN FLOW, MCFD	855	3000	4750
COMPONENT, MOLE PCT			
METHANE	86.4	60.0	44.1
ETHANE	8.2	23.9	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.2	15.4	36.2
OXYGEN	0.5	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.0
HELIUM	0.10	0.18	0.33
HEATING VALUE*	1022	1036	787
SPECIFIC GRAVITY	0.620	0.739	0.799

	INDEX 5719 SAMPLE 14919	INDEX 5720 SAMPLE 1038	INDEX 5721 SAMPLE 3312
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAYNE
FIELD	WATCHORN E	YALE	AVERY
WELL NAME	DOYLE NO. 4	NO. 5	A. R. MEYERS NO. 2
LOCATION	SEC. 36, T23N, R 3E	SEC. 22, T20N, R6E	SEC. 17, T17N, R6E
OWNER	JAY PETROLEUM, INC.	WESTERLY OIL CO.	CAMAIL OIL CO. & E. T. MURRY
COMPLETED	NOT GIVEN	01/--/25	11/01/41
SAMPLED	02/25/77	04/21/25	04/21/42
FORMATION	PENN-OSWEGO	PENN-BARTLESVILLE	PENN-PERU
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3200	3040	2626
WELLHEAD PRESSURE,PSIG	1380	570	NOT GIVEN
OPEN FLOW, MCFD	1559	4125	2724
COMPONENT, MOLE PCT			
METHANE	68.6	63.7	79.2
ETHANE	7.3	24.5	17.8
PROPANE	3.3	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	18.4	10.5	2.5
OXYGEN	0.0	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.7	0.1
HELIUM	0.20	0.07	0.09
HEATING VALUE*	987	1084	1121
SPECIFIC GRAVITY	0.735	0.729	0.655

	INDEX 5722 SAMPLE 4139	INDEX 5723 SAMPLE 4177	INDEX 5724 SAMPLE 596
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	GEORGIA	HARMONY	INGALLS
WELL NAME	STATE NO. 1	NAUMANN NO. 1	MAGNOLIA PET. CO. NO. 4
LOCATION	SEC. 36, T18N, R4E	SEC. 2, T17N, R5E	SEC. 34, T19N, R4E
OWNER	HOME GAS CO.	MUL-BERRY OIL CO.	MOBIL OIL CORP.
COMPLETED	11/16/45	10/08/46	NOT GIVEN
SAMPLED	09/30/46	12/12/46	05/--/21
FORMATION	PENN-BARTLESVILLE	PENN-PRUE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3689	3050	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1060	NOT GIVEN	500
OPEN FLOW, MCFD	6000	NOT GIVEN	13765
COMPONENT, MOLE PCT			
METHANE	72.6	71.9	45.4
ETHANE	22.1	12.0	16.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.7	15.5	37.1
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	2.13	0.16	0.30
HEATING VALUE*	1131	943	761
SPECIFIC GRAVITY	0.687	0.680	0.791

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5725 SAMPLE 598	INDEX 5726 SAMPLE 3729	INDEX 5727 SAMPLE 3770
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	INGALLS	INGALLS E	INGALLS E
WELL NAME	NOT GIVEN	MYATT NO. 1	FRANK SIMPSON NO. 1
LOCATION	SEC. 27, T19N, R4E	SEC. 25, T19N, R4E	SEC. 30, T19N, R5E
OWNER	OKLAHOMA NATURAL GAS CO.	J. E. CROSBIE, INC.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	11/16/43	10/04/43
SAMPLED	07/--/21	03/23/44	04/06/44
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-MISENER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	647	3732	3633
WELLHEAD PRESSURE,PSIG	180	NOT GIVEN	1250
OPEN FLOW, MCFD	7500	NOT GIVEN	38450
COMPONENT, MOLE PCT			
METHANE	45.3	24.0	76.5
ETHANE	6.3	67.6	22.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	42.5	7.1	0.3
OXYGEN	2.4	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	3.3	0.2	0.3
HELIUM	0.15	0.70	0.12
HEATING VALUE*	572	1455	1184
SPECIFIC GRAVITY	0.806	0.918	0.671

	INDEX 5728 SAMPLE 3733	INDEX 5729 SAMPLE 963	INDEX 5730 SAMPLE 1933
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	INGALLS N	NORFORK	NORFORK W
WELL NAME	STATE OF OKLA. TR. 15 NO. 1	BALLARD-SKELLY	DAWES NO. 1
LOCATION	SEC. 16, T19N, R4E	SEC. 32, T18 , R5E	SEC. 4, T18N, R5E
OWNER	STANOLIND OIL & GAS CO.	MUL-BERRY OIL CO.	TRANSCONTINENTAL OIL CO.
COMPLETED	03/08/44	09/--/24	11/05/29
SAMPLED	03/25/44	01/08/25	02/03/30
FORMATION	ORDO-SIMPSON	NOT GIVEN	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4006	1325	2745
WELLHEAD PRESSURE,PSIG	NOT GIVEN	800	800
OPEN FLOW, MCFD	250	12000	7770
COMPONENT, MOLE PCT			
METHANE	73.8	14.0	66.4
ETHANE	18.9	16.5	24.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.7	68.2	9.1
OXYGEN	0.4	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.11	0.49	0.14
HEATING VALUE*	1086	438	1105
SPECIFIC GRAVITY	0.678	0.921	0.716

	INDEX 5731 SAMPLE 1943	INDEX 5732 SAMPLE 7195	INDEX 5733 SAMPLE 3321
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	NORFORK W	ORLANDO E	RIPLEY
WELL NAME	ECHO HAWK HEIRS NO. 1	BARNES NO. 1-A	BOYLES NO. 9
LOCATION	SEC. 4, T18N, R5E	SEC. 13, T19N, R1W	SEC. 26, T18N, R4E
OWNER	SHAFFER OIL & REFINING CO.	WOLFE DRILLING CO.	MUL-BERRY OIL CO.
COMPLETED	11/30/29	12/11/57	11/10/41
SAMPLED	03/06/30	08/31/59	04/21/42
FORMATION	PENN-PRUE	NOT GIVEN	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2670	4513	3480
WELLHEAD PRESSURE,PSIG	900	1750	1260
OPEN FLOW, MCFD	5857	3300	5343
COMPONENT, MOLE PCT			
METHANE	71.5	71.6	73.0
ETHANE	20.8	7.9	18.5
PROPANE	---	4.4	---
N-BUTANE	---	1.2	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.8	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	7.4	12.8	7.8
OXYGEN	0.2	0.1	0.5
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.14	0.20	0.13
HEATING VALUE*	1097	1095	1071
SPECIFIC GRAVITY	0.692	0.744	0.682

	INDEX 5734 SAMPLE 4617	INDEX 5735 SAMPLE 4668	INDEX 5736 SAMPLE 3725
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	RIPLEY SE	RIPLEY SE	STILLWATER
WELL NAME	BOYD NO. 1	BUCKLES NO. 1	HARRIET V. BERRY NO. 1
LOCATION	SEC. 28, T18N, R4E	SEC. 28, T18N, R4E	SEC. 26, T19N, R2E
OWNER	JERGINS OIL CO.	JERGINS OIL CO.	T. N. BERRY
COMPLETED	09/06/48	11/19/48	03/--/43
SAMPLED	11/09/48	02/17/49	03/15/44
FORMATION	PENN-	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3475	3514	4060
WELLHEAD PRESSURE,PSIG	1425	1600	900
OPEN FLOW, MCFD	2500	1500	3200
COMPONENT, MOLE PCT			
METHANE	70.1	76.6	63.6
ETHANE	20.3	6.2	0.0
PROPANE	---	3.1	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.2	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.4	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.0	---
NITROGEN	9.0	12.1	16.3
OXYGEN	0.3	TRACE	0.4
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.12	0.12	0.16
HEATING VALUE*	1074	1031	644
SPECIFIC GRAVITY	0.695	0.694	0.516

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5737 SAMPLE 3782	INDEX 5738 SAMPLE 3424	INDEX 5739 SAMPLE 3425
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PITTSBURG	PITTSBURG
FIELD	YALE	ASHLAND S	ASHLAND S
WELL NAME	MORGAN NO. 1	CAMPBELL & CUNNINGHAM NO. 1	CAMPBELL & CUNNINGHAM
LOCATION	SEC. 10, T19N, R5E	SEC. 20, T3N, R12E	SEC. 20, T3N, R12E
OWNER	SUN OIL CO.	S. D. CAMPBELL	S. D. CAMPBELL
COMPLETED	02/06/44	12/04/40	12/04/40
SAMPLED	04/13/44	05/28/42	05/28/42
FORMATION	NOT GIVEN	PENN-HARTSHORNE	-BROGG
GEOLOGIC PROVINCE CODE	355	345	345
DEPTH, FEET	3558	1493	555
WELLHEAD PRESSURE,PSIG	1050	185	115
OPEN FLOW, MCFD	NOT GIVEN	1500	500
COMPONENT, MOLE PCT			
METHANE	67.0	83.8	87.4
ETHANE	24.8	15.3	10.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	0.1	1.7
OXYGEN	0.5	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	TRACE	0.09	0.15
HEATING VALUE*	1123	1123	1066
SPECIFIC GRAVITY	0.713	0.635	0.615

	INDEX 5740 SAMPLE 3433	INDEX 5741 SAMPLE 12105	INDEX 5742 SAMPLE 12186
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ASHLAND S	ASHLAND S	ASHLAND S
WELL NAME	VAUGHN NO. 1	INVESTOR ROYALTY NO. 1	INVESTORS-ROYALTY NO. 1
LOCATION	SEC. 30, T3N, R12E	SEC. 29, T3N, R12E	SEC. 29, T3N, R12E
OWNER	S. J. CAMPBELL	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	04/10/41	10/25/69	10/25/69
SAMPLED	05/28/42	11/07/69	02/05/70
FORMATION	PENN-HARTSHORNE	PENN-CROMWELL U&L	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1551	8300	8300
WELLHEAD PRESSURE,PSIG	185	2350	2350
OPEN FLOW, MCFD	1500	8000	3800
COMPONENT, MOLE PCT			
METHANE	88.4	84.0	95.8
ETHANE	9.1	0.8	0.8
PROPANE	---	0.1	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	1.7	10.6	0.9
OXYGEN	0.4	2.6	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	1.8	2.2
HELIUM	0.16	0.04	0.05
HEATING VALUE*	1059	868	987
SPECIFIC GRAVITY	0.610	0.636	0.583

	INDEX 5743 SAMPLE 14868	INDEX 5744 SAMPLE 9814	INDEX 5745 SAMPLE 12952
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ASHLAND S	BLOCKER S	BLOCKER S
WELL NAME	LANE NO. 1-28	DAVIS NO. 1	U.S.A. NO. 1
LOCATION	SEC. 28, T4N, R12E	SEC. 12, T6N, R16E	SEC. 12, T6N, R16E
OWNER	CONTINENTAL OIL CO.	SNEE AND EARLY	SNEE & EARLY OIL PRODUCERS
COMPLETED	09/02/76	01/20/65	01/15/71
SAMPLED	12/11/76	03/20/65	08/12/71
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	ORDO-RED OAK
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3401	2281	6999
WELLHEAD PRESSURE,PSIG	495	360	2489
OPEN FLOW, MCFD	4200	1392	66132
COMPONENT, MOLE PCT			
METHANE	91.2	94.1	86.0
ETHANE	3.6	4.2	1.3
PROPANE	1.7	0.9	0.3
N-BUTANE	0.4	0.1	0.0
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	2.1	0.5	9.2
OXYGEN	TRACE	TRACE	2.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.0	1.1
HELIUM	0.13	0.04	0.03
HEATING VALUE*	1060	1059	902
SPECIFIC GRAVITY	0.613	0.589	0.624

	INDEX 5746 SAMPLE 15879	INDEX 5747 SAMPLE 15937	INDEX 5748 SAMPLE 6905
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ARCHER S	ARCHER S	CANADIAN NE
WELL NAME	TURNEY NO. 31-2	TURNEY A NO.1	RAUMAN NO. 1
LOCATION	SEC. 21, T4N, R14E	SEC. 32, T4N, R14E	SEC. 29, T6N, R16E
OWNER	SUBOIL ENERGY CORP.	TEXAS OIL & GAS CORP.	UNION OIL CO.
COMPLETED	NOT GIVEN	09/14/79	01/15/59
SAMPLED	01/11/80	05/02/80	12/01/59
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7360	6496	4368
WELLHEAD PRESSURE,PSIG	2200	1800	225
OPEN FLOW, MCFD	2000	2000	3283
COMPONENT, MOLE PCT			
METHANE	95.6	96.4	95.6
ETHANE	1.4	1.5	0.7
PROPANE	0.2	0.3	0.1
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	1.1	0.5	1.4
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.2	1.9
HELIUM	0.03	0.04	0.10
HEATING VALUE*	999	1011	989
SPECIFIC GRAVITY	0.582	0.578	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5749 SAMPLE 1982	INDEX 5750 SAMPLE 3983	INDEX 5751 SAMPLE 10714
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	CARNEY	CHOATE PRAIRIE	FEATHERSTON
WELL NAME	CARNEY NO. 1	VAN HOOZER NO. 1-A	BROWNE NO. 1
LOCATION	SEC. 9, T7N, R18E	SEC. 20, T8N, R14E	SEC. 21, T7N, R17E
OWNER	UTILITIES PRODUCTION CORP.	PUBLIC SERVICE CO. OF OKLA.	CHOCTAW GAS CO.
COMPLETED	09/21/26	12/18/44	09/09/65
SAMPLED	04/03/30	03/09/45	09/08/66
FORMATION	NOT GIVEN	NOT GIVEN	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1752	3458	2670
WELLHEAD PRESSURE,PSIG	500	350	260
OPEN FLOW, MCFD	28000	2500	1500
COMPONENT, MOLE PCT			
METHANE	95.0	92.5	95.7
ETHANE	4.1	7.2	2.9
PROPANE	---	---	0.4
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.3	0.7	0.4
OXYGEN	0.3	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.04	0.12	TRACE
HEATING VALUE*	1036	1066	1032
SPECIFIC GRAVITY	0.581	0.601	0.580

	INDEX 5752 SAMPLE 15070	INDEX 5753 SAMPLE 14808	INDEX 5754 SAMPLE 11330
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	FEATHERSTON	FEATHERSTON NW	HARTSHORNE
WELL NAME	FEATHERSTONE TOWNSITE NO. 1	ROBERTS NO. 1	SMALLWOOD UNIT NO. 1
LOCATION	SEC. 15, T7N, R17E	SEC. 3, T7N, R17E	SEC. 10, T4N, R16E
OWNER	OXLEY PETROLEUM CO.	POTTS STEPHENSON EXPL. CO.	AMOCO PRODUCTION CO.
COMPLETED	05/06/77	05/26/76	01/07/64
SAMPLED	07/27/77	10/12/76	03/01/68
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2372	2502	5535
WELLHEAD PRESSURE,PSIG	230	585	1376
OPEN FLOW, MCFD	1639	3900	2021
COMPONENT, MOLE PCT			
METHANE	95.4	94.6	96.0
ETHANE	2.6	3.8	2.2
PROPANE	0.3	0.7	0.6
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.5	0.6	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.5
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1041	1052	1028
SPECIFIC GRAVITY	0.587	0.586	0.579

	INDEX 5755 SAMPLE 10420	INDEX 5756 SAMPLE 11257	INDEX 5757 SAMPLE 15886
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KINTA	KINTA	KIOWA SW
WELL NAME	WILLIAM FLOYD NO. 1	WHITE P NO. 1	CHITTY SCOTT NO. 1
LOCATION	SEC. 28, T7N, R18E	SEC. 30, T7N, R18E	SEC. 30, T3N, R14E
OWNER	SKELLY OIL COMPANY	SKELLY OIL CO.	HAMILTON BROTHERS OIL CO.
COMPLETED	02/28/66	11/13/67	NOT GIVEN
SAMPLED	02/28/66	--/--/33	01/15/80
FORMATION	MISS-RED OAK	PENN-ATOKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7825	6402	10279
WELLHEAD PRESSURE,PSIG	2484	2394	675
OPEN FLOW, MCFD	5374	14869	2200
COMPONENT, MOLE PCT			
METHANE	96.3	88.3	96.1
ETHANE	1.6	1.6	0.8
PROPANE	0.6	0.3	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	6.9	0.5
OXYGEN	0.0	1.7	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	2.4
HELIUM	0.05	0.02	0.03
HEATING VALUE*	1020	931	990
SPECIFIC GRAVITY	0.581	0.615	0.584

	INDEX 5758 SAMPLE 14664	INDEX 5759 SAMPLE 16134	INDEX 5760 SAMPLE 10884
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KIOWA W	KIOWA W	MCALESTER SE
WELL NAME	ENNENGA NO. 1	HALL "D" 1	GERMAN UNIT NO. 1
LOCATION	SEC. A, T3N, R13E	SEC. 19, T3N, R13E	SEC. 33, T5N, R15E
OWNER	SOUTHERN UNION PROD. CO.	CITIES SERVICE CO.	APACHE CORP.
COMPLETED	05/20/75	05/06/80	11/11/65
SAMPLED	04/23/76	11/19/80	NOT GIVEN
FORMATION	PENN-WAPANUCKA	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	9422	7052	10328
WELLHEAD PRESSURE,PSIG	2407	2015	3500
OPEN FLOW, MCFD	13931	NOT GIVEN	4300
COMPONENT, MOLE PCT			
METHANE	95.6	89.1	98.1
ETHANE	0.7	6.4	0.7
PROPANE	0.1	2.0	0.1
N-BUTANE	TRACE	0.4	0.0
ISOBUTANE	TRACE	0.3	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.4	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.9	0.5
HELIUM	0.05	0.04	0.02
HEATING VALUE*	984	1110	1009
SPECIFIC GRAVITY	0.590	0.636	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5761 SAMPLE 11260	INDEX 5762 SAMPLE 11320	INDEX 5763 SAMPLE 10092
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	MCALISTER	MCALISTER S	PINE HOLLOW S
WELL NAME	W. H. STANTON NO. 1	CORONADO A NO. 1	DAVIS UNIT NO. 1
LOCATION	SEC. 22, T5N, R14E	SEC. 29, T3N, R13E	SEC. 26, T5N, R12E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	EXXON CO. U.S.A.
COMPLETED	11/14/67	12/05/67	07/13/65
SAMPLED	01/25/68	02/29/68	08/31/65
FORMATION	PENN-HARTSHORNE	PENN-ATOKA	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4395	8390	3522
WELLHEAD PRESSURE,PSIG	677	3630	600
OPEN FLOW, MCFD	1133	6635	4066
COMPONENT, MOLE PCT			
METHANE	90.2	90.4	91.4
ETHANE	5.8	3.1	4.1
PROPANE	1.7	0.2	1.7
N-BUTANE	0.6	0.3	0.4
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	1.0	TRACE
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	0.2	TRACE
HEXANES PLUS	0.0	0.6	0.1
NITROGEN	1.0	2.3	1.6
OXYGEN	0.0	0.4	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	0.2
HELIUM	0.05	0.04	0.10
HEATING VALUE*	1082	1080	1073
SPECIFIC GRAVITY	0.619	0.640	0.613

	INDEX 5764 SAMPLE 10272	INDEX 5765 SAMPLE 10505	INDEX 5766 SAMPLE 15245
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	PINE HOLLOW S	PINE HOLLOW S	QUINTON DISTRICT
WELL NAME	MUSAN MCDONALD UNIT NO. 1	TENNECO NO. 36-1	LASH NO. 1
LOCATION	SEC. 35, T5N, R12E	SEC. 36, T5N, R12E	SEC. 10, T7N, R18E
OWNER	EXXON CO. U.S.A.	TENNECO OIL CO.	SAMSON RESOURCES CO.
COMPLETED	04/29/64	NOT GIVEN	NOT GIVEN
SAMPLED	11/02/65	03/29/66	03/22/78
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	PENN-SPIRO & CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3675	3446	6606
WELLHEAD PRESSURE,PSIG	490	NOT GIVEN	1040
OPEN FLOW, MCFD	3161	3363	14480
COMPONENT, MOLE PCT			
METHANE	90.5	89.4	95.1
ETHANE	4.3	5.1	1.0
PROPANE	1.9	2.3	0.1
N-BUTANE	0.4	0.5	0.0
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.8	1.3	1.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.4	0.4	1.6
HELIUM	0.11	0.11	0.06
HEATING VALUE*	1080	1104	985
SPECIFIC GRAVITY	0.623	0.634	0.582

	INDEX 5767 SAMPLE 13131	INDEX 5768 SAMPLE 14999	INDEX 5769 SAMPLE 14540
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	REAMS NW	REAMS NW	REAMS SE
WELL NAME	MURRIN NO. 1-23	MCKAY NO. 1-1	LAKE NO. 1-32
LOCATION	SEC. 23, T7N, R14E	SEC. 1, T6N, R13E	SEC. 32, T7N, R16E
OWNER	WILSHIRE OIL OF TEXAS	ARKLA EXPLORATION CO.	SNEE & EBERLY
COMPLETED	11/15/71	08/08/75	06/28/75
SAMPLED	01/03/72	05/13/77	12/03/75
FORMATION	PENN-CROMWELL	PENN-CROMWELL	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7096	5721	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1550	1800	NOT GIVEN
OPEN FLOW, MCFD	3502	4053	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	95.0	91.0
ETHANE	0.6	0.8	5.5
PROPANE	0.1	0.1	1.6
N-BUTANE	0.0	TRACE	0.2
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.7	0.9	0.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	2.9	0.6
HELIUM	0.06	0.06	0.03
HEATING VALUE*	975	984	1080
SPECIFIC GRAVITY	0.599	0.592	0.615

	INDEX 5770 SAMPLE 14541	INDEX 5771 SAMPLE 3994	INDEX 5772 SAMPLE 4468
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	REAMS SE	SCIPIO NW	SCIPIO NW
WELL NAME	LAKE NO. 1-32	C. E. MORTON NO. 1	KLEENKE NO. 1
LOCATION	SEC. 32, T7N, R16E	SEC. 19, T7N, R13E	SEC. 15, T7N, R12E
OWNER	SNEE & EBERLY	PUBLIC SERVICE CO. OF OKLA.	OTHA H. GRIMES
COMPLETED	06/28/75	07/10/44	02/07/48
SAMPLED	12/03/75	03/09/49	04/15/48
FORMATION	PENN-BOOCH	PENN-	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	2369	4265
WELLHEAD PRESSURE,PSIG	NOT GIVEN	350	1700
OPEN FLOW, MCFD	NOT GIVEN	500	17000
COMPONENT, MOLE PCT			
METHANE	91.0	95.2	86.3
ETHANE	5.4	1.7	12.3
PROPANE	1.6	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	2.3	0.9
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.7	0.5	0.2
HELIUM	0.13	TRACE	0.07
HEATING VALUE*	1086	995	1095
SPECIFIC GRAVITY	0.618	0.579	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5773 SAMPLE 4094	INDEX 5774 SAMPLE 14325	INDEX 5775 SAMPLE 14326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ULAN E	ULAN S	ULAN S
WELL NAME	TRAVIS NO. 1	FINAMORE NO. 1	FINAMORE NO. 1
LOCATION	SEC. 5, T7N, R14E	SEC. 32, T7N, R14E	SEC. 32, T7N, R14E
OWNER	PUBLIC SERVICE CO. OF OKLA.	KWB OIL PROPERTY MGMT., INC.	KWB OIL PROPERTY MGMT., INC.
COMPLETED	03/31/45	NOT GIVEN	NOT GIVEN
SAMPLED	06/14/45	04/20/75	04/20/75
FORMATION	PENN-BOOCH	PENN-WAPANUCKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1867	6692	7065
WELLHEAD PRESSURE,PSIG	450	17	1715
OPEN FLOW, MCFD	4	1600	2600
COMPONENT, MOLE PCT			
METHANE	93.3	93.6	95.2
ETHANE	6.4	0.6	0.8
PROPANE	---	0.1	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.0	2.2	0.7
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	3.4	3.2
HELIUM	0.07	0.07	0.05
HEATING VALUE*	1060	962	981
SPECIFIC GRAVITY	0.599	0.600	0.594

	INDEX 5776 SAMPLE 12828	INDEX 5777 SAMPLE 12829	INDEX 5778 SAMPLE 15885
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	WILBURTON W	WILBURTON W	WILDCAT
WELL NAME	R. A. KING UNIT NO. 1	R. E. KING UNIT NO. 1	CHITTY SCOIT NO. 1
LOCATION	SEC. 26, T5N, R16E	SEC. 26, T5N, R16E	SEC. 30, T3N, R14E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	HAMILTON BROTHERS OIL CO.
COMPLETED	04/04/71	04/08/71	NOT GIVEN
SAMPLED	05/20/71	05/20/71	01/15/80
FORMATION	ORDO-RED OAK	PENN-SPIRO	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6678	9340	9381
WELLHEAD PRESSURE,PSIG	1550	3750	1300
OPEN FLOW, MCFD	5900	24000	470000
COMPONENT, MOLE PCT			
METHANE	96.5	99.1	95.9
ETHANE	1.5	0.0	1.1
PROPANE	0.3	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.6	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.0	2.3
HELIUM	0.03	0.07	0.04
HEATING VALUE*	1012	1009	994
SPECIFIC GRAVITY	0.579	0.559	0.585

	INDEX 5779 SAMPLE 1821	INDEX 5780 SAMPLE 4888	INDEX 5781 SAMPLE 3474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PONTOTOC	PONTOTOC	PONTOTOC
FIELD	ALLEN DISTRICT	ALLEN DISTRICT	BEBEE SW KONAWA
WELL NAME	CRABTREE NO. 1	SINCLAIR NO. 1	NEWBERN NO. 1
LOCATION	SEC. 32, T5N, R7E	SEC. 31, T5N, R8E	SEC. 31, T5N, R4E
OWNER	S.W. GAS UTILITIES CORP.	JONES SHELBURNE, INC.	LONG, YINGLING, LAUCK
COMPLETED	05/31/29	04/18/50	03/26/40
SAMPLED	07/22/29	05/19/50	05/25/42
FORMATION	PENN-	PENN-EARLSBORO	EOCE-WILCOX 2ND
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1476	1610	2205
WELLHEAD PRESSURE,PSIG	650	600	NOT GIVEN
OPEN FLOW, MCFD	10000	5500	1000
COMPONENT, MOLE PCT			
METHANE	96.7	92.3	95.0
ETHANE	0.8	1.6	1.3
PROPANE	---	1.0	---
N-BUTANE	---	0.3	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.2	4.0	2.3
OXYGEN	0.2	0.2	0.4
ARGON	---	TRACE	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.9
HELIUM	0.08	0.05	0.05
HEATING VALUE*	994	1016	986
SPECIFIC GRAVITY	0.571	0.604	0.581

	INDEX 5782 SAMPLE 4760	INDEX 5783 SAMPLE 3462	INDEX 5784 SAMPLE 2619
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PONTOTOC	PONTOTOC	PONTOTOC
FIELD	BEBEE SW KONAWA	BEBEE SW KONOWA	FITTS
WELL NAME	WILBURN HEIRS NO. 1	JOHN NEAL NO. 1	HARDEN NO. 1
LOCATION	SEC. 4, T4N, R5E	SEC. 25, T5N, R4E	SEC. 30, T2N, R7E
OWNER	W. A. DELANEY, JR.	LAKE OIL CO.	KING & DELANEY
COMPLETED	09/10/49	05/07/38	--/--/33
SAMPLED	10/15/49	05/25/42	01/01/33
FORMATION	PENN-	ORDO-VIOLA	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1468	2475	NOT GIVEN
WELLHEAD PRESSURE,PSIG	570	NOT GIVEN	775
OPEN FLOW, MCFD	6000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	92.7	86.4
ETHANE	6.4	0.0	9.5
PROPANE	3.2	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	5.6	6.5	2.6
OXYGEN	0.1	0.5	0.9
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.06	0.04	0.09
HEATING VALUE*	1090	939	1045
SPECIFIC GRAVITY	0.669	0.587	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5785 SAMPLE 10831	INDEX 5786 SAMPLE 10113	INDEX 5787 SAMPLE 4073
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	POTTAWATOMIE	POTTAWATOMIE	POTTAWATOMIE
FIELD	PRAGUE S	RED HILL W	ROVER
WELL NAME	SCHOOL LAND NO. 1	O. K. O'NEAL NO. 1	VESTAL NO. 1
LOCATION	SEC. 16, T11N, R6E	SEC. 21, T11N, R4E	SEC. 28, T6N, R3E
OWNER	LITTLE NICK OIL CO.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	08/17/66	08/07/65	12/20/44
SAMPLED	01/03/67	NOT GIVEN	06/22/45
FORMATION	DEVO-HUNTON	PENN-SKINNER	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4260	4301	2864
WELLHEAD PRESSURE,PSIG	1250	1700	1140
OPEN FLOW, MCFD	1200	10800	15000
COMPONENT, MOLE PCT			
METHANE	71.6	64.6	67.5
ETHANE	8.6	5.4	16.6
PROPANE	5.1	3.2	---
N-BUTANE	1.4	0.9	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	12.0	24.2	13.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.11	0.15	0.18
HEATING VALUE*	1104	9180	1017
SPECIFIC GRAVITY	0.740	0.752	0.702

	INDEX 5788 SAMPLE 9793	INDEX 5789 SAMPLE 10514	INDEX 5790 SAMPLE 10515
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PUSHMATAHA	ROGER MILLS	ROGER MILLS
FIELD	WILDCAT	BISHOP	BISHOP
WELL NAME	BRAME NO. 1	APPEL NO. 1	BULLARD NO. 1
LOCATION	SEC. 15, T3S, R15E	SEC. 8, T17N, R25W	SEC. 14, T17N, R25W
OWNER	J. F. STEPHENSON	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	09/15/60	NOT GIVEN	NOT GIVEN
SAMPLED	03/10/65	04/12/66	04/12/66
FORMATION	MISS-STANLEY	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	400	360	360
DEPTH, FEET	3062	NOT GIVEN	7900
WELLHEAD PRESSURE,PSIG	1500	2000	2150
OPEN FLOW, MCFD	750	750	900
COMPONENT, MOLE PCT			
METHANE	92.6	81.3	83.1
ETHANE	4.1	7.0	8.2
PROPANE	1.4	4.2	3.8
N-BUTANE	0.3	1.3	1.2
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	TRACE	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	0.7	3.8	1.4
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.4
HELIUM	0.05	0.12	0.13
HEATING VALUE*	1091	1168	1203
SPECIFIC GRAVITY	0.611	0.702	0.695

	INDEX 5791 SAMPLE 14514	INDEX 5792 SAMPLE 15608	INDEX 5793 SAMPLE 14974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	BLACK KETTLE	CARPENTER W	CHEYENNE
WELL NAME	HUNT-CROSS NO. 1	SIMMONS NO. 1A	ROARK NO. 1
LOCATION	SEC. 22, T13N, R24W	SEC. 17, T12N, R22W	SEC. 17, T13N, R24W
OWNER	EL PASO NATURAL GAS CO.	NATOMAS NORTH AMERICA, INC.	HOOVER & BRACKEN, INC.
COMPLETED	06/11/75	NOT GIVEN	10/08/76
SAMPLED	10/31/75	04/26/79	04/20/77
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15530	9314	15835
WELLHEAD PRESSURE,PSIG	12220	NOT GIVEN	5910
OPEN FLOW, MCFD	19742	75	20721
COMPONENT, MOLE PCT			
METHANE	97.1	97.1	97.3
ETHANE	0.5	0.4	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	0.3	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	2.1	1.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	995	993	999
SPECIFIC GRAVITY	0.577	0.579	0.577

	INDEX 5794 SAMPLE 15972	INDEX 5795 SAMPLE 14996	INDEX 5796 SAMPLE 15222
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CHEYENNE S	CHEYENNE W	CHEYENNE W
WELL NAME	BRADY-1-20	L.L. ROARK UNIT NO. 1	STATE NO. 1-10
LOCATION	SEC. 20, T12N, R24W	SEC. 14, T13N, R24W	SEC. 10, T13N, R24W
OWNER	AMAREX, INC	SUN PRODUCTION CO.	HELMERICH & PAYNE, INC.
COMPLETED	01/11/80	12/23/76	09/--/76
SAMPLED	06/24/80	05/11/77	03/--/78
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17280	15178	NOT GIVEN
WELLHEAD PRESSURE,PSIG	11470	13400	NOT GIVEN
OPEN FLOW, MCFD	12399	16700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.5	97.1	97.1
ETHANE	0.7	0.6	0.6
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.3	0.2	0.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.0	1.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	997	997	1001
SPECIFIC GRAVITY	0.575	0.579	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5797 SAMPLE 16124	INDEX 5798 SAMPLE 10902	INDEX 5799 SAMPLE 11264
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CHEYENNE W	CRAWFORD NW	CRAWFORD NW
WELL NAME	STATE NO. 1-28	J. B. THOMAS NO. 1	M.E. STRICKLAND NO. 1
LOCATION	SEC. 28, T13N, R24W	SEC. 15, T16N, R26W	SEC. 28, T16N, R26W
OWNER	LADD PETROLEUM CORP.	SUN OIL CO.	MIDWEST OIL CORP.
COMPLETED	09/24/80	11/18/66	09/21/65
SAMPLED	10/28/80	03/09/67	01/31/68
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15660	8294	8458
WELLHEAD PRESSURE,PSIG	4900	2400	2250
OPEN FLOW, MCFD	5200	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.3	87.5	82.1
ETHANE	0.5	6.1	8.3
PROPANE	0.1	2.3	3.7
N-BUTANE	0.0	0.7	1.0
ISOBUTANE	0.0	0.2	0.6
N-PENTANE	0.0	0.3	0.4
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	0.3	0.3
HEXANES PLUS	0.0	0.6	0.5
NITROGEN	0.2	1.2	1.7
OXYGEN	TRACE	0.0	0.7
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.4	0.4
HELIUM	0.02	0.09	0.02
HEATING VALUE*	997	1149	1195
SPECIFIC GRAVITY	0.576	0.659	0.693

	INDEX 5800 SAMPLE 11423	INDEX 5801 SAMPLE 15715	INDEX 5802 SAMPLE 16127
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CRAWFORD NW	HAMBURG NW	LEEDY SW
WELL NAME	W. H. YORK NO. 1	E. T. GAMBLE	TAYLOR FARMS NO. 2
LOCATION	SEC. 20, T16N, R25W	SEC. 33, T15N, R26W	SEC. 25, T16N, R22W
OWNER	LONE STAR PRODUCING CO.	TEXACO INC.	SUNMARK EXPLORATION
COMPLETED	NOT GIVEN	01/31/79	04/02/80
SAMPLED	03/29/68	07/26/79	11/06/80
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8506	14356	11140
WELLHEAD PRESSURE,PSIG	2500	9400	4800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	9825
COMPONENT, MOLE PCT			
METHANE	83.7	96.8	84.7
ETHANE	8.2	0.7	8.1
PROPANE	3.8	0.1	3.6
N-BUTANE	1.0	0.1	0.8
ISOBUTANE	0.4	0.0	0.6
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.0	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.8	0.7
HELIUM	0.08	0.02	0.02
HEATING VALUE*	1176	1004	1188
SPECIFIC GRAVITY	0.686	0.581	0.681

	INDEX 5803 SAMPLE 15167	INDEX 5804 SAMPLE 15564	INDEX 5805 SAMPLE 14806
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	MIDWAY	MIDWAY	NOT GIVEN
WELL NAME	HICKEY NO. 1-32	SELBY HOOPER NO. 1	LESTER UNIT NO. 1
LOCATION	SEC. 32, T15N, R26W	SEC. 5, T14N, R26W	SEC. 9, T13N, R24W
OWNER	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.	HELMERICH & PAYNE, INC.
COMPLETED	09/03/77	NOT GIVEN	08/06/76
SAMPLED	12/13/77	02/09/79	10/12/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14404	NOT GIVEN	15086
WELLHEAD PRESSURE,PSIG	10100	NOT GIVEN	12000
OPEN FLOW, MCFD	3897	NOT GIVEN	10400
COMPONENT, MOLE PCT			
METHANE	97.1	96.6	97.1
ETHANE	0.7	0.6	0.7
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.2	0.5	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.9	1.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	999	997	999
SPECIFIC GRAVITY	0.577	0.580	0.576

	INDEX 5806 SAMPLE 15221	INDEX 5807 SAMPLE 15300	INDEX 5808 SAMPLE 14309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	PEEK S	RANKIN SE	REYDON
WELL NAME	PENRY NO. 1	PURVIS NO. 1	ROBERTSON NO. 1-A
LOCATION	SEC. 18, T17N, R21W	SEC. 30, T13N, R25W	SEC. 1, T13N, R26W
OWNER	INEXCO OIL CO.	NATOMAS NORTH AMERICA, INC.	EL PASO NATURAL GAS CO.
COMPLETED	02/03/77	01/14/77	01/25/75
SAMPLED	03/-/78	06/07/78	03/31/75
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10254	15944	15136
WELLHEAD PRESSURE,PSIG	2015	8945	9413
OPEN FLOW, MCFD	743	2716	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.1	97.1	96.6
ETHANE	10.3	0.5	0.6
PROPANE	5.0	TRACE	0.1
N-BUTANE	1.3	0.1	0.1
ISOBUTANE	0.7	0.0	TRACE
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.5	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	0.8	0.5	0.7
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.3	1.8
HELIUM	0.04	0.02	0.02
HEATING VALUE*	1246	1006	995
SPECIFIC GRAVITY	0.718	0.577	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5809 SAMPLE 13173	INDEX 5810 SAMPLE 13784	INDEX 5811 SAMPLE 14123
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	REYDON NW	REYDON NW	REYDON SE
WELL NAME	BETTY HOLLIS NO. 1-29	NELLIE "B" LIBBY NO. 1-33	PIERCE NO. 1
LOCATION	SEC. 29, T14N, R26W	SEC. 33, T14N, R26W	SEC. 9, T13N, R25W
OWNER	TEXAS PACIFIC OIL CO.	TEXAS PACIFIC OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	12/07/71	NOT GIVEN	05/21/74
SAMPLED	03/31/72	10/25/73	08/07/74
FORMATION	PENN-MORROW	PENN-MORROW U	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15076	14884	22566
WELLHEAD PRESSURE,PSIG	9990	NOT GIVEN	6110
OPEN FLOW, MCFD	8781	174446	12081
COMPONENT, MOLE PCT			
METHANE	97.1	96.6	91.6
ETHANE	0.6	0.7	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.5	3.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.7	4.7
HELIUM	0.02	0.02	0.06
HEATING VALUE*	1010	999	930
SPECIFIC GRAVITY	0.580	0.578	0.615

	INDEX 5812 SAMPLE 13972	INDEX 5813 SAMPLE 15229	INDEX 5814 SAMPLE 13513
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	REYDON W	REYDON W	ROLL E
WELL NAME	SCRIVNER NO. 1	KING NO. 1	VIERSEN UNIT NO. 1
LOCATION	SEC. 35, T14N, R26W	SEC. 9, T13N, R26W	SEC. 8, T15N, R22W
OWNER	EL PASO NATURAL GAS CO.	DYCO PETROLEUM CORP.	GENERAL AMERICAN OIL CO.
COMPLETED	11/25/73	01/06/78	12/20/72
SAMPLED	04/03/74	03/13/78	01/19/73
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14986	15330	14576
WELLHEAD PRESSURE,PSIG	10467	9260	6935
OPEN FLOW, MCFD	4846	7053	5844
COMPONENT, MOLE PCT			
METHANE	97.1	95.4	96.6
ETHANE	0.6	0.6	0.8
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	1.6	0.4
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.8	2.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	997	980	995
SPECIFIC GRAVITY	0.578	0.584	0.581

	INDEX 5815 SAMPLE 15811	INDEX 5816 SAMPLE 245	INDEX 5817 SAMPLE 3332
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGERS	ROGERS
FIELD	STRONG CITY N	CLAREMORE	COLLINSVILLE
WELL NAME	WICKHAM NO. 1	RITCHSON NO. 1	T. C. WALLACE NO. 1
LOCATION	SEC. 26, T15N, R23W	SEC. 21, T21N, R16E	SEC. 10, T21N, R14E
OWNER	HARPER OIL CO.	OKLA. NATURAL GAS CO.	T. C. COLPITT & OTHERS
COMPLETED	04/10/79	--/--/19	--/--/13
SAMPLED	10/1A/79	05/06/20	04/23/42
FORMATION	PENN-CHEROKEE	PENN-	PENN-BURGESS
GEOLOGIC PROVINCE CODE	360	355	355
DEPTH, FEET	11205	700	1150
WELLHEAD PRESSURE,PSIG	6900	130	16
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	86.5	96.8	95.4
ETHANE	7.9	2.2	0.3
PROPANE	2.7	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	0.4	2.1
OXYGEN	0.0	0.5	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	0.0	1.7
HELIUM	0.03	TRACE	0.07
HEATING VALUE*	1144	1020	972
SPECIFIC GRAVITY	0.656	0.569	0.583

	INDEX 5818 SAMPLE 1952	INDEX 5819 SAMPLE 3448	INDEX 5820 SAMPLE 3456
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	ALLEN DISTRICT	BETHEL	BETHEL
WELL NAME	LUCY NO. 1	HELLER NO. 1	MADKINS NO. 1
LOCATION	SEC. 12, T5N, R7E	SEC. 14, T9N, R7E	SEC. 13, T9N, R7E
OWNER	PRODUCERS & REFINERS CORP.	MCINTYRE, SHERMAN & CUMMINGS	MCINTYRE, SHERMAN & CUMMINGS
COMPLETED	01/1A/30	08/29/41	09/15/41
SAMPLED	03/10/30	05/26/42	05/26/42
FORMATION	PENN-	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2A77	3403	3355
WELLHEAD PRESSURE,PSIG	1050	940	940
OPEN FLOW, MCFD	39000	23400	24300
COMPONENT, MOLE PCT			
METHANE	94.9	66.8	50.6
ETHANE	1.7	25.0	41.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.3	7.5	7.0
OXYGEN	0.1	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.2	0.2
HELIUM	0.05	0.10	0.12
HEATING VALUE*	992	1125	1249
SPECIFIC GRAVITY	0.588	0.713	0.793

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5821 SAMPLE 4556	INDEX 5822 SAMPLE 926	INDEX 5823 SAMPLE 945
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	BOWLEGS	CROMWELL	CROMWELL
WELL NAME	LIVINGSTON NO. 2	BRUNER NO. 1	YAHOLA NO. 1
LOCATION	SEC. 15, T8N, R6E	SEC. 9, T10N, R8E	SEC. 22, T10 , R8
OWNER	CITIES SERVICE OIL CO.	PURE OIL CO.	SHAFFER OIL & REFINING CO.
COMPLETED	02/25/47	NOT GIVEN	NOT GIVEN
SAMPLED	09/13/48	09/15/24	NOT GIVEN
FORMATION	PENN-CALVIN	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2200	3452	3398
WELLHEAD PRESSURE,PSIG	NOT GIVEN	20	20
OPEN FLOW, MCFD	1000	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	38.8	56.1	0.0
ETHANE	43.1	35.2	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	17.3	7.8	0.0
OXYGEN	0.3	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.0
HELIUM	0.11	0.09	0.01
HEATING VALUE*	1165	1199	0
SPECIFIC GRAVITY	0.844	0.765	0.000

	INDEX 5824 SAMPLE 7419	INDEX 5825 SAMPLE 3452	INDEX 5826 SAMPLE 3453
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	CROMWELL S	HOLDENVILLE	HOLDENVILLE
WELL NAME	R. ARHALOKOCHE NO. 1-A	FISH NO. 2	MEYERS NO. 1
LOCATION	SEC. 28, T10N, R8E	SEC. 19, T7N, R8E	SEC. 31, T7N, R8E
OWNER	EXXON CO., U.S.A.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	10/28/59	08/13/39	08/26/34
SAMPLED	02/26/60	05/25/42	05/25/42
FORMATION	PENN-WEWOKA	ORDO-VIOLA	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1093	4095	4105
WELLHEAD PRESSURE,PSIG	414	650	NOT GIVEN
OPEN FLOW, MCFD	13	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.5	63.6	73.6
ETHANE	0.4	9.4	14.4
PROPANE	0.3	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	5.0	26.0	11.0
OXYGEN	0.2	0.2	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.7	0.4
HELIUM	0.10	0.09	0.08
HEATING VALUE*	977	813	1004
SPECIFIC GRAVITY	0.590	0.716	0.677

	INDEX 5827 SAMPLE 4012	INDEX 5828 SAMPLE 14702	INDEX 5829 SAMPLE 1954
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	HOLDENVILLE	HOLDENVILLE	LITTLE RIVER E
WELL NAME	A. H. PALMER NO. 2	WALLACE NO. 1	YAHOLA NO. 3
LOCATION	SEC. 36, T6N, R7E	SEC. 30, T6N, R8E	SEC. 8, T7N, R7E
OWNER	STANOLIND OIL & GAS CO.	FRANK W. COLE	MID-CONTINENT PETROLEUM CORP
COMPLETED	04/25/45	12/02/75	02/28/30
SAMPLED	05/02/45	06/10/76	03/11/30
FORMATION	PENN-WAPANUCKA	MISS-JEFFERSON	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1751	3171	NOT GIVEN
WELLHEAD PRESSURE,PSIG	934	100	NOT GIVEN
OPEN FLOW, MCFD	50000	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	84.5	89.2	74.1
ETHANE	10.8	3.5	16.6
PROPANE	---	1.4	---
N-BUTANE	---	0.3	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.5	4.6	8.0
OXYGEN	0.8	0.0	0.6
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIIOXIDE	1.3	0.2	0.8
HELIUM	0.11	0.12	0.07
HEATING VALUE*	1050	1045	1048
SPECIFIC GRAVITY	0.635	0.626	0.681

	INDEX 5830 SAMPLE 1996	INDEX 5831 SAMPLE 14547	INDEX 5832 SAMPLE 1932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	LITTLE RIVER E	LITTLE RIVER E	MISSION
WELL NAME	A. E. WALKER NO. 4	JOHNNY WOLF NO. 3	DAVIS NO. 6
LOCATION	SEC. 5, T7N, R7E	SEC. 30, T8N, R6E	SEC. 7, T8N, R6E
OWNER	GYPSY OIL CO.	VIKING PETROLEUM CO.	ATLANTIC RICHFIELD CO.
COMPLETED	04/01/30	05/05/75	12/12/29
SAMPLED	04/18/30	12/10/75	02/03/30
FORMATION	PENN-CROMWELL	PENN-CROMWELL	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3218	3312	2886
WELLHEAD PRESSURE,PSIG	1200	470	755
OPEN FLOW, MCFD	100000	6903	3000
COMPONENT, MOLE PCT			
METHANE	81.9	83.9	75.1
ETHANE	12.6	5.4	22.2
PROPANE	---	2.4	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	4.8	6.3	2.4
OXYGEN	0.3	0.0	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	0.07	0.08	0.07
HEATING VALUE*	1055	1064	1159
SPECIFIC GRAVITY	0.644	0.658	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5833 SAMPLE 3681		INDEX 5834 SAMPLE 4126		INDEX 5835 SAMPLE 13447	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEMINOLE		SEMINOLE		SEMINOLE	
FIELD	SEMINOLE		SEMINOLE		WEWOKA NE	
WELL NAME	N. RUCK NO. 1		J. D. CAMBELL NO. 1		WORK B NO. 1	
LOCATION	SEC. 21, T10N, R7E		SEC. 21, T9N, R7E		SEC. 20, TAN, R8E	
OWNER	SHELL OIL CO.		PORTABLE DRILLING CORP.		GENERAL AMERICAN OIL CO.	
COMPLETED	08/--/43		04/02/46		11/19/71	
SAMPLED	10/13/43		10/25/46		10/13/72	
FORMATION	PENN-CROMWELL		PENN-		PENN-CROMWELL	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	3710		1932		3266	
WELLHEAD PRESSURE,PSIG	1100		740		500	
OPEN FLOW, MCFD	2000		6000		5286	
COMPONENT, MOLE PCT						
METHANE	51.5		79.5		77.2	
ETHANE	39.0		2.5		9.7	
PROPANE	---		---		5.2	
N-BUTANE	---		---		1.1	
ISOBUTANE	---		---		0.6	
N-PENTANE	---		---		0.3	
ISOPENTANE	---		---		0.2	
CYCLOPENTANE	---		---		0.1	
HEXANES PLUS	---		---		0.1	
NITROGEN	8.8		17.6		4.7	
OXYGEN	0.3		0.0		0.2	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.4		0.3		0.5	
HELIUM	0.20		0.14		0.07	
HEATING VALUE*	1221		850		1178	
SPECIFIC GRAVITY	0.790		0.642		0.719	

	INDEX 5836 SAMPLE 7727		INDEX 5837 SAMPLE 7729		INDEX 5838 SAMPLE 10634	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEQUOYAH		SEQUOYAH		SEQUOYAH	
FIELD	KINTA		KINTA		KINTA	
WELL NAME	REDLAND RANCH NO. 2		REDLAND RANCH NO. 3		M. J. RINEHART NO. 1	
LOCATION	SEC. 33, T10N, R25E		SEC. 34, T10N, R25E		SEC. 10, T10N, R26E	
OWNER	STEPHENS PRODUCTION CO.		STEPHENS PRODUCTION CO.		CONTINENTAL OIL CO.	
COMPLETED	01/06/60		08/05/60		03/16/66	
SAMPLED	10/11/60		10/11/60		06/29/66	
FORMATION	PENN-ATOKA		PENN-SPIRO & ATOKA		PENN-SPIRO	
GEOLOGIC PROVINCE CODE	345		345		345	
DEPTH, FEET	1645		5966		5626	
WELLHEAD PRESSURE,PSIG	405		1091		1200	
OPEN FLOW, MCFD	350		7500		5397	
COMPONENT, MOLE PCT						
METHANE	97.8		94.1		95.6	
ETHANE	1.1		2.1		1.6	
PROPANE	0.1		0.2		0.2	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	TRACE		TRACE		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	TRACE		TRACE		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.5		1.1		1.2	
OXYGEN	0.0		TRACE		0.2	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.2		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		2.1		1.2	
HELIUM	0.10		0.10		0.09	
HEATING VALUE*	1014		996		989	
SPECIFIC GRAVITY	0.560		0.590		0.580	

	INDEX 5839 SAMPLE 10897		INDEX 5840 SAMPLE 10919		INDEX 5841 SAMPLE 4674	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEQUOYAH		SEQUOYAH		STEPHENS	
FIELD	PAW PAW NE		PAW PAW NE		COMANCHE LAKE	
WELL NAME	IRENE DICKENS NO. 1		IRENE DICKENS NO. 1		PHILLIPS JENNETT NO. 1	
LOCATION	SEC. 29, T11N, R27E		SEC. 29, T11N, R27E		SEC. 25, T2S, R7W	
OWNER	SUN OIL CO.		SUN OIL CO.		PHILLIPS PET. CO.&KERR MCGEE	
COMPLETED	NOT GIVEN		11/15/66		11/18/48	
SAMPLED	03/02/67		04/05/67		03/25/49	
FORMATION	PENN-CROMWELL		PENN-CROMWELL		PENN-	
GEOLOGIC PROVINCE CODE	345		345		350	
DEPTH, FEET	5325		5325		2643	
WELLHEAD PRESSURE,PSIG	940		940		1104	
OPEN FLOW, MCFD	11300		11300		71185	
COMPONENT, MOLE PCT						
METHANE	96.6		96.8		69.4	
ETHANE	1.2		1.1		5.3	
PROPANE	0.1		0.1		3.2	
N-BUTANE	0.0		0.0		1.0	
ISOBUTANE	0.0		0.0		0.7	
N-PENTANE	0.0		0.0		0.2	
ISOPENTANE	0.0		0.0		0.6	
CYCLOPENTANE	0.0		0.0		0.1	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.7		0.6		19.2	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	1.3		1.3		0.2	
HELIUM	0.05		0.05		0.18	
HEATING VALUE*	1003		1003		973	
SPECIFIC GRAVITY	0.576		0.575		0.738	

	INDEX 5842 SAMPLE 10322		INDEX 5843 SAMPLE 13171		INDEX 5844 SAMPLE 635	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	CHAPE H		DUNCAN NE		DUNCAN W	
WELL NAME	SITZ EQUA NO. 1		JACKSON NO. 1		CLARKSTON NO. 1	
LOCATION	SEC. 1, T1N, R6W		SEC. 19, T1N, R7W		SEC. 30, T1N, R8W	
OWNER	ATLANTIC RICHFIELD		MCCULLOCH OIL CORP.		LONE STAR GAS CO.	
COMPLETED	11/03/65		03/10/72		09/--/20	
SAMPLED	12/18/65		03/24/72		08/07/21	
FORMATION	PENN-SPRINGER		PENN-DEESE		-SAND	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	2846		9138		2117	
WELLHEAD PRESSURE,PSIG	588		2408		240	
OPEN FLOW, MCFD	6400		4774		2170	
COMPONENT, MOLE PCT						
METHANE	95.8		72.0		78.5	
ETHANE	1.7		5.9		16.9	
PROPANE	0.3		3.6		---	
N-BUTANE	0.0		1.2		---	
ISOBUTANE	0.0		0.7		---	
N-PENTANE	0.0		0.3		---	
ISOPENTANE	0.0		0.4		---	
CYCLOPENTANE	0.0		0.3		---	
HEXANES PLUS	0.0		0.6		---	
NITROGEN	2.5		12.1		3.9	
OXYGEN	0.0		2.4		0.5	
ARGON	TRACE		0.1		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	TRACE		0.4		0.2	
HELIUM	1.19		2.9%		0.01	
HEATING VALUE*	1035		1064		1098	
SPECIFIC GRAVITY	0.576		0.750		0.659	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5845 SAMPLE 636	INDEX 5846 SAMPLE 638	INDEX 5847 SAMPLE 1285
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	DUNCAN W
WELL NAME	CARTER-HARDING NO. 2	CLARKSTON NO. 2	CLARK NO. 1
LOCATION	SEC. 30, T1N, R8W	SEC. 30, T1N, R8W	SEC. 25, T1S, R9W
OWNER	CARTER OIL CO.	LONE STAR GAS CO.	CARTER OIL CO.
COMPLETED	07/--/21	07/--/20	04/03/26
SAMPLED	08/07/21	08/07/21	07/19/26
FORMATION	-SAND	-SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1822	1740	2022
WELLHEAD PRESSURE,PSIG	700	250	600
OPEN FLOW, MCFD	27240	15375	36000
COMPONENT, MOLE PCT			
METHANE	89.8	86.8	38.1
ETHANE	10.0	10.1	13.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	2.4	47.2
OXYGEN	0.0	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.5
HELIUM	0.04	0.03	0.20
HEATING VALUE*	1089	1060	633
SPECIFIC GRAVITY	0.604	0.618	0.826

	INDEX 5848 SAMPLE 1744	INDEX 5849 SAMPLE 3787	INDEX 5850 SAMPLE 5631
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	DUNCAN W
WELL NAME	C. C. WORRELL NO. 5	HARRY BAKER NO. 1	JOHNSON E NO. 2
LOCATION	SEC. 19, T1S, R8W	SEC. 25, T1S, R9W	SEC. 7, T1S, R8W
OWNER	MOBIL OIL CORP.	T. H. MCCASLAND	WM. H. ATKINSON
COMPLETED	01/06/29	03/03/44	05/19/54
SAMPLED	04/13/29	04/15/44	05/29/54
FORMATION	NOT GIVEN	PENN-	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1490	2461	3028
WELLHEAD PRESSURE,PSIG	325	984	1250
OPEN FLOW, MCFD	12839	22340	2000
COMPONENT, MOLE PCT			
METHANE	70.1	81.2	89.2
ETHANE	18.9	6.5	3.7
PROPANE	---	---	0.3
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	10.7	11.5	6.3
OXYGEN	0.2	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.12	0.15	0.14
HEATING VALUE*	1049	939	987
SPECIFIC GRAVITY	0.696	0.637	0.604

	INDEX 5851 SAMPLE 12245	INDEX 5852 SAMPLE 12246	INDEX 5853 SAMPLE 2474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	EMPIRE-COMANCHE
WELL NAME	HAMMAN NO. 1	HAMMAN NO. 1	MYRTLE DARE NO. 1
LOCATION	SEC. 25, T1N, R8W	SEC. 25, T1N, R8W	SEC. 2, T2S, R8W
OWNER	L. E. JONES PRODUCTION CO.	L. E. JONES PRODUCTION CO.	CONTINENTAL OIL CO.
COMPLETED	02/04/70	02/04/70	01/29/32
SAMPLED	04/27/70	04/27/70	NOT GIVEN
FORMATION	PERM-NICHOLAS U	PERM-NICHOLAS L	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1433
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	495
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6282
COMPONENT, MOLE PCT			
METHANE	87.1	86.8	89.5
ETHANE	5.6	5.2	7.2
PROPANE	3.0	3.2	---
N-BUTANE	0.8	0.7	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	2.3	2.8	2.8
OXYGEN	TRACE	0.1	0.4
ARGON	0.0	0.0	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.04	0.04	0.09
HEATING VALUE*	1124	1123	1036
SPECIFIC GRAVITY	0.650	0.654	0.605

	INDEX 5854 SAMPLE 12331	INDEX 5855 SAMPLE 13170	INDEX 5856 SAMPLE 13797
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	HOPE SW	HOPE SW	HOPE SW
WELL NAME	WATTS NO. 1	MAYBERRY NO. 1	JACKSON NO. 1-26
LOCATION	SEC. 23, T1N, R7W	SEC. 23, T1N, R7W	SEC. 26, T1N, R7W
OWNER	PETROLEUM, INC.	MCCULLOCH OIL CORP.	MCCULLOCH OIL CORP.
COMPLETED	02/21/70	01/02/72	12/26/72
SAMPLED	07/22/70	03/26/72	10/31/73
FORMATION	PENN-WAGE U&L	PENN-SPRINGER	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7300	12137	12844
WELLHEAD PRESSURE,PSIG	1175	5953	900
OPEN FLOW, MCFD	4000	50302	100
COMPONENT, MOLE PCT			
METHANE	89.5	82.9	84.9
ETHANE	4.6	7.0	8.1
PROPANE	2.5	4.1	3.5
N-BUTANE	0.7	1.4	1.1
ISOBUTANE	0.4	0.9	0.5
N-PENTANE	0.2	0.5	0.3
ISOPENTANE	TRACE	0.8	0.3
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	1.0	0.2
NITROGEN	1.5	0.8	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.06	0.03	0.05
HEATING VALUE*	1114	1271	1186
SPECIFIC GRAVITY	0.634	0.727	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5857 SAMPLE 14987		INDEX 5858 SAMPLE 648		INDEX 5859 SAMPLE 649	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	HOPE, SW		LOCO DISTRICT		LOCO DISTRICT	
WELL NAME	CLARK NO. 1-15		CULVER NO. 1		MULLEN & ROBBISON	
LOCATION	SEC. 15, T1N, R7W		NOT GIVEN		, T3N, R5E	
OWNER	TESORO PETROLEUM CORP.		LONE STAR GAS CO.		LONE STAR GAS CO.	
COMPLETED	03/04/77		07/--/20		--/--/15	
SAMPLED	09/05/77		08/12/21		08/12/21	
FORMATION	PENN-HOXBAR		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	9062		1680		800	
WELLHEAD PRESSURE,PSIG	2762		190		210	
OPEN FLOW, MCFD	19397		7400		11272	
COMPONENT, MOLE PCT						
METHANE	90.4		88.1		90.3	
ETHANE	4.4		8.7		2.5	
PROPANE	2.2		---		---	
N-BUTANE	0.7		---		---	
ISOBUTANE	0.2		---		---	
N-PENTANE	0.2		---		---	
ISOPENTANE	0.2		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.2		---		---	
NITROGEN	1.0		3.0		6.9	
OXYGEN	0.4		0.0		0.2	
ARGON	TRACE		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.2		0.2		0.0	
HELIUM	0.07		0.03		0.21	
HEATING VALUE*	1113		1048		960	
SPECIFIC GRAVITY	0.632		0.612		0.594	

	INDEX 5860 SAMPLE 650		INDEX 5861 SAMPLE 1981		INDEX 5862 SAMPLE 3898	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	LOCO DISTRICT		LOCO DISTRICT		LOCO DISTRICT	
WELL NAME	ALLEN & GILBERT NO. 3		PAUL ANDREA NO. 1		P. H. PECK NO. 1-B	
LOCATION	, T3N, R5E		SEC. 8, T2S, R6W		SEC. 1, T3S, R6W	
OWNER	LONE STAR GAS CO.		MOBIL OIL CORP.		FAIR & BRIGHT	
COMPLETED	--/--/14		11/15/29		07/30/44	
SAMPLED	08/12/21		04/03/30		08/17/44	
FORMATION	NOT GIVEN		NOT GIVEN		PENN-	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	745		3008		1164	
WELLHEAD PRESSURE,PSIG	170		1080		370	
OPEN FLOW, MCFD	9527		40000		8000	
COMPONENT, MOLE PCT						
METHANE	80.6		77.9		78.0	
ETHANE	13.0		16.7		15.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	6.0		4.9		6.4	
OXYGEN	0.0		0.2		0.4	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.3		0.1	
HELIUM	0.17		0.13		0.07	
HEATING VALUE*	1049		1088		1059	
SPECIFIC GRAVITY	0.645		0.661		0.658	

	INDEX 5863 SAMPLE 12125		INDEX 5864 SAMPLE 11285		INDEX 5865 SAMPLE 12114	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	LOCO DISTRICT		MARLOW W		MARLOW SE	
WELL NAME	VIRGIL MCPHAIL NO. 1		W. M. HERVEY NO. 1		EDWARDS NO. 1	
LOCATION	SEC. 7, T2S, R6W		SEC. 16, T2N, R7W		SEC. 34, T2N, R7W	
OWNER	ANADARKO PRODUCTION CO.		GETTY OIL CO.		MACDONALD OIL CORP.	
COMPLETED	10/11/68		03/27/58		05/--/69	
SAMPLED	11/--/69		02/13/68		11/13/69	
FORMATION	PENN-NICHOLAS		PENN-WADE		PENN-BRISCOE	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	3565		8676		9300	
WELLHEAD PRESSURE,PSIG	1185		800		3000	
OPEN FLOW, MCFD	3671		1500		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	80.8		83.1		92.4	
ETHANE	5.1		6.6		3.6	
PROPANE	2.7		3.1		1.7	
N-BUTANE	0.7		1.1		0.5	
ISOBUTANE	0.4		0.3		0.1	
N-PENTANE	0.3		0.2		0.1	
ISOPENTANE	TRACE		0.3		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	9.4		4.1		0.8	
OXYGEN	TRACE		0.4		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.4		0.1	
HELIUM	0.18		0.05		0.03	
HEATING VALUE*	1044		1123		1088	
SPECIFIC GRAVITY	0.673		0.678		0.612	

	INDEX 5866 SAMPLE 11145		INDEX 5867 SAMPLE 11439		INDEX 5868 SAMPLE 11440	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	MARLOW W		MARLOW W		MARLOW W	
WELL NAME	MESSALL NO. 2		BRISCOE ESTATE NO. 1		SADLER NO. 2	
LOCATION	SEC. 2, T2N, R8W		SEC. 36, T2N, R8W		SEC. 36, T2N, R8W	
OWNER	BLACKWOOD & NICHOLS CO.		GULF OIL CO. U.S.		GULF OIL CO. U.S.	
COMPLETED	NOT GIVEN		NOT GIVEN		11/29/66	
SAMPLED	10/03/67		03/27/68		03/26/68	
FORMATION	PENN-HOXBAR		PENN-BRISCOE		PENN-CISCO U	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	8582		7732		5116	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		367		1367	
OPEN FLOW, MCFD	12900		3888		10000	
COMPONENT, MOLE PCT						
METHANE	86.8		90.1		89.7	
ETHANE	6.3		4.8		4.0	
PROPANE	2.9		2.2		1.9	
N-BUTANE	1.0		0.5		0.6	
ISOBUTANE	0.3		0.4		0.3	
N-PENTANE	0.2		0.2		0.3	
ISOPENTANE	0.3		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.4		0.2	
NITROGEN	1.5		0.8		2.7	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.1	
HELIUM	0.04		0.01		0.05	
HEATING VALUE*	1147		1128		1091	
SPECIFIC GRAVITY	0.659		0.636		0.635	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5869 SAMPLE 11441	INDEX 5870 SAMPLE 11442	INDEX 5871 SAMPLE 3547
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	MARLOW W	MARLOW W	NELLIE DISTRICT N
WELL NAME	BRISCOE, WILDER NO. 2	SADLER NO. 1	BALL NO. 1
LOCATION	SEC. 25, T2N, R8W	SEC. 36, T2N, R8W	SEC. 1, T1N, R9W
OWNER	GULF OIL CO. U.S.	GULF OIL CO. U.S.	CONTINENTAL OIL CO.
COMPLETED	12/09/60	12/01/59	03/11/27
SAMPLED	03/27/68	03/27/68	05/20/42
FORMATION	PENN-CISCO M	PENN-CISCO L	-GAS SAND
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6310	7128	1863
WELLHEAD PRESSURE,PSIG	1674	1378	525
OPEN FLOW, MCFD	3430	5700	8309
COMPONENT, MOLE PCT			
METHANE	88.4	82.7	79.8
ETHANE	4.2	4.0	15.1
PROPANE	2.2	2.3	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	3.0	7.1	4.2
OXYGEN	0.2	1.4	0.4
ARGON	TRACE	0.1	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.05	0.01	0.07
HEATING VALUE*	1096	1054	1079
SPECIFIC GRAVITY	0.642	0.674	0.652

	INDEX 5872 SAMPLE 3548	INDEX 5873 SAMPLE 9911	INDEX 5874 SAMPLE 10531
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NELLIE DISTRICT N	NELLIE DISTRICT N	NELLIE DISTRICT N
WELL NAME	RICHARDS NO. 1	J. T. NUNLEY NO. 1	ELIZIA NUNLEY UNIT NO. 1
LOCATION	SEC. 26, T2N, R9W	SEC. 27, T2N, R9W	SEC. 25, T2N, R9W
OWNER	LONE STAR GAS CO.	SUN OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/28/25	03/31/65	06/07/65
SAMPLED	05/20/42	06/02/65	04/22/66
FORMATION	PENN-CISCO	PENN-NELLIE	PENN-BRISCOE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1843	1840	6211
WELLHEAD PRESSURE,PSIG	428	650	2220
OPEN FLOW, MCFD	1700	600	6050
COMPONENT, MOLE PCT			
METHANE	81.3	88.3	87.3
ETHANE	14.8	4.0	6.3
PROPANE	---	1.8	2.6
N-BUTANE	---	0.6	0.8
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.3
NITROGEN	3.1	4.5	1.5
OXYGEN	0.5	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.09	0.10	0.04
HEATING VALUE*	1089	1058	1138
SPECIFIC GRAVITY	0.645	0.632	0.655

	INDEX 5875 SAMPLE 14888	INDEX 5876 SAMPLE 14612	INDEX 5877 SAMPLE 3428
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NEW HOPE	PALACINE	SHO-VEL-TUM
WELL NAME	HINES NO. 1	HARLEY NO. 1	T. PARKER NO. 1
LOCATION	SEC. 16, T1N, R7W	SEC. 9, T2S, R6W	SEC. 16, T1S, R5W
OWNER	MACK OIL CO.	WOODS PETROLEUM CORP.	SKELLY OIL CO.
COMPLETED	08/07/76	10/21/75	12/10/41
SAMPLED	01/21/77	03/10/76	05/21/42
FORMATION	PENN-HOXBAR	PENN-HOXBAR	-700 FOOT SAND
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9442	2745	736
WELLHEAD PRESSURE,PSIG	3225	936	100
OPEN FLOW, MCFD	3292	8156	3000
COMPONENT, MOLE PCT			
METHANE	87.9	83.4	93.8
ETHANE	5.3	6.3	4.3
PROPANE	3.0	3.0	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.3	0.7	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.6	4.8	1.0
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.06	0.07	0.07
HEATING VALUE*	1139	1112	1027
SPECIFIC GRAVITY	0.654	0.671	0.585

	INDEX 5878 SAMPLE 3549	INDEX 5879 SAMPLE 3550	INDEX 5880 SAMPLE 3551
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	SIMPSON NO. 10	WADE NO. 1A	HEFNER NO. 18
LOCATION	SEC. 11, T1N, R5W	SEC. 12, T1N, R5W	SEC. 12, T1N, R5W
OWNER	CLARK AND CORADEN DRLG. CO.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	01/18/38	10/21/37	05/07/42
SAMPLED	05/20/42	05/20/42	05/20/42
FORMATION	PENN-DEESE	PENN-DEESE	PENN-DEESE L
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3678	3600	5355
WELLHEAD PRESSURE,PSIG	750	600	1860
OPEN FLOW, MCFD	12500	7200	13120
COMPONENT, MOLE PCT			
METHANE	72.5	68.4	68.8
ETHANE	20.0	25.3	28.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.9	5.6	2.5
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.09	0.10
HEATING VALUE*	1093	1146	1200
SPECIFIC GRAVITY	0.685	0.706	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5881 SAMPLE 3552	INDEX 5882 SAMPLE 3553	INDEX 5883 SAMPLE 3556
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	HEFNER NO. 2	ROBBERSON NO. 4	FRENSLEY NO. 3
LOCATION	SEC. 12, T1N, R5W	SEC. 35, T1S, R5W	SEC. 36, T1S, R5W
OWNER	HELMERICH & PAYNE, INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	12/21/40	06/08/41	01/18/42
SAMPLED	05/20/42	05/21/42	05/21/42
FORMATION	PENN-OEESE	ORDO-BROMIDE	-1200 FOOT SAND
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5506	7060	1268
WELLHEAD PRESSURE,PSIG	1250	520	345
OPEN FLOW, MCFD	4507	1597	2500
COMPONENT, MOLE PCT			
METHANE	72.8	76.1	95.2
ETHANE	20.1	19.4	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	3.8	2.1
OXYGEN	0.4	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.08	0.09	0.11
HEATING VALUE*	1169	1119	998
SPECIFIC GRAVITY	0.687	0.669	0.578

	INDEX 5884 SAMPLE 3774	INDEX 5885 SAMPLE 4417	INDEX 5886 SAMPLE 4421
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	EGGLESON NO. 1	HATTIE HARRELL NO. 1-A	ORAH CREEL NO. 1
LOCATION	SEC. 30, T1N, R5W	SEC. 3, T1N, R5W	SEC. 5, T1S, R5W
OWNER	T. H. MCCASLAND	TEXACO INC.	W. L. HERNSTADT
COMPLETED	09/15/43	09/09/47	09/19/47
SAMPLED	04/17/44	01/06/48	01/05/48
FORMATION	PENN-	-CULBERSON	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1691	5325	6265
WELLHEAD PRESSURE,PSIG	550	NOT GIVEN	1350
OPEN FLOW, MCFD	11000	10000	10908
COMPONENT, MOLE PCT			
METHANE	96.2	8.3	89.1
ETHANE	2.4	89.5	9.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	1.1	0.8
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	TRACE	0.04	0.05
HEATING VALUE*	1018	1688	1069
SPECIFIC GRAVITY	0.574	1.011	0.608

	INDEX 5887 SAMPLE 4731	INDEX 5888 SAMPLE 5415	INDEX 5889 SAMPLE 9768
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	L. G. VOORHEES NO. 2	IRENE RIVIERE NO. 1	DENNIS NO. 3
LOCATION	SEC. 4, T1S, R5W	SEC. 9, T1S, R5W	SEC. 32, T2N, R5W
OWNER	CARTER OIL CO.	AMERADA HESS CORP.	COASTAL STATES GAS PROD. CO.
COMPLETED	10/03/48	12/01/52	12/01/64
SAMPLED	05/10/49	03/13/53	02/25/65
FORMATION	PENN-SPRINGER	NOT GIVEN	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6604	5220	7346
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1204	1050
OPEN FLOW, MCFD	5717	7117	1002
COMPONENT, MOLE PCT			
METHANE	88.6	92.3	90.5
ETHANE	5.5	4.1	5.2
PROPANE	2.2	1.2	1.9
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.5	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.1	1.1	0.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.05	0.07	0.04
HEATING VALUE*	1109	1074	1113
SPECIFIC GRAVITY	0.639	0.607	0.630

	INDEX 5890 SAMPLE 9769	INDEX 5891 SAMPLE 9770	INDEX 5892 SAMPLE 9771
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	DENNIS NO. 3	DENNIS NO. 3	DENNIS NO. 3
LOCATION	SEC. 32, T2N, R5W	SEC. 32, T2N, R5W	SEC. 32, T2N, R5W
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	12/01/64	12/01/64	12/01/64
SAMPLED	02/25/65	02/25/65	02/25/65
FORMATION	MISS-MARKHAM	PENN-SIMS	PENN-HUMPHREYS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8660	9616	9258
WELLHEAD PRESSURE,PSIG	1750	350	1850
OPEN FLOW, MCFD	7913	3692	749
COMPONENT, MOLE PCT			
METHANE	87.1	89.3	89.3
ETHANE	6.1	4.7	4.9
PROPANE	2.8	2.1	2.4
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	1.0	1.3	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.04	0.07	0.07
HEATING VALUE*	1169	1131	1131
SPECIFIC GRAVITY	0.646	0.646	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5893 SAMPLE 10295	INDEX 5894 SAMPLE 11084	INDEX 5895 SAMPLE 11085
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	CROSHIE MUDGE UNIT NO. 4	BUCK A NO. 1	BUCK A NO. 1
LOCATION	SEC. 23, T1S, R5W	SEC. 27, T1S, R5W	SEC. 27, T1S, R5W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	08/23/65	04/23/67	04/23/67
SAMPLED	11/29/65	08/31/67	08/31/67
FORMATION	MISS-SYCAMORE	PENN-SIMS	PENN-SIMS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3924	3242	3650
WELLHEAD PRESSURE,PSIG	1502	1400	1480
OPEN FLOW, MCFD	1000	11602	6186
COMPONENT, MOLE PCT			
METHANE	87.4	94.0	88.1
ETHANE	6.3	3.2	5.9
PROPANE	2.3	0.5	2.7
N-BUTANE	0.8	0.1	0.7
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.2	1.4	1.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	TRACE
HELIUM	0.03	0.04	0.05
HEATING VALUE*	1120	1052	1132
SPECIFIC GRAVITY	0.654	0.596	0.646

	INDEX 5896 SAMPLE 15243	INDEX 5897 SAMPLE 1743	INDEX 5898 SAMPLE 14231
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM DISTRICT	SHOLEM ALECHEM
WELL NAME	FRENSLEY-MARTIN NO. 1	M. GREEN NO. 1	DENVER NEWMAN NO. 1
LOCATION	SEC. 36, T1S, R5W	SEC. 13, T1S, R4W	SEC. 22, T1N, R4W
OWNER	GETTY OIL CO.	MOBIL OIL CORP.	HELMERICH & PAYNE, INC.
COMPLETED	12/22/77	02/19/29	10/02/74
SAMPLED	03/21/78	04/13/29	11/21/74
FORMATION	DEVO-HUNTON	PENN-DEESE	MISS-GOODWIN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4290	2515	6514
WELLHEAD PRESSURE,PSIG	972	600	1714
OPEN FLOW, MCFD	5202	7381	2129
COMPONENT, MOLE PCT			
METHANE	84.5	72.2	90.2
ETHANE	7.1	16.6	5.2
PROPANE	3.1	---	2.0
N-BUTANE	0.8	---	0.5
ISOBUTANE	0.2	---	0.3
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	2.5	10.8	1.1
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.2	0.3	0.1
HELIUM	0.04	0.12	0.09
HEATING VALUE*	1120	1029	1107
SPECIFIC GRAVITY	0.669	0.686	0.628

	INDEX 5899 SAMPLE 14232	INDEX 5900 SAMPLE 11299	INDEX 5901 SAMPLE 11300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHOLEM ALECHEM	STAGE STAND NE	STAGE STAND NE
WELL NAME	DENVER NEWMAN NO. 1	J.K. CALLOWAY UNIT NO. 1	V.J. CARSON NO. 1
LOCATION	SEC. 22, T1N, R4W	SEC. 9, T1N, R8W	SEC. 9, T1N, R8W
OWNER	HELMERICH & PAYNE, INC.	AMERADA HESS CORP.	AMERADA HESS CORP.
COMPLETED	10/02/74	09/08/56	01/17/56
SAMPLED	11/21/74	02/19/68	02/19/68
FORMATION	MISS-SYCAMORE	PENN-CISCO & PONTOTOC	PENN-ROWE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8522	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1454	255	225
OPEN FLOW, MCFD	NOT GIVEN	270	337
COMPONENT, MOLE PCT			
METHANE	77.0	82.8	78.8
ETHANE	10.3	5.5	5.5
PROPANE	5.6	2.9	3.5
N-BUTANE	1.5	1.1	1.1
ISOBUTANE	0.5	0.5	1.0
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	3.4	6.3	9.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.1
HELIUM	0.07	0.09	0.08
HEATING VALUE*	1213	1102	1099
SPECIFIC GRAVITY	0.728	0.679	0.707

	INDEX 5902 SAMPLE 11375	INDEX 5903 SAMPLE 11408	INDEX 5904 SAMPLE 11409
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STAGE STAND SE	STAGE STAND SE	STAGE STAND SE
WELL NAME	NORRIS TRUST NO. 1	DEVINE NO. 1	DEVINE NO. 1
LOCATION	SEC. 30, T1N, R7W	SEC. 22, T1N, R8W	SEC. 22, T1N, R8W
OWNER	TEXACO INC.	HERMAN GEORGE KAISER	HERMAN GEORGE KAISER
COMPLETED	03/01/65	NOT GIVEN	NOT GIVEN
SAMPLED	03/15/68	03/25/68	03/25/68
FORMATION	PENN-MEDRANO	PENN-DES MOINES	PENN-MISSOURI
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7312	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2305	920	825
OPEN FLOW, MCFD	869	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	86.2	87.4
ETHANE	5.3	7.6	6.4
PROPANE	3.0	3.2	3.0
N-BUTANE	0.9	1.0	0.7
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	0.9	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.02	0.03
HEATING VALUE*	1127	1164	1142
SPECIFIC GRAVITY	0.654	0.661	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5905 SAMPLE 11432	INDEX 5906 SAMPLE 4006	INDEX 5907 SAMPLE 13594
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STAGE STAND SE	VELMA W	WILDCAT
WELL NAME	S. J. PINSON NO. 1	FRENSLEY C-114 NO. 1	PRICE NO. 2
LOCATION	SEC. 30, T1N, R7W	SEC. 12, T1N, R6W	SEC. 25, T2N, R6W
OWNER	EASON OIL CO.	CARTER OIL CO.	WHITE SHIELD OIL & GAS CORP.
COMPLETED	NOT GIVEN	02/23/45	08/09/72
SAMPLED	04/05/68	04/21/45	04/30/73
FORMATION	PENN-DEESE	NOT GIVEN	PENN-MISS COMMINGLED
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	913	7944
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	1125
OPEN FLOW, MCFD	NOT GIVEN	2800	500
COMPONENT, MOLE PCT			
METHANE	87.5	86.5	87.8
ETHANE	4.9	8.3	5.7
PROPANE	2.8	---	3.0
N-BUTANE	0.9	---	0.8
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.3	---	0.3
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	2.5	4.3	1.1
OXYGEN	0.0	0.5	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.05	0.06	0.04
HEATING VALUE*	1123	1025	1149
SPECIFIC GRAVITY	0.652	0.618	0.656

	INDEX 5908 SAMPLE 15602	INDEX 5909 SAMPLE 5564	INDEX 5910 SAMPLE 5973
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	NEFF "D" NO. 2X	J. H. COOK NO. 1	WESTMORELAND NO. C-1
LOCATION	SEC. 6, T2N, R18ECM	SEC. 27, T1N, R19ECM	SEC. 26, T1N, R18ECM
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	TEXACO INC.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	09/16/78	10/16/53	11/01/55
SAMPLED	04/23/79	11/20/53	11/29/55
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6373	6812	6632
WELLHEAD PRESSURE,PSIG	360	1417	1014
OPEN FLOW, MCFD	1000	22250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.8	86.4	92.9
ETHANE	6.2	5.9	2.0
PROPANE	4.5	3.5	0.9
N-BUTANE	1.4	0.9	0.1
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	0.4	0.2	0.0
ISOPENTANE	0.4	0.1	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	2.4	2.4	3.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.17	0.19	0.27
HEATING VALUE*	1190	1127	1008
SPECIFIC GRAVITY	0.696	0.655	0.589

	INDEX 5911 SAMPLE 6128	INDEX 5912 SAMPLE 6134	INDEX 5913 SAMPLE 6351
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	FLETCHER NO. 2-25	F. B. REUSZER	JOLLIFFE ESTATE NO. 1
LOCATION	SEC. 25, T3N, R18ECM	SEC. 8, T1N, R19ECM	SEC. 4, T2N, R18ECM
OWNER	PANHANDLE EASTERN PIPE LINE	CARTER OIL CO.	CARTER OIL CO.
COMPLETED	05/14/56	05/22/56	01/07/57
SAMPLED	08/15/56	08/24/56	07/08/57
FORMATION	PENN-MORROW	PENN-	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6172	6666	6246
WELLHEAD PRESSURE,PSIG	1389	NOT GIVEN	1490
OPEN FLOW, MCFD	235913	76000	80000
COMPONENT, MOLE PCT			
METHANE	84.9	83.4	94.2
ETHANE	5.6	5.9	0.5
PROPANE	3.8	3.9	0.6
N-BUTANE	1.1	1.1	0.3
ISOBUTANE	0.6	0.7	0.2
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.4	0.2
HEXANES PLUS	0.4	1.0	0.5
NITROGEN	2.4	2.3	2.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.18	0.17	0.24
HEATING VALUE*	1170	1209	1042
SPECIFIC GRAVITY	0.684	0.706	0.604

	INDEX 5914 SAMPLE 6427	INDEX 5915 SAMPLE 6504	INDEX 5916 SAMPLE 6766
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	BE&SLEY NO. 2-23	JOLLIFFE UNIT NO. 1	LAMASTER NO. 1-31
LOCATION	SEC. 23, T3N, R17ECM	SEC. 27, T3N, R18ECM	SEC. 31, T1N, R19ECM
OWNER	PANHANDLE EASTERN PIPELINE	CARTER OIL CO.	HORIZON OIL & GAS CO.
COMPLETED	08/08/57	11/25/57	05/10/58
SAMPLED	10/31/57	02/17/58	07/18/58
FORMATION	PENN-MORROW U	PENN-MORROW U	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6205	6330	7411
WELLHEAD PRESSURE,PSIG	1235	1310	1916
OPEN FLOW, MCFD	63500	70000	8100
COMPONENT, MOLE PCT			
METHANE	88.9	86.1	95.4
ETHANE	6.1	5.8	2.3
PROPANE	3.8	3.6	0.7
N-BUTANE	1.0	0.9	0.2
ISOBUTANE	0.6	0.4	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.6	2.2	0.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.20	0.04
HEATING VALUE*	1108	1132	1053
SPECIFIC GRAVITY	0.672	0.658	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5917 SAMPLE 7408	INDEX 5918 SAMPLE 7430	INDEX 5919 SAMPLE 12177
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	LITTAU NO. 1-25	O. C. FLOWERS NO. 1-34	VOTH A NO. 1
LOCATION	SEC. 25, T1N, R19ECM	SEC. 34, T1N, R19ECM	SEC. 20, T3N, R18ECM
OWNER	HORIZON OIL & GAS CO.	MAYFLO OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	05/19/59	01/--/60	09/12/69
SAMPLED	02/18/60	03/09/60	01/27/70
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7202	6887	6328
WELLHEAD PRESSURE,PSIG	1987	1245	682
OPEN FLOW, MCFD	1500	28500	10853
COMPONENT, MOLE PCT			
METHANE	88.9	85.8	83.8
ETHANE	4.9	6.0	6.0
PROPANE	2.9	3.6	4.5
N-BUTANE	0.8	1.0	1.0
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.1	2.1	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.10	0.10	0.16
HEATING VALUE*	1139	1148	1159
SPECIFIC GRAVITY	0.649	0.666	0.681

	INDEX 5920 SAMPLE 12372	INDEX 5921 SAMPLE 12373	INDEX 5922 SAMPLE 12394
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	FLETCHER NO. 2	BEASLEY NO. 1-B	NEFF NO. 1-36
LOCATION	SEC. 25, T3N, R17ECM	SEC. 23, T3N, R17ECM	SEC. 36, T3N, R17ECM
OWNER	PANHANDLE EASTERN PIPELINE	PANHANDLE EASTERN PIPELINE	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	05/14/57	08/08/57	01/05/66
SAMPLED	08/21/70	08/21/70	08/25/70
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6200	6253	NOT GIVEN
WELLHEAD PRESSURE,PSIG	726	507	986
OPEN FLOW, MCFD	25515	14587	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	83.7	91.0
ETHANE	6.0	6.1	3.2
PROPANE	4.5	4.5	1.6
N-BUTANE	1.3	1.2	0.6
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	2.9	2.4
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.16	0.15	0.13
HEATING VALUE*	1177	1172	1075
SPECIFIC GRAVITY	0.689	0.689	0.623

	INDEX 5923 SAMPLE 12412	INDEX 5924 SAMPLE 12908	INDEX 5925 SAMPLE 15625
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAPLE N
WELL NAME	BEASLEY NO. 1	GRAHAM NO. A-3	DAISY NO. 1
LOCATION	SEC. 35, T3N, R17ECM	SEC. 31, T3N, R18ECM	SEC. 31, T2N, R17ECM
OWNER	PETROLEUM, INC.	ANADARKO PRODUCTION CO.	SOUTHLAND ROYALTY CO.
COMPLETED	06/30/66	NOT GIVEN	05/12/79
SAMPLED	09/06/70	07/23/71	10/11/79
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6442	NOT GIVEN	6711
WELLHEAD PRESSURE,PSIG	728	574	1250
OPEN FLOW, MCFD	4289	NOT GIVEN	800
COMPONENT, MOLE PCT			
METHANE	81.9	85.7	91.7
ETHANE	5.6	5.5	3.2
PROPANE	5.2	4.0	1.6
N-BUTANE	1.5	0.9	0.4
ISOBUTANE	1.1	0.6	0.3
N-PENTANE	0.6	0.3	0.1
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.7	0.2	0.2
NITROGEN	2.7	2.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.16	0.17	0.14
HEATING VALUE*	1235	1144	1078
SPECIFIC GRAVITY	0.722	0.666	0.618

	INDEX 5926 SAMPLE 6532	INDEX 5927 SAMPLE 7756	INDEX 5928 SAMPLE 7856
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE	CARTHAGE DISTRICT NE	CARTHAGE DISTRICT NE
WELL NAME	REISS NO. 1	BESSIE SHRAUNER UNIT NO. 1	QUIGLEY NO. 1
LOCATION	SEC. 11, T5N, R10ECM	SEC. 13, T6N, R10ECM	SEC. 25, T6N, R10ECM
OWNER	PANHANDLE EASTERN PIPELINE	TEXACO INC.	PETROLEUM INC.
COMPLETED	12/16/57	06/02/60	12/31/60
SAMPLED	03/24/58	11/03/60	02/13/61
FORMATION	PENN-MORROW U	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4455	2958	3042
WELLHEAD PRESSURE,PSIG	1115	420	435
OPEN FLOW, MCFD	NOT GIVEN	2930	6500
COMPONENT, MOLE PCT			
METHANE	71.3	65.4	66.6
ETHANE	5.2	6.3	6.4
PROPANE	3.3	3.6	3.5
N-BUTANE	0.8	0.8	1.1
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	17.5	22.3	19.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.80	0.70	0.70
HEATING VALUE*	959	923	978
SPECIFIC GRAVITY	0.710	0.736	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5929 SAMPLE 6420	INDEX 5930 SAMPLE 6445	INDEX 5931 SAMPLE 6870
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	MCCLANAHAN NO. 2-32	FINCHEM NO. 1	MILLER NO. 1
LOCATION	SEC. 32, T6N, R12ECM	SEC. 27, T6N, R10ECM	SEC. 18, T6N, R10ECM
OWNER	PANHANDLE EASTERN PIPELINE	GRAHAM MICHAELIS DRLG. CO.	SIERRA PETROLEUM CO., INC.
COMPLETED	07/27/57	08/11/58	09/20/58
SAMPLED	10/16/57	10/25/58	11/11/58
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-PURDY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5689	4442	4310
WELLHEAD PRESSURE,PSIG	1339	1117	1050
OPEN FLOW, MCFD	150567	50	23
COMPONENT, MOLE PCT			
METHANE	80.9	70.5	78.2
ETHANE	7.1	5.7	6.4
PROPANE	4.6	4.7	3.6
N-BUTANE	1.1	1.8	0.6
ISOBUTANE	0.4	1.1	0.6
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.5	0.8	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.8	0.1
NITROGEN	4.6	13.1	9.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.60	0.40
HEATING VALUE*	1147	1140	1058
SPECIFIC GRAVITY	0.691	0.774	0.686

	INDEX 5932 SAMPLE 7228	INDEX 5933 SAMPLE 7353	INDEX 5934 SAMPLE 7643
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	DENNING NO. 1	BOALDIN	GLODEN NO. 1
LOCATION	SEC. 30, T6N, R11ECM	SEC. 17, T6N, R10ECM	SEC. 20, T6N, R11ECM
OWNER	PETROLEUM, INC.	PANHANDLE EASTERN PIPELINE	EDWIN L. COX
COMPLETED	05/28/58	12/10/58	10/--/59
SAMPLED	10/01/59	01/19/60	08/12/60
FORMATION	PENN-PURDY	PENN-KEYES	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4503	4580	3000
WELLHEAD PRESSURE,PSIG	1108	834	450
OPEN FLOW, MCFD	4000	37120	2900
COMPONENT, MOLE PCT			
METHANE	72.5	76.4	66.3
ETHANE	6.2	3.9	6.7
PROPANE	4.7	3.2	4.1
N-BUTANE	1.1	0.9	1.1
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	13.3	12.1	20.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.70	1.70	0.70
HEATING VALUE*	1051	1007	968
SPECIFIC GRAVITY	0.722	0.689	0.743

	INDEX 5935 SAMPLE 7711	INDEX 5936 SAMPLE 7774	INDEX 5937 SAMPLE 7893
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	ROOFNER NO. A-1	TUCKER NO. 1-18	REISS A
LOCATION	SEC. 29, T6N, R11ECM	SEC. 18, T6N, R11ECM	SEC. 27, T6W, R11ECM
OWNER	CITIES SERVICE OIL CO.	GRAHAM-MICHAELIS DRLG.CO.	CITIES SERVICE OIL CO.
COMPLETED	07/26/60	04/25/60	01/07/61
SAMPLED	10/17/60	11/15/60	05/01/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3018	2980	3101
WELLHEAD PRESSURE,PSIG	414	420	422
OPEN FLOW, MCFD	11000	12422	7000
COMPONENT, MOLE PCT			
METHANE	63.0	65.1	60.8
ETHANE	6.0	6.4	6.0
PROPANE	3.3	3.7	3.2
N-BUTANE	1.0	1.1	0.9
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	23.7	21.6	27.3
OXYGEN	0.9	TRACE	0.0
ARGON	2.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.70	0.70	0.70
HEATING VALUE*	904	955	877
SPECIFIC GRAVITY	0.752	0.748	0.759

	INDEX 5938 SAMPLE 7894	INDEX 5939 SAMPLE 8042	INDEX 5940 SAMPLE 8560
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	DENNEY	WELSH B NO. 1	BOALDIN NO. 1-20
LOCATION	SEC. 21, T6N, R11ECM	SEC. 21, T6N, R10ECM	SEC. 20, T6N, R10ECM
OWNER	CITIES SERVICE OIL CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	01/10/61	07/27/60	05/02/62
SAMPLED	05/01/61	06/28/61	05/17/62
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3008	2922	4572
WELLHEAD PRESSURE,PSIG	423	430	778
OPEN FLOW, MCFD	5800	2181	6079
COMPONENT, MOLE PCT			
METHANE	65.8	63.0	75.9
ETHANE	6.3	6.4	4.1
PROPANE	4.4	5.6	2.8
N-BUTANE	1.0	1.1	0.9
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	21.1	23.5	12.7
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.2	0.7
HELIUM	1.70	0.70	1.69
HEATING VALUE*	965	935	998
SPECIFIC GRAVITY	0.742	0.758	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5941 SAMPLE 8904	INDEX 5942 SAMPLE 14420	INDEX 5943 SAMPLE 5917
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE NE	DAGUE
WELL NAME	ORVILLA HIGGINS NO. 2-25	ETTA NILES NO. 4	BURDGE NO. 2
LOCATION	SEC. 25, T6N, R11ECM	SEC. 32, T6N, R10ECM	SEC. 20, T6N, R16ECM
OWNER	HAMILTON BROS., INC.	MAURICE L. BROWN CO.	REPUBLIC NATURAL GAS CO.
COMPLETED	NOT GIVEN	11/09/74	NOT GIVEN
SAMPLED	03/22/63	07/26/75	08/18/55
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4605	6484
WELLHEAD PRESSURE,PSIG	NOT GIVEN	427	1685
OPEN FLOW, MCFD	NOT GIVEN	5568	21000
COMPONENT, MOLE PCT			
METHANE	78.6	76.7	89.6
ETHANE	6.1	4.1	3.3
PROPANE	4.1	0.7	1.6
N-BUTANE	1.3	0.1	0.5
ISOBUTANE	0.4	0.1	0.3
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.3	TRACE	0.3
NITROGEN	7.5	12.2	3.4
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	5.1	0.3
HELIUM	0.40	0.92	0.19
HEATING VALUE*	1106	880	1067
SPECIFIC GRAVITY	0.704	0.683	0.629

	INDEX 5944 SAMPLE 11166	INDEX 5945 SAMPLE 15612	INDEX 5946 SAMPLE 9897
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	DAGUE SE	DAGUE SE	DOMBEY NW
WELL NAME	MATTER NO. 1-9	FISCHER NO. 1	TEAGARDEN NO. 1
LOCATION	SEC. 9, T5N, R16ECM	SEC. 27, T5N, R16ECM	SEC. 35, T5N, R19ECM
OWNER	CABOT CORP.	CABOT CORP.	AMARILLO NATURAL GAS CO.
COMPLETED	NOT GIVEN	08/15/78	03/08/65
SAMPLED	10/12/67	04/30/79	05/19/65
FORMATION	PENN-KEYES	PENN-KEYES	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6477	6484	6814
WELLHEAD PRESSURE,PSIG	1320	1338	1620
OPEN FLOW, MCFD	2000	9855	4621
COMPONENT, MOLE PCT			
METHANE	87.0	94.2	74.3
ETHANE	3.9	2.5	3.4
PROPANE	1.9	0.9	4.7
N-BUTANE	0.5	0.3	0.8
ISOBUTANE	0.4	0.1	TRACE
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	5.0	1.1	1.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	14.6
HELIUM	0.20	0.09	0.17
HEATING VALUE*	1063	1058	9890
SPECIFIC GRAVITY	0.645	0.598	0.789

	INDEX 5947 SAMPLE 12703	INDEX 5948 SAMPLE 5686	INDEX 5949 SAMPLE 6428
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA N	EVA NW	EVA NW
WELL NAME	INTERSTATE CATTLE&LOAN NO. 1	KELLEY NO. 9	KELLEY NO. 1
LOCATION	SEC. 29, T5N, R11ECM	SEC. 2, T4N, R10ECM	SEC. 2, T4N, R10ECM
OWNER	SHENANDOAH OIL CORP.	UNITED PRODUCING CO., INC.	ASHLAND OIL INC.
COMPLETED	07/04/69	02/12/54	09/02/53
SAMPLED	03/04/71	09/08/54	11/06/57
FORMATION	PENN-KEYES	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4753	2933	4430
WELLHEAD PRESSURE,PSIG	473	500	NOT GIVEN
OPEN FLOW, MCFD	1187	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.6	45.5	46.2
ETHANE	4.4	4.8	4.9
PROPANE	3.2	3.2	2.7
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	20.0	43.6	43.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.70	0.91	0.90
HEATING VALUE*	942	695	686
SPECIFIC GRAVITY	0.725	0.816	0.811

	INDEX 5950 SAMPLE 6429	INDEX 5951 SAMPLE 6430	INDEX 5952 SAMPLE 6431
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA NW	EVA NW	EVA NW
WELL NAME	KELLEY NO. 4	KELLEY NO. 9	KELLEY NO. 5
LOCATION	SEC. 2, T4N, R10ECM	SEC. 2, T4N, R10ECM	SEC. 11, T4N, R10ECM
OWNER	ASHLAND OIL INC.	ASHLAND OIL INC.	ASHLAND OIL INC.
COMPLETED	12/17/53	02/16/54	01/05/54
SAMPLED	11/06/57	11/06/57	11/05/57
FORMATION	PENN-MORROW	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4425	2933	4424
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	403
OPEN FLOW, MCFD	NOT GIVEN	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.6	45.0	74.9
ETHANE	14.2	5.4	4.4
PROPANE	19.5	3.5	2.9
N-BUTANE	4.5	1.0	0.7
ISOBUTANE	2.9	0.4	0.4
N-PENTANE	1.0	0.3	0.1
ISOPENTANE	0.6	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.2	TRACE
NITROGEN	2.8	42.8	15.5
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.90	0.60
HEATING VALUE*	1651	726	963
SPECIFIC GRAVITY	0.989	0.829	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5953 SAMPLE 6432		INDEX 5954 SAMPLE 6433		INDEX 5955 SAMPLE 6434	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	EVA NW		EVA NW		EVA NW	
WELL NAME	KELLEY NO. 6		KELLEY NO. 5		KELLEY NO. 4	
LOCATION	SEC. 11, T4N, R10ECM		SEC. 11, T4N, R10ECM		SEC. 2, T4N, R10ECM	
OWNER	ASHLAND OIL INC.		ASHLAND OIL INC.		ASHLAND OIL INC.	
COMPLETED	06/19/59		02/23/59		NOT GIVEN	
SAMPLED	11/05/57		11/06/57		11/06/57	
FORMATION	PENN-CHEROKEE		PENN-KEYES		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4020		4668		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	704		900		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	61.6		64.9		51.1	
ETHANE	7.9		4.3		13.1	
PROPANE	4.5		2.8		20.2	
N-BUTANE	1.1		0.7		6.6	
ISOBUTANE	0.5		0.4		3.8	
N-PENTANE	0.3		0.1		1.2	
ISOPENTANE	0.1		0.2		1.4	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.2		0.1		0.6	
NITROGEN	23.0		24.5		1.3	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.5		0.1	
HELIUM	0.60		1.50		0.01	
HEATING VALUE*	967		862		1778	
SPECIFIC GRAVITY	0.772		0.730		1.054	

	INDEX 5956 SAMPLE 6435		INDEX 5957 SAMPLE 7155		INDEX 5958 SAMPLE 7569	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	EVA NW		EVA NW		EVA NW	
WELL NAME	KELLEY NO. 10		BURNS NO. 1		J. C. WHITE NO. 1	
LOCATION	SEC. 11, T4N, R10ECM		SEC. 15, T4N, R10ECM		SEC. 15, T4N, R10ECM	
OWNER	ASHLAND OIL INC.		PARKER PETROLEUM CO.		W. C. MCBRIDE, INC.	
COMPLETED	12/04/56		05/15/56		02/29/60	
SAMPLED	11/06/57		08/--/59		05/18/60	
FORMATION	PENN-TOPEKA		PENN-KELLY		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2930		4425		4250	
WELLHEAD PRESSURE,PSIG	489		727		960	
OPEN FLOW, MCFD	3360		11500		4130	
COMPONENT, MOLE PCT						
METHANE	52.1		73.7		77.4	
ETHANE	5.2		3.9		5.7	
PROPANE	3.1		2.6		2.5	
N-BUTANE	5.8		0.6		0.6	
ISOBUTANE	0.3		0.4		0.6	
N-PENTANE	0.3		TRACE		0.1	
ISOPENTANE	0.3		0.4		0.3	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	33.8		17.3		11.7	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.80		0.60		0.70	
HEATING VALUE*	939		944		1014	
SPECIFIC GRAVITY	0.848		0.696		0.683	

	INDEX 5959 SAMPLE 9969		INDEX 5960 SAMPLE 10050		INDEX 5961 SAMPLE 10051	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	EVA S		EVA SE		EVA SE	
WELL NAME	EGGERS NO. 1		COON A NO. 1		COON A NO. 1	
LOCATION	SEC. 5, T3N, R11ECM		SEC. 17, T3N, R12ECM		SEC. 17, T3N, R12ECM	
OWNER	GULF OIL CO.-U.S.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	07/29/64		12/29/64		12/28/64	
SAMPLED	07/09/65		08/06/65		08/16/65	
FORMATION	PENN-MARMATON		PENN-CHEROKEE		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4618		5313		6316	
WELLHEAD PRESSURE,PSIG	420		1257		1187	
OPEN FLOW, MCFD	6390		5800		2600	
COMPONENT, MOLE PCT						
METHANE	77.0		78.3		75.5	
ETHANE	5.8		7.9		6.5	
PROPANE	3.2		4.2		3.5	
N-BUTANE	0.8		1.0		1.3	
ISOBUTANE	0.4		0.6		0.7	
N-PENTANE	0.3		0.2		0.5	
ISOPENTANE	TRACE		0.2		0.4	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.2		0.2		0.7	
NITROGEN	11.8		7.0		10.2	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.27		0.16		0.20	
HEATING VALUE*	1034		1129		1121	
SPECIFIC GRAVITY	0.694		0.703		0.734	

	INDEX 5962 SAMPLE 14228		INDEX 5963 SAMPLE 14229		INDEX 5964 SAMPLE 14230	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	EVA SE		EVA SE		EVA SE	
WELL NAME	STONEBRAKER AQ NO. 2		STONEBRAKER AQ NO. 2		STONEBRAKER AQ NO. 2	
LOCATION	SEC. 20, T3N, R12ECM		SEC. 20, T3N, R12ECM		SEC. 20, T3N, R12ECM	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	09/13/74		09/18/74		09/18/74	
SAMPLED	11/21/74		11/21/74		11/21/74	
FORMATION	PENN-CHEROKEE		PENN-KEYES		PENN-LANSING	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5303		6242		4428	
WELLHEAD PRESSURE,PSIG	1098		1020		947	
OPEN FLOW, MCFD	1414		1550		8000	
COMPONENT, MOLE PCT						
METHANE	78.6		78.5		77.0	
ETHANE	8.8		6.6		5.9	
PROPANE	5.6		3.9		3.3	
N-BUTANE	1.1		1.3		1.0	
ISOBUTANE	0.8		0.8		0.4	
N-PENTANE	0.2		0.4		0.2	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	4.2		7.0		11.4	
OXYGEN	0.0		0.2		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.15		0.19		0.22	
HEATING VALUE*	1197		1129		1095	
SPECIFIC GRAVITY	0.699		0.706		0.695	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5965 SAMPLE 8710		INDEX 5966 SAMPLE 15393		INDEX 5967 SAMPLE 15394	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	FLATS NW		GOFF CREEK		GOFF CREEK	
WELL NAME	BESSIE HAMBY NO. 1		HAWKINS NO. B-1		HAWKINS NO. B-1	
LOCATION	SEC. 14, T6N, R11ECM		SEC. 9, T4N, R14ECM		SEC. 9, T4N, R14ECM	
OWNER	HUMBLE OIL & REFINING CO.		ANADARKO PRODUCTION CO.		ANADARKO PRODUCTION CO.	
COMPLETED	09/02/62		12/09/77		12/09/77	
SAMPLED	10/10/62		09/27/78		09/27/78	
FORMATION	PENN-MORROW U		PENN-CHEROKEE		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4504		5668		6163	
WELLHEAD PRESSURE,PSIG	1175		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	3050		1176		838	
COMPONENT, MOLE PCT						
METHANE	60.4		72.9		78.1	
ETHANE	4.9		7.8		6.3	
PROPANE	3.1		5.8		5.2	
N-BUTANE	0.7		1.6		1.4	
ISOBUTANE	0.4		0.6		0.7	
N-PENTANE	0.1		0.4		0.3	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	TRACE		0.2		0.1	
HEXANES PLUS	TRACE		0.4		0.2	
NITROGEN	24.5		9.6		6.9	
OXYGEN	4.9		TRACE		0.0	
ARGON	0.2		0.0		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.31		0.18		0.17	
HEATING VALUE*	830		1165		1150	
SPECIFIC GRAVITY	0.761		0.753		0.717	

	INDEX 5968 SAMPLE 9463		INDEX 5969 SAMPLE 6970		INDEX 5970 SAMPLE 7190	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON HUGOTON GAS AREA		GUYMON S		GUYMON S	
WELL NAME	DICK RIDER NO. 1		WAVIA NO. 2-LT		PEARL NO. 2	
LOCATION	SEC. 33, T1N, R18ECM		SEC. 17, T1N, R15ECM		SEC. 16, T1N, R15ECM	
OWNER	AMARILLO OIL CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		01/21/59		09/05/58	
SAMPLED	08/20/64		02/09/59		08/27/59	
FORMATION	PENN-COLLIER		PENN-OSWEGO		PENN-MARMATON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4613		5756		5740	
WELLHEAD PRESSURE,PSIG	1172		1439		1621	
OPEN FLOW, MCFD	3872		11992		20933	
COMPONENT, MOLE PCT						
METHANE	67.1		83.0		84.0	
ETHANE	4.7		8.1		7.7	
PROPANE	4.0		3.7		2.9	
N-BUTANE	1.4		1.1		0.8	
ISOBUTANE	0.8		0.4		0.3	
N-PENTANE	0.5		0.2		0.1	
ISOPENTANE	0.3		0.2		0.5	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.3		0.3	
NITROGEN	20.4		2.5		3.0	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.42		0.10		0.10	
HEATING VALUE*	995		1169		1146	
SPECIFIC GRAVITY	0.758		0.681		0.671	

	INDEX 5971 SAMPLE 7420		INDEX 5972 SAMPLE 7758		INDEX 5973 SAMPLE 7766	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON S		GUYMON S		GUYMON S	
WELL NAME	REUST NO. 2		OBIN NO. 2		REES A NO. 1	
LOCATION	SEC. 30, T1N, R15ECM		SEC. 26, T1N, R15ECM		SEC. 25, T2N, R14ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	12/21/59		10/04/60		07/26/60	
SAMPLED	02/25/60		11/04/60		11/09/60	
FORMATION	PERM-COUNCIL GROVE		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	3126		6694		6737	
WELLHEAD PRESSURE,PSIG	582		1595		1696	
OPEN FLOW, MCFD	10230		1814		3227	
COMPONENT, MOLE PCT						
METHANE	61.4		84.3		81.4	
ETHANE	5.0		5.0		6.2	
PROPANE	2.9		3.7		3.4	
N-BUTANE	0.8		1.4		1.3	
ISOBUTANE	0.4		0.7		0.7	
N-PENTANE	0.2		0.4		0.4	
ISOPENTANE	0.1		0.5		0.3	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.1		0.4		0.2	
NITROGEN	28.5		3.2		5.7	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.50		0.10		0.20	
HEATING VALUE*	845		1177		1132	
SPECIFIC GRAVITY	0.753		0.693		0.693	

	INDEX 5974 SAMPLE 8740		INDEX 5975 SAMPLE 8741		INDEX 5976 SAMPLE 9062	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON S		GUYMON S		GUYMON S	
WELL NAME	WIGGINS NO. 1		WIGGINS NO. 1		KATE JACKSON NO. 1	
LOCATION	SEC. 10, T2N, R15ECM		SEC. 10, T2N, R15ECM		SEC. 17, T2N, R15ECM	
OWNER	YINGLING OIL, INC.		YINGLING OIL, INC.		YINGLING OIL, INC.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	11/01/62		11/01/62		08/12/63	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-KEYES	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6331		6690		6726	
WELLHEAD PRESSURE,PSIG	1660		1780		1706	
OPEN FLOW, MCFD	10000		4450		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.0		83.9		82.7	
ETHANE	4.9		4.9		5.1	
PROPANE	1.8		2.4		3.2	
N-BUTANE	0.6		0.7		1.1	
ISOBUTANE	0.3		0.3		0.5	
N-PENTANE	0.1		0.1		0.3	
ISOPENTANE	0.3		0.2		0.6	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.4	
NITROGEN	1.4		6.3		5.5	
OXYGEN	0.1		0.3		0.2	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.2	
HELIUM	0.11		0.18		0.20	
HEATING VALUE*	1103		1052		1129	
SPECIFIC GRAVITY	0.630		0.656		0.690	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5977 SAMPLE 10288	INDEX 5978 SAMPLE 1277	INDEX 5979 SAMPLE 1717
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON S	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	HALL C NO. 1	HOVEY NO. 1	HOVEY NO. 1
LOCATION	SEC. 16, T2N, R14ECM	SEC. 21, T4N, R14ECM	SEC. 21, T4N, R14ECM
OWNER	CITIES SERVICE OIL CO.	H. F. WILCOX OIL & GAS CO.	CIMARRON UTILITIES CO.
COMPLETED	10/14/65	DRILL STEM TEST	NOT GIVEN
SAMPLED	11/15/65	07/06/26	02/26/29
FORMATION	PENN-KEYES	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6748	2692	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1715	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	27000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.4	65.8	63.4
ETHANE	6.2	21.4	22.2
PROPANE	3.2	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	4.5	11.8	13.2
OXYGEN	0.0	0.5	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.17	0.36	0.38
HEATING VALUE*	1132	1050	1040
SPECIFIC GRAVITY	0.678	0.713	0.723

	INDEX 5980 SAMPLE 3765	INDEX 5981 SAMPLE 4014	INDEX 5982 SAMPLE 4905
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	MCGRATH NO. 1	NINA NO. 1	PARKES NO. 1
LOCATION	SEC. 3, T3N, R15ECM	SEC. 36, T1N, R13ECM	SEC. 27, T4N, R18ECM
OWNER	REPUBLIC NATURAL GAS CO.	PHILLIPS PETROLEUM CO.	PANHANDLE EASTERN PIPELINE
COMPLETED	04/15/43	07/12/44	09/25/50
SAMPLED	04/14/44	04/29/45	08/29/50
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2784	2795	2697
WELLHEAD PRESSURE,PSIG	427	400	408
OPEN FLOW, MCFD	24624	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.7	68.9	58.5
ETHANE	20.0	18.8	7.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.4	11.5	28.1
OXYGEN	0.4	0.4	3.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	2.1
HELIUM	0.37	0.41	0.07
HEATING VALUE*	1034	1035	731
SPECIFIC GRAVITY	0.706	0.695	0.748

	INDEX 5983 SAMPLE 5079	INDEX 5984 SAMPLE 5381	INDEX 5985 SAMPLE 5395
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	PHILLIPS-HITCH B NO. 1	STONEBRAKER AB NO. 1	SHORES A NO. 1
LOCATION	SEC. 35, T3N, R16ECM	SEC. 29, T3N, R12ECM	SEC. 36, T3N, R11ECM
OWNER	PHILLIPS PETROLEUM CO.	AMERICAN GAS PRODUCTION CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	NOT GIVEN	12/29/52	12/18/52
SAMPLED	08/09/51	01/29/53	02/13/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2652	2638
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	404
OPEN FLOW, MCFD	NOT GIVEN	4940	10700
COMPONENT, MOLE PCT			
METHANE	78.9	64.1	59.1
ETHANE	6.0	5.7	5.0
PROPANE	3.2	3.9	3.7
N-BUTANE	0.6	1.2	1.2
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	13.2	23.0	28.5
OXYGEN	0.3	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.83	0.82	1.16
HEATING VALUE*	1009	993	956
SPECIFIC GRAVITY	0.701	0.751	0.763

	INDEX 5986 SAMPLE 5418	INDEX 5987 SAMPLE 5419	INDEX 5988 SAMPLE 6127
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	STONEBRAKER Y-1	MORSE A-1	DROSSELMYER NO. 1-33
LOCATION	SEC. 9, T2N, R12ECM	SEC. 24, T5N, R12ECM	SEC. 27, T3N, R18ECM
OWNER	AMERICAN GAS PRODUCTION CO.	AMERICAN GAS PRODUCTION CO.	PANHANDLE EASTERN PIPELINE
COMPLETED	01/22/53	01/08/53	05/06/53
SAMPLED	03/17/53	03/17/53	08/15/56
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2456	2590	2467
WELLHEAD PRESSURE,PSIG	929	400	327
OPEN FLOW, MCFD	24000	13300	1159
COMPONENT, MOLE PCT			
METHANE	73.0	71.9	73.0
ETHANE	5.6	5.8	6.2
PROPANE	3.6	3.6	3.4
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	17.9	15.6	14.6
OXYGEN	0.1	0.5	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.51	0.39	0.40
HEATING VALUE*	935	894	1025
SPECIFIC GRAVITY	0.730	0.717	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5989 SAMPLE 6776	INDEX 5990 SAMPLE 7063	INDEX 5991 SAMPLE 7064
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	SCHOONOVER NO. A-1	ASHER	FARMER NO. 1
LOCATION	SEC. 13, T5N, R11ECM	SEC. 13, T5N, R18ECM	SEC. 20, T6N, R19ECM
OWNER	CITIES SERVICE OIL CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
COMPLETED	06/17/58	02/26/53	04/07/58
SAMPLED	08/06/58	05/05/59	05/05/59
FORMATION	PERM-CHASE GROUP	PERM-HERRINGTON	PERM-HERRINGTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2398	2658	2654
WELLHEAD PRESSURE,PSIG	358	395	358
OPEN FLOW, MCFD	7650	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.1	73.1	72.8
ETHANE	5.8	3.4	1.9
PROPANE	3.3	1.3	0.5
N-BUTANE	0.9	0.3	0.1
ISOBUTANE	0.5	0.2	TRACE
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	17.1	20.5	23.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.60	0.80
HEATING VALUE*	988	866	792
SPECIFIC GRAVITY	0.723	0.682	0.668

	INDEX 5992 SAMPLE 7070	INDEX 5993 SAMPLE 7138	INDEX 5994 SAMPLE 7253
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	HAKKE NO. 1	CURRAN NO. 1	GUSTIN NO. 2
LOCATION	SEC. 30, T4N, R18ECM	SEC. 1, T3N, R12ECM	SEC. 18, T4N, R17ECM
OWNER	PANHANDLE EASTERN PIPELINE	PANHANDLE EASTERN PIPELINE	DORCHESTER CORP.
COMPLETED	--/--/53	08/01/51	12/31/47
SAMPLED	05/18/59	07/07/59	10/15/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2654	2638	2690
WELLHEAD PRESSURE,PSIG	313	283	271
OPEN FLOW, MCFD	487	1171	1750
COMPONENT, MOLE PCT			
METHANE	73.5	69.4	75.9
ETHANE	4.7	6.5	6.0
PROPANE	2.2	3.5	3.2
N-BUTANE	0.6	0.0	0.9
ISOBUTANE	0.4	1.5	0.4
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	TRACE	0.6
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	17.6	17.9	12.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.50	0.40	0.40
HEATING VALUE*	933	977	1034
SPECIFIC GRAVITY	0.692	0.726	0.699

	INDEX 5995 SAMPLE 7254	INDEX 5996 SAMPLE 7255	INDEX 5997 SAMPLE 7256
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	LUNDGRIN NO. 3	WRIGHT NO. 5	BALZER NO. 2
LOCATION	SEC. 21, T4N, R16ECM	SEC. 9, T3N, R16ECM	SEC. 36, T6N, R17ECM
OWNER	DORCHESTER CORP.	DORCHESTER CORP.	DORCHESTER CORP.
COMPLETED	09/14/47	07/10/47	04/28/49
SAMPLED	10/15/59	10/15/59	10/15/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2628	2650	2675
WELLHEAD PRESSURE,PSIG	270	276	293
OPEN FLOW, MCFD	1049	846	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	75.2	76.3
ETHANE	6.5	6.3	5.4
PROPANE	3.5	3.7	2.2
N-BUTANE	0.9	0.9	0.5
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.5	0.4	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.7	12.2	14.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.30	0.40	0.30
HEATING VALUE*	1051	1053	975
SPECIFIC GRAVITY	0.704	0.709	0.683

	INDEX 5998 SAMPLE 7257	INDEX 5999 SAMPLE 7389	INDEX 6000 SAMPLE 8207
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	LORING NO. 1	GRAHAM NO. 2-31	METCALF NO. 1
LOCATION	SEC. 13, T5N, R16ECM	SEC. 31, T3N, R18ECM	SEC. 2, T4N, R18ECM
OWNER	DORCHESTER CORP.	PANHANDLE EASTERN PIPELINE	PHILLIP BOYLE
COMPLETED	08/09/48	11/4/59	08/06/61
SAMPLED	10/15/59	02/10/60	11/01/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2731	2522	2653
WELLHEAD PRESSURE,PSIG	280	350	NOT GIVEN
OPEN FLOW, MCFD	845	NOT GIVEN	265
COMPONENT, MOLE PCT			
METHANE	75.6	73.2	68.5
ETHANE	6.2	4.0	1.7
PROPANE	3.3	1.7	0.3
N-BUTANE	0.8	0.3	0.1
ISOBUTANE	0.5	0.2	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.4	0.1	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	12.5	19.7	28.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.40	0.60	0.62
HEATING VALUE*	1028	878	736
SPECIFIC GRAVITY	0.697	0.681	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6001 SAMPLE 11437	INDEX 6002 SAMPLE 11815	INDEX 6003 SAMPLE 11816
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	A.V. BALZER NO. 1	STONEBRAKER A W NO. 1	STONEBRAKER A W NO. 1
LOCATION	SEC. 26, T4N, R17ECM	SEC. 27, T3N, R14ECM	SEC. 27, T3N, R14ECM
OWNER	SOHIO PETROLEUM CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	02/04/68	01/20/69	01/20/69
SAMPLED	04/07/68	04/11/69	04/11/69
FORMATION	PENN-MORROW	PENN-TORONTO	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6270	4272	6240
WELLHEAD PRESSURE,PSIG	1388	1012	1481
OPEN FLOW, MCFD	4700	5800	7200
COMPONENT, MOLE PCT			
METHANE	89.0	78.9	81.2
ETHANE	5.6	8.1	7.4
PROPANE	2.0	3.8	4.3
N-BUTANE	1.5	1.2	1.1
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.4	0.2	0.4
NITROGEN	2.7	6.4	4.2
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.16	0.18	0.18
HEATING VALUE*	1178	1130	1158
SPECIFIC GRAVITY	0.691	0.699	0.695

	INDEX 6004 SAMPLE 12191	INDEX 6005 SAMPLE 12192	INDEX 6006 SAMPLE 12205
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	STONEBRAKER AX NO. 1	STONEBRAKER AX NO. 1	NASH A NO. 1
LOCATION	SEC. 26, T3N, R14ECM	SEC. 26, T3N, R14ECM	SEC. 15, T3N, R15ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	SKELLY OIL CO.
COMPLETED	07/22/69	08/19/69	12/20/69
SAMPLED	02/12/70	02/12/70	02/18/70
FORMATION	PENN-LANSING	PENN-TORONTO	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5138	4284	6074
WELLHEAD PRESSURE,PSIG	1281	918	1200
OPEN FLOW, MCFD	3500	14250	4850
COMPONENT, MOLE PCT			
METHANE	76.5	78.8	78.8
ETHANE	7.1	7.8	6.3
PROPANE	4.3	4.2	4.9
N-BUTANE	1.0	1.1	0.9
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.5	0.4	0.4
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.7	6.4	7.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.20	0.18	0.25
HEATING VALUE*	1097	1142	1113
SPECIFIC GRAVITY	0.710	0.703	0.697

	INDEX 6007 SAMPLE 12880	INDEX 6008 SAMPLE 12900	INDEX 6009 SAMPLE 12905
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	CASTO NO. 11	C. M. REYNOLDS NO. 1	TARVER NO. 1
LOCATION	SEC. 29, T3N, R16ECM	SEC. 31, T1N, R11ECM	SEC. 2, T4N, R15ECM
OWNER	CABOT CORP.	SKELLY OIL CO.	CONTINENTAL OIL CO.
COMPLETED	06/24/71	NOT GIVEN	NOT GIVEN
SAMPLED	06/24/71	07/23/71	07/19/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	195
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	63.5	76.2
ETHANE	6.0	5.2	6.2
PROPANE	3.8	4.0	3.6
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.3	0.4	0.4
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	11.4	23.7	11.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.36	1.20	0.36
HEATING VALUE*	1061	925	1047
SPECIFIC GRAVITY	0.706	0.752	0.700

	INDEX 6010 SAMPLE 12906	INDEX 6011 SAMPLE 12907	INDEX 6012 SAMPLE 12929
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	LONG NO. 1-B	LONG NO. 1	EASTERWOOD NO. 1-20
LOCATION	SEC. 12, T4N, R15ECM	SEC. 27, T4N, R14ECM	SEC. 20, T4N, R14ECM
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	PANHANDLE EASTERN PL. CO.
COMPLETED	NOT GIVEN	NOT GIVEN	09/23/48
SAMPLED	07/19/71	07/19/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2636
WELLHEAD PRESSURE,PSIG	195	195	195
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	201
COMPONENT, MOLE PCT			
METHANE	75.8	76.5	76.1
ETHANE	6.1	6.1	6.0
PROPANE	3.5	3.5	3.6
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.4	11.6	12.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.36	0.37	0.38
HEATING VALUE*	1039	1040	1042
SPECIFIC GRAVITY	0.703	0.695	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6013 SAMPLE 12932	INDEX 6014 SAMPLE 12976	INDEX 6015 SAMPLE 12977
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	BACON NO. 1-29	ALLEN ESTATE NO. 1	HELLER-ROYSE NO. 1
LOCATION	SEC. 29, T4N, R14ECM	SEC. 26, T6N, R16ECM	SEC. 15, T6N, R16ECM
OWNER	PANHANDLE EASTERN PL. CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	06/24/50	NOT GIVEN	NOT GIVEN
SAMPLED	07/21/71	08/26/71	08/26/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2520	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	212	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	278	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.0	77.8	77.5
ETHANE	5.9	5.8	5.8
PROPANE	3.6	3.4	3.4
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	11.9	11.1	11.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.38	0.36	0.36
HEATING VALUE*	1051	1037	1036
SPECIFIC GRAVITY	0.704	0.687	0.688

	INDEX 6016 SAMPLE 12991	INDEX 6017 SAMPLE 13013	INDEX 6018 SAMPLE 13014
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	STATE NO. 1-8	CARBON NO. 1	STOOKEY NO. 1
LOCATION	SEC. 34, T1N, R12ECM	SEC. 20, T1N, R14ECM	SEC. 31, T1N, R14ECM
OWNER	AMOCO PRODUCTION CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/27/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	74.9	75.0
ETHANE	5.4	5.9	5.9
PROPANE	3.5	4.0	4.0
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	16.6	12.8	12.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.61	0.41	0.40
HEATING VALUE*	979	1042	1041
SPECIFIC GRAVITY	0.709	0.708	0.705

	INDEX 6019 SAMPLE 13015	INDEX 6020 SAMPLE 13016	INDEX 6021 SAMPLE 13017
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	OLIVE NO. 1	NIELSEN NO. 1	OLLIE NO. 1
LOCATION	SEC. 32, T1N, R14ECM	SEC. 33, T1N, R14ECM	SEC. 34, T1N, R14ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	75.3	75.5
ETHANE	5.9	5.8	5.9
PROPANE	4.0	3.9	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.4	12.6	12.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.42	0.42	0.41
HEATING VALUE*	1045	1042	1042
SPECIFIC GRAVITY	0.706	0.706	0.703

	INDEX 6022 SAMPLE 13018	INDEX 6023 SAMPLE 13019	INDEX 6024 SAMPLE 13025
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	JEROME NO. 2	REPUBLIC NO. 1	NINA NO. 1
LOCATION	SEC. 35, T1N, R14ECM	SEC. 36, T1N, R14ECM	SEC. 36, T1N, R13ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	74.7	74.6
ETHANE	6.0	5.8	6.0
PROPANE	3.9	3.9	4.0
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.4	13.2	12.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.41	0.41	0.42
HEATING VALUE*	1057	1032	1057
SPECIFIC GRAVITY	0.713	0.706	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6025 SAMPLE 13026		INDEX 6026 SAMPLE 13027		INDEX 6027 SAMPLE 13028	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	HAZE NO. 1		LOIS NO. 1		JAKE NO. 1	
LOCATION	SEC. 35, T1N, R13ECM		SEC. 34, T1N, R13ECM		SEC. 33, T1N, R13ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	09/21/71		09/21/71		09/21/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	74.8		74.8		73.9	
ETHANE	6.0		6.0		5.8	
PROPANE	3.9		4.1		3.9	
N-BUTANE	1.1		0.9		0.9	
ISOBUTANE	0.5		0.6		0.6	
N-PENTANE	0.3		0.3		0.3	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	13.0		12.7		13.9	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.0		0.0	
HELIUM	0.42		0.41		0.43	
HEATING VALUE*	1047		1049		1027	
SPECIFIC GRAVITY	0.714		0.712		0.711	

	INDEX 6028 SAMPLE 13029		INDEX 6029 SAMPLE 13030		INDEX 6030 SAMPLE 13031	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	RIFFE NO. 1		WAUGH NO. 1		OTTO NO. 1	
LOCATION	SEC. 32, T1N, R13ECM		SEC. 31, T1N, R13ECM		SEC. 35, T1N, R12ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	09/21/71		09/21/71		09/21/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	73.8		73.4		69.4	
ETHANE	6.0		5.7		5.7	
PROPANE	4.0		3.3		4.1	
N-BUTANE	1.0		0.7		0.9	
ISOBUTANE	0.5		0.5		0.7	
N-PENTANE	0.3		0.1		0.3	
ISOPENTANE	TRACE		TRACE		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	13.5		15.8		18.0	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		TRACE	
HELIUM	0.46		0.48		0.60	
HEATING VALUE*	1036		981		988	
SPECIFIC GRAVITY	0.713		0.702		0.731	

	INDEX 6031 SAMPLE 13032		INDEX 6032 SAMPLE 13033		INDEX 6033 SAMPLE 13034	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	ESTA NO. 1		ORR NO. 1		BERGNER NO. 1	
LOCATION	SEC. 3, T1N, R11ECM		SEC. 31, T2N, R12ECM		SEC. 32, T1N, R11ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	09/21/71		09/21/71		09/20/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	49.9		70.8		63.9	
ETHANE	4.3		5.8		5.3	
PROPANE	4.5		4.0		3.9	
N-BUTANE	1.2		1.0		1.0	
ISOBUTANE	0.7		0.6		0.5	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	36.5		16.5		23.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		TRACE		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.6	
HELIUM	2.16		0.53		0.88	
HEATING VALUE*	786		1006		929	
SPECIFIC GRAVITY	0.802		0.725		0.757	

	INDEX 6034 SAMPLE 13035		INDEX 6035 SAMPLE 13036		INDEX 6036 SAMPLE 13037	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	BERGNER NO. B-1		BARKER NO. A-1		BERRY NO. 1-E	
LOCATION	SEC. 33, T1N, R11ECM		SEC. 34, T1N, R11ECM		SEC. 35, T1N, R11ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	09/20/71		09/20/71		09/20/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	68.2		68.9		65.3	
ETHANE	5.7		5.7		6.0	
PROPANE	4.1		4.1		4.6	
N-BUTANE	1.1		1.0		1.1	
ISOBUTANE	0.6		0.5		0.7	
N-PENTANE	0.3		0.3		0.4	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.3		0.2		0.3	
NITROGEN	19.6		18.5		20.2	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.6	
HELIUM	0.43		0.71		0.35	
HEATING VALUE*	997		984		994	
SPECIFIC GRAVITY	0.783		0.758		0.772	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6037 SAMPLE 13038	INDEX 6038 SAMPLE 13054	INDEX 6039 SAMPLE 13055
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	BERRY NO. 1-F	HITCHLAND NO. 1	ROUGE NO. 1
LOCATION	SEC. 36, T1N, R11ECM	SEC. 31, T1N, R16ECM	SEC. 32, T1N, R16ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/20/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	74.6	74.9
ETHANE	5.8	6.0	5.8
PROPANE	4.0	3.9	3.8
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.6	12.9	13.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.62	0.41	0.44
HEATING VALUE*	1023	1046	1027
SPECIFIC GRAVITY	0.726	0.712	0.703

	INDEX 6040 SAMPLE 13056	INDEX 6041 SAMPLE 13057	INDEX 6042 SAMPLE 13058
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	CAIRO NO. 1	TIMMONS NO. 1	HITCH NO. R-1
LOCATION	SEC. 33, T1N, R16ECM	SEC. 34, T1N, R16ECM	SEC. 35, T1N, R16ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/06/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	73.6	73.9
ETHANE	5.8	5.7	5.8
PROPANE	3.7	3.7	3.8
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.5	14.5	14.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.47	0.48	0.41
HEATING VALUE*	1014	1010	1016
SPECIFIC GRAVITY	0.709	0.707	0.706

	INDEX 6043 SAMPLE 13059	INDEX 6044 SAMPLE 13060	INDEX 6045 SAMPLE 13061
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	STATE NO. 1-D	WINFIELD NO. 1	ATKINS NO. B-1
LOCATION	SEC. 36, T1N, R16ECM	SEC. 31, T1N, R17ECM	SEC. 32, T1N, R17ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/06/71	10/06/71	10/07/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.4	73.9	73.4
ETHANE	5.7	5.7	5.6
PROPANE	3.2	3.7	3.2
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.5	14.4	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.50	0.49	0.50
HEATING VALUE*	987	1012	985
SPECIFIC GRAVITY	0.702	0.707	0.702

	INDEX 6046 SAMPLE 13062	INDEX 6047 SAMPLE 13063	INDEX 6048 SAMPLE 13064
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	ATKINS NO. B-3	ATKINS NO. B-4	ATKINS B NO. 5
LOCATION	SEC. 33, T1N, R17ECM	SEC. 34, T1N, R17ECM	SEC. 35, T1N, R17ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/07/71	10/07/71	10/07/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	79.4	73.9
ETHANE	5.8	5.5	5.4
PROPANE	3.8	3.5	3.1
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	13.7	9.3	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.41	0.35	0.57
HEATING VALUE*	1020	1062	975
SPECIFIC GRAVITY	0.705	0.684	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6049 SAMPLE 13065		INDEX 6050 SAMPLE 13067		INDEX 6051 SAMPLE 13068	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	PERCY NO. 2		RUDER NO. 1		HITCH NO. B-2	
LOCATION	SEC. 31, T1N, R15ECM		SEC. 33, T1N, R15ECM		SEC. 34, T1N, R15ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	10/06/71		10/06/71		10/06/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		NOT GIVEN	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	74.3		75.0		81.5	
ETHANE	5.8		6.0		4.8	
PROPANE	3.9		4.0		4.8	
N-BUTANE	0.9		0.9		1.9	
ISOBUTANE	0.5		0.6		0.8	
N-PENTANE	0.3		0.4		0.4	
ISOPENTANE	0.0		0.0		1.0	
CYCLOPENTANE	TRACE		0.1		0.3	
HEXANES PLUS	0.2		0.2		0.7	
NITROGEN	13.6		12.4		3.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.1	
HELIUM	0.42		0.40		0.17	
HEATING VALUE*	1028		1053		1234	
SPECIFIC GRAVITY	0.708		0.711		0.732	

	INDEX 6052 SAMPLE 13069		INDEX 6053 SAMPLE 13070		INDEX 6054 SAMPLE 13071	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA		GUYMON-HUGOTON GAS AREA	
WELL NAME	HITCH NO. B-1		LES NO. 1		LES NO. 2	
LOCATION	SEC. 34, T1N, R15ECM		SEC. 35, T1N, R15ECM		SEC. 35, T1N, R15ECM	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	10/06/71		10/06/71		10/06/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		NOT GIVEN	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	75.4		74.7		82.0	
ETHANE	6.1		6.1		4.6	
PROPANE	4.1		4.3		4.7	
N-BUTANE	1.0		1.1		2.0	
ISOBUTANE	0.6		0.6		0.7	
N-PENTANE	0.3		0.3		0.5	
ISOPENTANE	0.1		0.3		0.9	
CYCLOPENTANE	0.1		0.1		0.3	
HEXANES PLUS	0.1		0.2		0.6	
NITROGEN	11.9		12.0		3.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.1	
HELIUM	0.41		0.42		0.16	
HEATING VALUE*	1059		1074		1228	
SPECIFIC GRAVITY	0.710		0.720		0.727	

	INDEX 6055 SAMPLE 13072		INDEX 6056 SAMPLE 13867		INDEX 6057 SAMPLE 14647	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	GUYMON-HUGOTON GAS AREA		HITCHLAND N		HITCHLAND W	
WELL NAME	SEGAR NO. 1		HITCH UNIT B NO. 1		HITCH NO. B-2	
LOCATION	SEC. 36, T1N, R15ECM		SEC. 27, T1N, R16ECM		SEC. 34, T1N, R15ECM	
OWNER	PHILLIPS PETROLEUM CO.		PETROLEUM INC.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		06/08/73		05/17/60	
SAMPLED	10/06/71		01/18/74		04/26/76	
FORMATION	PERM-CHASE GROUP		PENN-MORROW		PENN-MORROW L	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		6450		6783	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1162		520	
OPEN FLOW, MCFD	NOT GIVEN		23857		409	
COMPONENT, MOLE PCT						
METHANE	75.8		89.1		82.5	
ETHANE	5.8		5.0		5.0	
PROPANE	3.9		2.1		4.6	
N-BUTANE	0.9		0.6		1.9	
ISOBUTANE	0.6		0.4		0.5	
N-PENTANE	0.4		0.3		0.5	
ISOPENTANE	0.2		0.2		0.7	
CYCLOPENTANE	TRACE		0.2		0.1	
HEXANES PLUS	0.2		0.5		0.3	
NITROGEN	12.4		1.2		3.7	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.2	
HELIUM	0.42		0.11		0.17	
HEATING VALUE*	1046		1135		1196	
SPECIFIC GRAVITY	0.708		0.647		0.712	

	INDEX 6058 SAMPLE 14649		INDEX 6059 SAMPLE 12199		INDEX 6060 SAMPLE 7252	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	HITCHLAND W		HOOKER N		HOOKER SW	
WELL NAME	LES NO. 2		STAMPER NO. 1		BALZER NO. 1	
LOCATION	SEC. 35, T1N, R15ECM		SEC. 21, T4N, R16ECM		SEC. 8, T3N, R17ECM	
OWNER	PHILLIPS PETROLEUM CO.		CABOT CORP.		SHELL OIL CO.	
COMPLETED	08/18/59		02/27/69		09/--/59	
SAMPLED	04/26/76		02/16/70		10/16/59	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6752		7100		6360	
WELLHEAD PRESSURE,PSIG	728		1766		1700	
OPEN FLOW, MCFD	465		18592		19090	
COMPONENT, MOLE PCT						
METHANE	82.3		89.1		79.9	
ETHANE	4.8		3.4		5.4	
PROPANE	4.3		1.5		3.4	
N-BUTANE	1.8		0.3		1.0	
ISOBUTANE	0.6		0.1		0.9	
N-PENTANE	0.8		TRACE		0.4	
ISOPENTANE	0.8		0.2		0.9	
CYCLOPENTANE	0.1		0.1		0.5	
HEXANES PLUS	0.3		0.1		2.0	
NITROGEN	4.2		4.4		4.9	
OXYGEN	0.2		0.3		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.2		TRACE	
HYDROGEN SULFIDE**	2.2		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.5	
HELIUM	0.16		0.12		0.20	
HEATING VALUE*	1183		1034		1235	
SPECIFIC GRAVITY	0.711		0.619		0.751	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6061 SAMPLE 7714	INDEX 6062 SAMPLE 7826	INDEX 6063 SAMPLE 7829
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	BALZAR NO. 1-9	LUNDGRIN NO. 1-19	FINEROCK NO. 1-13
LOCATION	SEC. 9, T3N, R17ECM	SEC. 19, T4N, R17ECM	SEC. 13, T4N, R16ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/09/60	06/03/60	10/21/60
SAMPLED	10/08/60	01/23/61	01/28/61
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6453	6197	6196
WELLHEAD PRESSURE,PSIG	1800	1450	1525
OPEN FLOW, MCFD	15000	20000	14500
COMPONENT, MOLE PCT			
METHANE	94.7	83.9	83.6
ETHANE	2.5	6.1	6.2
PROPANE	0.9	3.8	4.0
N-BUTANE	0.2	1.0	1.1
ISOBUTANE	0.2	0.7	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	3.3	3.3
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1063	1146	1150
SPECIFIC GRAVITY	0.598	0.680	0.682

	INDEX 6064 SAMPLE 7880	INDEX 6065 SAMPLE 7881	INDEX 6066 SAMPLE 7882
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SCHAEFFLER NO. 1-23	SCHAEFFLER NO. 1-23	FINROCK NO. 1-18
LOCATION	SEC. 23, T5N, R16ECM	SEC. 23, T5N, R16ECM	SEC. 18, T4N, R17ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/28/60	08/28/60	08/27/60
SAMPLED	02/22/61	02/22/61	02/22/61
FORMATION	PENN-MORROW U	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6116	6452	6190
WELLHEAD PRESSURE,PSIG	1424	1327	1409
OPEN FLOW, MCFD	14700	2724	20600
COMPONENT, MOLE PCT			
METHANE	83.7	92.0	84.0
ETHANE	6.4	3.5	6.2
PROPANE	4.1	1.3	3.9
N-BUTANE	1.1	0.5	1.2
ISOBUTANE	0.7	0.3	0.6
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.0	1.6	3.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1157	1069	1164
SPECIFIC GRAVITY	0.682	0.612	0.685

	INDEX 6067 SAMPLE 8406	INDEX 6068 SAMPLE 8446	INDEX 6069 SAMPLE 8448
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	MATTER NO. 1-14	AVA M. BLACKWELDER NO. 1-30	AVA M. BLACKWELDER NO. 1-30
LOCATION	SEC. 14, T5N, R16ECM	SEC. 30, T5N, R17ECM	SEC. 30, T5N, R17ECM
OWNER	SHELL OIL CO.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	03/25/61	02/09/62	02/09/62
SAMPLED	02/08/62	03/03/62	03/03/62
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6102	6482	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1579	1429
OPEN FLOW, MCFD	136200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	88.0	83.9
ETHANE	6.0	4.8	5.9
PROPANE	3.9	2.2	3.9
N-BUTANE	1.0	0.6	1.1
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	3.2	3.4	3.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.15	0.11	0.15
HEATING VALUE*	1139	1083	1156
SPECIFIC GRAVITY	0.673	0.640	0.684

	INDEX 6070 SAMPLE 8614	INDEX 6071 SAMPLE 8621	INDEX 6072 SAMPLE 8698
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	AVA M. BLACKWELDER NO. 1-30	AVA M. BLACKWELDER	MAXINE B. GROUNDS
LOCATION	SEC. 30, T5N, R17ECM	SEC. 30, T5N, R17ECM	SEC. 29, T5N, R17ECM
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	02/10/62	02/10/62	07/19/62
SAMPLED	07/25/62	07/25/62	10/08/62
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6468	6163	6214
WELLHEAD PRESSURE,PSIG	1425	1400	1465
OPEN FLOW, MCFD	2000	3000	21299
COMPONENT, MOLE PCT			
METHANE	88.2	84.5	83.6
ETHANE	4.7	6.0	6.0
PROPANE	3.2	3.8	4.1
N-BUTANE	0.6	1.0	1.2
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.7	3.2	3.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.12	0.14	0.14
HEATING VALUE*	1098	1139	1149
SPECIFIC GRAVITY	0.637	0.673	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6073 SAMPLE 9723	INDEX 6074 SAMPLE 11164	INDEX 6075 SAMPLE 11165
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SHELL UNIT 1-21	OKLAHOMA STATE K NO. 1	OKLAHOMA STATE K NO. 1
LOCATION	SEC. 21, T3N, R17ECM	SEC. 21, T3N, R17ECM	SEC. 21, T3N, R17ECM
OWNER	SHELL OIL CO.	CABOT CORP.	CABOT CORP.
COMPLETED	12/07/64	07/07/66	07/07/66
SAMPLED	02/09/65	10/12/67	10/12/67
FORMATION	PENN-KEYES	PENN-TORONTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6448	4253	6469
WELLHEAD PRESSURE,PSIG	1725	1086	1609
OPEN FLOW, MCFD	2310	10000	1500
COMPONENT, MOLE PCT			
METHANE	94.3	94.4	66.1
ETHANE	2.4	2.4	5.3
PROPANE	0.9	0.8	3.1
N-BUTANE	0.3	0.4	1.1
ISOBUTANE	0.2	0.1	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.2	1.1	22.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.09	0.09	0.38
HEATING VALUE*	1057	1065	939
SPECIFIC GRAVITY	0.598	0.602	0.746

	INDEX 6076 SAMPLE 12382	INDEX 6077 SAMPLE 12384	INDEX 6078 SAMPLE 12385
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SYLVESTER NO. 1-32	BALZER NO. 1-9	MAYER NO. 1-16
LOCATION	SEC. 32, T4N, R17ECM	SEC. 9, T3N, R17ECM	SEC. 16, T3N, R17ECM
OWNER	GRAHAM-MICHAELIS DRILLING CO	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	12/18/64	06/--/60	10/--/62
SAMPLED	08/21/70	08/25/70	08/25/70
FORMATION	PENN-MORROW	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6424	6419	6416
WELLHEAD PRESSURE,PSIG	1066	1347	1350
OPEN FLOW, MCFD	17886	2500	3225
COMPONENT, MOLE PCT			
METHANE	88.4	94.8	94.4
ETHANE	5.4	2.3	2.2
PROPANE	4.2	0.9	0.9
N-BUTANE	1.2	0.3	0.2
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	3.0	0.9	1.4
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.15	0.09	0.09
HEATING VALUE*	1154	1053	1041
SPECIFIC GRAVITY	0.680	0.592	0.592

	INDEX 6079 SAMPLE 12426	INDEX 6080 SAMPLE 15596	INDEX 6081 SAMPLE 1716
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOUGH S	HUGOTON, OKLAHOMA
WELL NAME	FRICK UNIT NO. 1	KEENAN NO. B-1	BACON NO. 1
LOCATION	SEC. 5, T3N, R17ECM	SEC. 36, T4N, R13ECM	SEC. 17, T3N, R15ECM
OWNER	SAMEDAN OIL CORP.	ANADARKO PRODUCTION CO.	CIMARRON UTILITIES CO.
COMPLETED	12/18/64	06/20/78	04/--/28
SAMPLED	09/23/70	04/05/79	02/23/29
FORMATION	PENN-KEYES	PENN-MORROW	PERM-MONOGAHELA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6420	6203	2605
WELLHEAD PRESSURE,PSIG	1525	NOT GIVEN	500
OPEN FLOW, MCFD	13360	6300	10000
COMPONENT, MOLE PCT			
METHANE	94.9	88.1	52.8
ETHANE	2.2	5.6	29.3
PROPANE	0.9	2.7	---
N-BUTANE	0.2	0.8	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	TRACE	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.0	1.5	17.0
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.12	0.37
HEATING VALUE*	1056	1122	1060
SPECIFIC GRAVITY	0.595	0.643	0.771

	INDEX 6082 SAMPLE 3257	INDEX 6083 SAMPLE 12858	INDEX 6084 SAMPLE 12859
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA
WELL NAME	ANNA CALVERT	STONEBRAKER Y	STONEBRAKER AA-1
LOCATION	SEC. 14, T3N, R16ECM	SEC. 9, T2N, R12ECM	SEC. 10, T2N, R12ECM
OWNER	CABOT CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/--/47	NOT GIVEN	NOT GIVEN
SAMPLED	04/03/62	06/23/71	06/23/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2585	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	440	185	155
OPEN FLOW, MCFD	5200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.9	71.8	70.2
ETHANE	22.2	5.8	5.6
PROPANE	---	4.4	1.7
N-BUTANE	---	1.2	1.0
ISOBUTANE	---	0.5	0.5
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	11.2	15.4	18.0
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.39	0.49	0.56
HEATING VALUE*	1050	1014	972
SPECIFIC GRAVITY	0.701	0.719	0.721

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6085 SAMPLE 12975	INDEX 6086 SAMPLE 14644	INDEX 6087 SAMPLE 14645
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA
WELL NAME	C. M. REYNOLDS NO. 1	JAN NO. 1	LES NO. 1
LOCATION	SEC. 31, T1N, R11ECM	SEC. 24, T1N, R15ECM	SEC. 35, T1N, R15ECM
OWNER	SKELLY OIL CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	03/13/46	08/08/45
SAMPLED	08/27/71	04/26/76	04/26/76
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2535	2665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	153	143
OPEN FLOW, MCFD	NOT GIVEN	169	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.5	75.5	75.6
ETHANE	5.1	6.4	6.4
PROPANE	3.8	3.6	3.6
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.3	12.0	11.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	1.19	0.40	0.39
HEATING VALUE*	916	1047	1048
SPECIFIC GRAVITY	0.743	0.703	0.702

	INDEX 6088 SAMPLE 14646	INDEX 6089 SAMPLE 14648	INDEX 6090 SAMPLE 14663
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA
WELL NAME	HITCH NO. B-1	TUNIS NO. 1	SEGAR NO. 1
LOCATION	SEC. 34, T1N, R15ECM	SEC. 23, T1N, R15ECM	SEC. 36, T1N, R15ECM
OWNER	PHILLIPS PETROLFUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/03/45	07/23/47	08/03/45
SAMPLED	04/26/76	04/26/76	04/27/76
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2751	2530	2660
WELLHEAD PRESSURE,PSIG	139	159	171
OPEN FLOW, MCFD	NOT GIVEN	189	449
COMPONENT, MOLE PCT			
METHANE	75.7	75.4	74.9
ETHANE	6.4	6.3	6.3
PROPANE	3.8	3.6	3.7
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.5	12.3	12.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.41	0.40	0.43
HEATING VALUE*	1053	1044	1040
SPECIFIC GRAVITY	0.702	0.704	0.705

	INDEX 6091 SAMPLE 5602	INDEX 6092 SAMPLE 5826	INDEX 6093 SAMPLE 5831
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ELLA HAMILTON NO. 1	W. A. SPARKMAN NO. 1	HERB NO. 1
LOCATION	SEC. 6, T5N, R10ECM	SEC. 7, T5N, R10ECM	SEC. 18, T5N, R10ECM
OWNER	UNITED PRODUCING CO., INC.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	12/10/53	06/--/54	06/--/54
SAMPLED	03/22/54	04/26/55	04/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4617	4528	4589
WELLHEAD PRESSURE,PSIG	875	836	831
OPEN FLOW, MCFD	14100	1900	22500
COMPONENT, MOLE PCT			
METHANE	73.3	71.2	64.1
ETHANE	3.8	3.5	3.1
PROPANE	2.4	2.1	1.9
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	16.2	18.7	25.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	1.0
HELIUM	1.80	1.87	2.14
HEATING VALUE*	925	907	822
SPECIFIC GRAVITY	0.688	0.701	0.728

	INDEX 6094 SAMPLE 5844	INDEX 6095 SAMPLE 5990	INDEX 6096 SAMPLE 6123
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MANARY NO. A-1	DELIER	STATE OF OKLAHOMA NO. 2-C
LOCATION	SEC. 31, T6N, R10ECM	SEC. 32, T3N, R10ECM	SEC. 30, T5N, R10ECM
OWNER	CITIES SERVICE OIL CO.	PHILLIPS PETROLEUM CO.	CABOT CORP.
COMPLETED	09/18/53	11/20/55	06/30/55
SAMPLED	05/02/55	01/05/56	08/09/56
FORMATION	PENN-KEYES	PENN-CHEROKEE	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4582	4528	4580
WELLHEAD PRESSURE,PSIG	840	795	750
OPEN FLOW, MCFD	5573	671	1500
COMPONENT, MOLE PCT			
METHANE	76.6	71.8	63.0
ETHANE	3.3	7.3	3.1
PROPANE	1.7	3.2	2.0
N-BUTANE	0.8	0.9	0.7
ISOBUTANE	0.6	0.1	0.4
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.1	0.2
NITROGEN	12.8	15.2	26.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	1.1
HELIUM	1.44	0.40	2.26
HEATING VALUE*	1022	1005	814
SPECIFIC GRAVITY	0.706	0.715	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6097 SAMPLE 6126		INDEX 6098 SAMPLE 6388		INDEX 6099 SAMPLE 6406	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	GODDARD NO. 1-19		PIKE NO. 1		STATE WILLIAMS NO. 1	
LOCATION	SEC. 19, T5N, R10ECM		SEC. 5, T5N, R10ECM		SEC. 30, T5N, R10ECM	
OWNER	PANHANDLE EASTERN PIPE LINE		H. F. SAUNDERS		CABOT CARBON CO.	
COMPLETED	12/01/54		NOT GIVEN		06/27/54	
SAMPLED	08/15/56		08/20/57		09/27/57	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4590		4554		4550	
WELLHEAD PRESSURE,PSIG	816		894		815	
OPEN FLOW, MCFD	23183		92000		48500	
COMPONENT, MOLE PCT						
METHANE	55.0		73.2		62.9	
ETHANE	2.6		3.8		3.0	
PROPANE	1.5		2.3		1.7	
N-BUTANE	0.7		0.7		0.5	
ISOBUTANE	0.4		0.4		0.8	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.2		0.2		0.0	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	34.0		16.4		27.0	
OXYGEN	2.3		TRACE		TRACE	
ARGON	0.2		0.1		0.1	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		0.6		1.3	
HELIUM	1.58		1.91		2.20	
HEATING VALUE*	707		934		792	
SPECIFIC GRAVITY	0.772		0.692		0.727	

	INDEX 6100 SAMPLE 6436		INDEX 6101 SAMPLE 7166		INDEX 6102 SAMPLE 7185	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	OKLAHOMA STATE NO. C-2		OKLAHOMA STATE D-1		W. A. SPARKMAN NO. 1	
LOCATION	SEC. 30, T5N, R10ECM		SEC. 31, T5N, R10ECM		SEC. 7, T5N, R10ECM	
OWNER	CABOT CARBON CO.		PANHANDLE EASTERN PIPELINE		SHELL OIL CO.	
COMPLETED	06/30/55		09/16/57		06/--/54	
SAMPLED	11/06/57		08/07/59		08/--/59	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4580		4526		4528	
WELLHEAD PRESSURE,PSIG	940		745		754	
OPEN FLOW, MCFD	NOT GIVEN		2256		1900	
COMPONENT, MOLE PCT						
METHANE	63.0		54.4		80.5	
ETHANE	3.1		2.6		4.1	
PROPANE	2.3		2.7		2.8	
N-BUTANE	0.8		0.6		0.7	
ISOBUTANE	0.5		0.3		0.5	
N-PENTANE	0.1		0.1		0.2	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.4		0.2	
NITROGEN	26.2		33.3		8.1	
OXYGEN	TRACE		2.4		0.0	
ARGON	0.1		0.2		0.1	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		0.7		0.5	
HELIUM	2.20		1.90		1.90	
HEATING VALUE*	828		739		1037	
SPECIFIC GRAVITY	0.739		0.779		0.669	

	INDEX 6103 SAMPLE 7246		INDEX 6104 SAMPLE 7269		INDEX 6105 SAMPLE 7270	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	FINCHAM NO. 1		GODDARD NO. 1-19		SAUNDERS PIKE NO. 1	
LOCATION	SEC. 27, T6N, R10ECM		SEC. 19, T5N, R10ECM		SEC. 5, T5N, R10ECM	
OWNER	GRAHAM-MICHAELIS DRLG. CO.		PANHANDLE EASTERN PIPELINE		H. F. SAUNDERS	
COMPLETED	08/11/58		12/02/54		NOT GIVEN	
SAMPLED	10/16/59		11/03/59		11/03/59	
FORMATION	PENN-PURDY		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4442		4584		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1117		753		746	
OPEN FLOW, MCFD	50000		20351		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	73.9		62.8		72.6	
ETHANE	5.4		3.0		3.7	
PROPANE	3.4		1.6		3.3	
N-BUTANE	0.7		0.6		0.7	
ISOBUTANE	0.4		0.5		0.3	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.5		0.5		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	14.6		27.2		16.4	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		1.4		0.5	
HELIUM	0.70		2.10		1.80	
HEATING VALUE*	997		808		952	
SPECIFIC GRAVITY	0.701		0.759		0.700	

	INDEX 6106 SAMPLE 7282		INDEX 6107 SAMPLE 7285		INDEX 6108 SAMPLE 9765	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	TEXAS		TEXAS		TEXAS	
FIELD	KEYES GAS AREA		KEYES GAS AREA		LIBERAL SW	
WELL NAME	HAMILTON NO. 1		MANARY		DELLA HADSELL	
LOCATION	SEC. 6, T5N, R10ECM		SEC. 31, T6N, R10ECM		SEC. 13, T4N, R19ECM	
OWNER	UNITED PRODUCING CO.		CITIES SERVICE OIL CO.		MOBIL OIL CORP.	
COMPLETED	01/05/54		04/21/53		05/30/64	
SAMPLED	11/17/59		11/13/59		02/25/65	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4631		4572		6312	
WELLHEAD PRESSURE,PSIG	749		760		1030	
OPEN FLOW, MCFD	14100		3125		1040	
COMPONENT, MOLE PCT						
METHANE	71.6		75.4		80.6	
ETHANE	3.7		3.6		4.1	
PROPANE	3.3		3.5		2.9	
N-BUTANE	0.7		0.6		0.9	
ISOBUTANE	0.2		0.6		0.6	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.2		0.0		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	17.9		13.6		9.6	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.3		0.3	
HELIUM	1.40		1.70		0.24	
HEATING VALUE*	753		783		1043	
SPECIFIC GRAVITY	0.700		0.687		0.681	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6109 SAMPLE 14500	INDEX 6110 SAMPLE 11685	INDEX 6111 SAMPLE 6510
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	LIBERAL SW	LORENA W	MOUSER
WELL NAME	BLASER NO. 1	RUBY HARRISON NO. 1	MURDOCK A NO. 2
LOCATION	SEC. 13, T6N, R19ECM	SEC. 8, T5N, R19ECM	SEC. 3, T4N, R15ECM
OWNER	BASIN PETROLEUM CORP.	TEXACO INC. & SUN OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	04/03/75	03/30/68	10/02/57
SAMPLED	10/21/75	11/26/68	02/17/58
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6400	6417	6032
WELLHEAD PRESSURE,PSIG	1170	1463	1634
OPEN FLOW, MCFD	10902	14600	168000
COMPONENT, MOLE PCT			
METHANE	89.6	88.4	82.7
ETHANE	4.0	4.3	6.5
PROPANE	2.1	2.2	4.0
N-BUTANE	0.6	0.8	1.1
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	2.3	2.7	4.0
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.15	0.16	0.10
HEATING VALUE*	1099	1104	1153
SPECIFIC GRAVITY	0.638	0.645	0.690

	INDEX 6112 SAMPLE 6584	INDEX 6113 SAMPLE 7447	INDEX 6114 SAMPLE 7590
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER	MOUSER	MOUSER
WELL NAME	MURDOCK NO. A-1	NORDBERG TRUSTEE NO. 1-M	HIER NO. A-1
LOCATION	SEC. 10, T4N, R15ECM	SEC. 27, T6N, R15ECM	SEC. 21, T5N, R15ECM
OWNER	CITIES SERVICE OIL CO.	REPUBLIC NATURAL GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	04/03/58	03/12/60	04/29/60
SAMPLED	05/14/58	03/16/60	06/23/60
FORMATION	PENN-KEYES	PENN-MORROW BASAL	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6380	6568	6128
WELLHEAD PRESSURE,PSIG	1624	1715	1434
OPEN FLOW, MCFD	2255	4587	52000
COMPONENT, MOLE PCT			
METHANE	81.3	92.7	63.6
ETHANE	5.0	2.7	6.1
PROPANE	3.2	1.2	6.9
N-BUTANE	1.2	0.3	6.5
ISOBUTANE	1.1	0.1	TRACE
N-PENTANE	0.1	TRACE	6.5
ISOPENTANE	0.4	0.1	3.2
CYCLOPENTANE	TRACE	TRACE	1.0
HEXANES PLUS	0.1	0.1	4.2
NITROGEN	6.9	1.7	1.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	0.3
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1100	1041	1819
SPECIFIC GRAVITY	0.688	0.605	1.069

	INDEX 6115 SAMPLE 8659	INDEX 6116 SAMPLE 13726	INDEX 6117 SAMPLE 6509
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER	MOUSER	MOUSER SW
WELL NAME	WILSON E NO. 4	MURDOCK A-12	STELZER
LOCATION	SEC. 23, T5N, R15ECM	SEC. 15, T4N, R15ECM	SEC. 11, T4N, R14ECM
OWNER	CITIES SERVICE PETROLEUM CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/16/62	06/04/73	12/24/57
SAMPLED	08/30/62	08/16/73	02/17/58
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6526	6083	6160
WELLHEAD PRESSURE,PSIG	1688	643	1422
OPEN FLOW, MCFD	12200	11000	32000
COMPONENT, MOLE PCT			
METHANE	93.1	79.9	77.8
ETHANE	2.9	6.7	7.3
PROPANE	1.1	5.1	5.4
N-BUTANE	0.2	1.1	2.7
ISOBUTANE	0.2	0.6	1.0
N-PENTANE	0.1	0.2	0.7
ISOPENTANE	0.1	0.2	0.9
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	1.8	5.9	2.9
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.12	0.17	0.20
HEATING VALUE*	1054	1141	1296
SPECIFIC GRAVITY	0.603	0.700	0.767

	INDEX 6118 SAMPLE 14863	INDEX 6119 SAMPLE 6466	INDEX 6120 SAMPLE 6977
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER W	ONA NW	ONA NW
WELL NAME	HAMPY A NO. 2	DENCKER NO. A-1	ADDIE VOILES UNIT NO. 1
LOCATION	SEC. 23, T5N, R17ECM	SEC. 8, T4N, R10ECM	SEC. 18, T4N, R10ECM
OWNER	CITIES SERVICE OIL CO.	EXCELSIOR OIL CORP.	TEXACO INC.
COMPLETED	09/10/76	12/20/57	12/08/58
SAMPLED	11/30/76	12/31/57	02/17/59
FORMATION	PENN-MORROW	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6120	3134	3141
WELLHEAD PRESSURE,PSIG	1191	437	386
OPEN FLOW, MCFD	89625	5400	1884
COMPONENT, MOLE PCT			
METHANE	82.7	76.8	76.9
ETHANE	6.4	5.7	6.0
PROPANE	4.3	3.4	3.4
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.0	10.9	10.7
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.17	0.60	0.20
HEATING VALUE*	1150	1054	1067
SPECIFIC GRAVITY	0.688	0.701	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6121 SAMPLE 7110	INDEX 6122 SAMPLE 7139	INDEX 6123 SAMPLE 7141
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	ONA NW	ONA NW	ONA NW
WELL NAME	E. BRUMLEY NO. 1	QENCKER NO. 1	E. BRUMLEY NO. 1
LOCATION	SEC. 7, T4N, R10ECM	SEC. 8, T4N, R10ECM	SEC. 7, T4N, R10ECM
OWNER	PICO DRILLING CO.	EXCELSIOR OIL CORP.	PICO DRILLING CO.
COMPLETED	NOT GIVEN	12/07/57	NOT GIVEN
SAMPLED	06/22/59	07/10/59	07/14/59
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-PURDY L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3110	3134	4470
WELLHEAD PRESSURE,PSIG	430	435	950
OPEN FLOW, MCFD	NOT GIVEN	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	75.8	59.1
ETHANE	5.1	6.1	3.2
PROPANE	3.2	3.3	1.1
N-BUTANE	1.0	1.2	0.3
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	10.9	11.7	31.8
OXYGEN	0.1	TRACE	2.7
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.80	0.60	1.00
HEATING VALUE*	1030	1046	714
SPECIFIC GRAVITY	0.685	0.702	0.739

	INDEX 6124 SAMPLE 7149	INDEX 6125 SAMPLE 7713	INDEX 6126 SAMPLE 6703
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	ONA NW	ONA W	POSTLE
WELL NAME	E. BRUMLEY NO. 1	NO. 1	EASTERWOOD NO. 2
LOCATION	SEC. 7, T4N, R10ECM	SEC. 19, T4N, R10ECM	SEC. 11, T4N, R13ECM
OWNER	PICO DRILLING CO.	ASHLAND OIL & REFINING CO.	PANHANDLE EASTERN PIPELINE
COMPLETED	07/25/59	08/12/60	12/23/57
SAMPLED	07/25/59	10/06/60	07/10/58
FORMATION	PENN-PURDY M	PENN-TOPEKA	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4425	3156	6400
WELLHEAD PRESSURE,PSIG	866	329	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.0	75.0	65.1
ETHANE	3.7	6.3	8.7
PROPANE	1.3	4.0	8.4
N-BUTANE	0.0	1.2	4.6
ISOBUTANE	0.7	0.6	2.1
N-PENTANE	0.1	0.1	1.4
ISOPENTANE	0.1	0.2	1.3
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.0	0.1	0.9
NITROGEN	23.7	11.6	6.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	1.20	0.70	0.04
HEATING VALUE*	831	1055	1428
SPECIFIC GRAVITY	0.693	0.710	0.892

	INDEX 6127 SAMPLE 6918	INDEX 6128 SAMPLE 6982	INDEX 6129 SAMPLE 7331
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	POSTLE	POSTLE	POSTLE
WELL NAME	BEATY NO. 2-33	WELCH NO. 2	G. W. FERGUSON NO. 1-M
LOCATION	SEC. 33, T6N, R13ECM	SEC. 13, T5N, R13ECM	SEC. 13, T5N, R13ECM
OWNER	PANHANDLE EASTERN PIPELINE	REPUBLIC NATURAL GAS CO.	REPUBLIC NATURAL GAS CO.
COMPLETED	11/13/58	02/22/59	NOT GIVEN
SAMPLED	01/06/59	02/22/59	01/05/60
FORMATION	PENN-MORROW G	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6447	6171	6560
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1670	1985
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6640
COMPONENT, MOLE PCT			
METHANE	71.5	77.5	80.0
ETHANE	9.7	6.3	4.1
PROPANE	8.9	5.7	2.8
N-BUTANE	2.6	1.7	0.8
ISOBUTANE	1.5	0.9	0.6
N-PENTANE	0.6	0.4	0.3
ISOPENTANE	0.8	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.4	0.3
NITROGEN	3.2	6.1	10.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.02	0.10	0.20
HEATING VALUE*	1357	1188	1049
SPECIFIC GRAVITY	0.810	0.738	0.689

	INDEX 6130 SAMPLE 8005	INDEX 6131 SAMPLE 8189	INDEX 6132 SAMPLE 8750
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	POSTLE	POSTLE	POSTLE
WELL NAME	JULIAN NO. A	HAAR NO. 2	H. C. ROESLER B 1-29
LOCATION	SEC. 3, T5N, R13ECM	SEC. 32, T6N, R13ECM	SEC. 19, T6N, R13ECM
OWNER	REPUBLIC NATURAL GAS CO.	ANADARKO PRODUCTION CO.	HAMILTON BROS., INC.
COMPLETED	NOT GIVEN	10/23/60	NOT GIVEN
SAMPLED	06/11/61	09/11/61	11/01/62
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5980	6067	6511
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1353	1442
OPEN FLOW, MCFD	1470	50946	10172
COMPONENT, MOLE PCT			
METHANE	80.8	81.2	79.9
ETHANE	6.3	7.0	4.5
PROPANE	4.6	4.7	2.8
N-BUTANE	1.2	1.1	0.9
ISOBUTANE	0.7	0.6	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	5.8	4.3	10.0
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	0.13	0.13	0.17
HEATING VALUE*	1128	1156	1050
SPECIFIC GRAVITY	0.692	0.697	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6133 SAMPLE 15580	INDEX 6134 SAMPLE 7974	INDEX 6135 SAMPLE 14426
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	RICE SW	RICHLAND CENTER N	RICHLAND CENTER S
WELL NAME	C. N. TREECE "B" NO. 2	WOODWARD B 01	ECKSTEIN A-2
LOCATION	SEC. 7, T2N, R20ECM	SEC. 9, T5N, R12ECM	SEC. 27, T5N, R12ECM
OWNER	TEXACO INC.	ANADARKO PRODUCTION CO.	CITIES SERVICE OIL CO.
COMPLETED	10/17/77	01/22/60	07/08/75
SAMPLED	03/14/79	05/19/61	08/06/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4556	5742	5078
WELLHEAD PRESSURE,PSIG	937	487	NOT GIVEN
OPEN FLOW, MCFD	6376	4074	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	59.4	80.5
ETHANE	6.0	5.4	8.1
PROPANE	3.0	3.3	4.0
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	3.0	29.7	5.2
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.19	0.20	0.15
HEATING VALUE*	1137	850	1134
SPECIFIC GRAVITY	0.666	0.766	0.687

	INDEX 6136 SAMPLE 14427	INDEX 6137 SAMPLE 14567	INDEX 6138 SAMPLE 9849
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	RICHLAND CENTER S	TEXHOMA N	TRACY SE
WELL NAME	ECKSTEIN A-2	HERMIT NO. 2	STAMBAUGH A -1
LOCATION	SEC. 27, T5N, R12ECM	SEC. 29, T2N, R12ECM	SEC. 1, T3N, R12ECM
OWNER	CITIES SERVICE OIL CO.	PHILLIPS PETROLEUM CO.	ANADARKO PRODUCTION CO.
COMPLETED	07/08/75	10/30/75	12/31/64
SAMPLED	08/06/75	01/23/76	04/21/65
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5870	6080	6417
WELLHEAD PRESSURE,PSIG	NOT GIVEN	572	1288
OPEN FLOW, MCFD	NOT GIVEN	4190	1020
COMPONENT, MOLE PCT			
METHANE	75.0	89.0	80.4
ETHANE	5.8	5.3	6.7
PROPANE	3.6	2.3	3.5
N-BUTANE	0.9	0.6	1.0
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	13.5	1.6	6.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.32	0.10	0.32
HEATING VALUE*	1030	1104	1111
SPECIFIC GRAVITY	0.708	0.633	0.690

	INDEX 6139 SAMPLE 12269	INDEX 6140 SAMPLE 14495	INDEX 6141 SAMPLE 7229
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TRACY SE	TRACY SE	TRIUMPH S
WELL NAME	WEBB A NO. 2	STONEBRAKER P NO. 2	STEINKUEHLER NO. 1
LOCATION	SEC. 35, T4N, R12ECM	SEC. 2, T3N, R12ECM	SEC. 15, T5N, R11ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PETROLEUM, INC.
COMPLETED	04/11/70	09/05/75	10/31/58
SAMPLED	05/22/70	10/17/75	10/01/59
FORMATION	PENN-MORROW	PENN-MORROW	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6026	5993	4548
WELLHEAD PRESSURE,PSIG	1354	1340	1013
OPEN FLOW, MCFD	2200	4844	8000
COMPONENT, MOLE PCT			
METHANE	82.7	87.4	77.7
ETHANE	7.1	5.9	7.0
PROPANE	4.7	2.9	3.8
N-BUTANE	1.0	0.7	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.4	0.2	0.5
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	3.0	2.0	9.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.12	0.13	0.30
HEATING VALUE*	1174	1122	1073
SPECIFIC GRAVITY	0.688	0.648	0.694

	INDEX 6142 SAMPLE 10569	INDEX 6143 SAMPLE 11051	INDEX 6144 SAMPLE 15171
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TYRONE NE	TYRONE NW	UNALLOCATED
WELL NAME	PEDIGO NO. 1-16	RIFFE NO. 1-26	ADDINGTON NO. 1
LOCATION	SEC. 16, T6N, R18ECM	SEC. 26, T6N, R18ECM	SEC. 6, T4N, R11ECM
OWNER	MESA PETROLEUM CO.	HUMBLE OIL & REFINING CO.	KENNEDY & MITCHELL, INC.
COMPLETED	03/27/66	NOT GIVEN	11/22/76
SAMPLED	05/20/66	08/06/67	12/20/77
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6306	6380	3837
WELLHEAD PRESSURE,PSIG	1635	1778	515
OPEN FLOW, MCFD	22400	4261	2237
COMPONENT, MOLE PCT			
METHANE	84.8	88.9	76.1
ETHANE	4.5	4.5	7.7
PROPANE	2.2	2.2	4.0
N-BUTANE	0.1	0.7	1.2
ISOBUTANE	1.4	0.4	0.2
N-PENTANE	0.8	0.1	0.3
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	1.4	0.2	0.2
NITROGEN	3.7	2.2	9.5
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.16	0.16	0.27
HEATING VALUE*	1168	1106	1095
SPECIFIC GRAVITY	0.696	0.642	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6145 SAMPLE 12424	INDEX 6146 SAMPLE 6329	INDEX 6147 SAMPLE 6330
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	UNITY	UNITY N	UNITY N
WELL NAME	OKLAHOMA STATE H NO. 1	WILSON NO. 01	WILSON NO. 01
LOCATION	SEC. 1, T3N, R13ECM	SEC. 23, T4N, R13ECM	SEC. 23, T4N, R13ECM
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPELINE	PANHANDLE EASTERN PIPELINE
COMPLETED	07/28/69	02/12/57	02/12/57
SAMPLED	09/25/70	05/22/57	05/22/57
FORMATION	PENN-MORROW U	PENN-KEYES	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6212	6441	4248
WELLHEAD PRESSURE,PSIG	1390	1600	936
OPEN FLOW, MCFD	1133	NOT GIVEN	11008
COMPONENT, MOLE PCT			
METHANE	87.1	73.3	72.2
ETHANE	5.7	3.7	5.2
PROPANE	3.1	2.6	3.4
N-BUTANE	0.8	1.0	1.3
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	0.2	0.3	0.5
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	2.0	17.6	15.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.14	0.31	0.31
HEATING VALUE*	1128	961	1021
SPECIFIC GRAVITY	0.650	0.712	0.729

	INDEX 6148 SAMPLE 3324	INDEX 6149 SAMPLE 3315	INDEX 6150 SAMPLE 16093
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TULSA	TULSA	WASHINGTON
FIELD	OWASSO	TULSA DISTRICT	HOGSHOOTER
WELL NAME	MARTHA SIXKILLER	A. R. PERRYMAN NO. 1	REYNOLOS NO. 1
LOCATION	SEC. 29, T21N, R14E	SEC. 36, T19N, R12E	SEC. 20, T25N, R14E
OWNER	C. R. COLPITT & OTHERS	A. C. RAMSEY	ECC OIL CO.
COMPLETED	--/--/26	11/15/41	08/17/78
SAMPLED	04/23/42	04/22/42	10/08/80
FORMATION	PENN-BARTLESVILLE	NOT GIVEN	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	860	1123	780
WELLHEAD PRESSURE,PSIG	210	230	325
OPEN FLOW, MCFD	350	228	2000
COMPONENT, MOLE PCT			
METHANE	93.8	65.4	86.3
ETHANE	5.0	23.1	2.3
PROPANE	---	---	2.6
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	1.0	10.2	6.0
OXYGEN	0.3	1.0	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	TRACE	0.07	0.07
HEATING VALUE*	1036	1076	1070
SPECIFIC GRAVITY	0.588	0.718	0.659

	INDEX 6151 SAMPLE 8655	INDEX 6152 SAMPLE 10527	INDEX 6153 SAMPLE 4783
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	CANUTE N	CANUTE N	ELK CITY
WELL NAME	A. H. SPIEKER NO. 1	MARIK NO. 1-11	LAMBERT NO. 1
LOCATION	SEC. 12, T11N, R20W	SEC. 11, T11N, R20W	SEC. 18, T10N, R20W
OWNER	UNION OIL CO. OF CAL.	GLOVER HEFNER KENNEDY OIL CO	E. CONSTANTIN, JR.
COMPLETED	08/24/62	NOT GIVEN	07/--/49
SAMPLED	08/24/62	04/19/66	09/22/49
FORMATION	PENN-ATOKA	PENN-DES MOINES	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14932	13650	9849
WELLHEAD PRESSURE,PSIG	10300	8700	1500
OPEN FLOW, MCFD	4500	6400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	85.9	70.5
ETHANE	3.3	7.9	12.1
PROPANE	0.8	2.9	8.9
N-BUTANE	0.1	0.6	2.5
ISOBUTANE	0.2	0.4	1.2
N-PENTANE	0.1	0.1	0.6
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.5	0.5
NITROGEN	0.2	0.4	3.4
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	0.9	0.1
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1057	1166	1340
SPECIFIC GRAVITY	0.600	0.670	0.803

	INDEX 6154 SAMPLE 10570	INDEX 6155 SAMPLE 14303	INDEX 6156 SAMPLE 14884
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	ELK CITY	ELK CITY	ELK CITY
WELL NAME	FINNELL NO. 1-34	SPRADLIN NO. 1	WILLIE PIERCE NO. 1-A
LOCATION	SEC. 34, T10N, R20W	SEC. 35, T10N, R20W	SEC. 36, T10N, R20W
OWNER	GLOVER HEFNER KENNEDY OIL CO	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	05/01/66	11/11/74	06/15/75
SAMPLED	05/19/66	03/10/75	01/12/77
FORMATION	PENN-DES MOINES	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12628	13458	14824
WELLHEAD PRESSURE,PSIG	7400	7600	11568
OPEN FLOW, MCFD	1750	11514	11149
COMPONENT, MOLE PCT			
METHANE	90.1	96.6	95.4
ETHANE	5.2	1.9	2.2
PROPANE	1.9	0.4	0.4
N-BUTANE	0.6	0.0	TRACE
ISOBUTANE	0.3	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.4	0.0	TRACE
NITROGEN	0.6	0.4	0.4
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.7	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1129	1029	1028
SPECIFIC GRAVITY	0.639	0.576	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6157 SAMPLE 15644	INDEX 6158 SAMPLE 5417	INDEX 6159 SAMPLE 9614
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	ELK CITY	ELK CITY SE	NOT GIVEN
WELL NAME	FLOYD NIECE NO. 1	G. ADAMS NO. 1	KNIE A NO. 1
LOCATION	SEC. 27, T10N, R20W	SEC. 6, T9N, R19W	SEC. 26, T9N, R17W
OWNER	EL PASO NATURAL GAS CO.	SHELL OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/02/77	12/14/52	NOT GIVEN
SAMPLED	06/15/79	03/18/53	10/25/64
FORMATION	PENN-MORROW	PENN-DES MOINES U	PERM-DUNCAN A
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	19178	11066	1342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4385	500
OPEN FLOW, MCFD	20000	2000	40
COMPONENT, MOLE PCT			
METHANE	95.9	91.5	95.3
ETHANE	1.8	4.4	2.0
PROPANE	0.4	1.8	0.5
N-BUTANE	0.1	0.5	0.1
ISOBUTANE	0.0	0.2	TRACE
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.3	0.6	1.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.3	0.5
HELIUM	0.02	0.03	0.06
HEATING VALUE*	1022	1103	1023
SPECIFIC GRAVITY	0.584	0.623	0.582

	INDEX 6160 SAMPLE 6704	INDEX 6161 SAMPLE 6705	INDEX 6162 SAMPLE 4196
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	RAINEY S	RAINEY S	ROCKY
WELL NAME	SCHOOL TRACT 34 NO. 1	ANNIE SCHMIDT NO. 1	HILL NO. 1
LOCATION	SEC. 36, T8N, R17W	SEC. 35, T8N, R17W	SEC. 25, T8N, R18W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	ATLANTIC RICHFIELD CO.
COMPLETED	03/21/58	04/14/57	03/13/46
SAMPLED	07/03/58	07/03/58	11/13/46
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6500	6500	6150
WELLHEAD PRESSURE,PSIG	2112	1862	2430
OPEN FLOW, MCFD	19600	17789	17500
COMPONENT, MOLE PCT			
METHANE	93.4	94.1	96.1
ETHANE	3.8	3.3	3.5
PROPANE	1.1	1.1	---
N-BUTANE	0.4	0.3	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.4	0.4	0.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.10	0.10	0.05
HEATING VALUE*	1085	1071	1036
SPECIFIC GRAVITY	0.607	0.599	0.575

	INDEX 6163 SAMPLE 9550	INDEX 6164 SAMPLE 9560	INDEX 6165 SAMPLE 9630
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	KNIE NO. 1	KNIE A NO. 1	KNIE A NO. 1
LOCATION	SEC. 26, T9N, R17W	SEC. 26, T9N, R17W	SEC. 26, T9N, R17W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	NOT GIVEN
SAMPLED	08/21/64	09/09/64	11/11/64
FORMATION	PERM-GRANITE WASH	PENN-DES MOINES	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6400	7889	1164
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	490
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	98.1	98.0	95.8
ETHANE	0.9	1.0	1.9
PROPANE	0.2	0.2	0.6
N-BUTANE	TRACE	TRACE	0.2
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.4	0.5	1.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1020	1016	1036
SPECIFIC GRAVITY	0.566	0.562	0.582

	INDEX 6166 SAMPLE 10358	INDEX 6167 SAMPLE 10364	INDEX 6168 SAMPLE 6447
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	ALVA SE	ALVA SE	AVARD NW
WELL NAME	BROWN NO. 1	SCHMITT HEIRS NO. 1	AVARD NO. 1
LOCATION	SEC. 27, T26N, R13W	SEC. 26, T26N, R13W	SEC. 9, T26N, R15W
OWNER	CALVERT EXPLORATION CO.	SUN OIL CO.	PHILLIPS PETROLEUM CO. ET AL
COMPLETED	05/06/65	10/25/65	10/--/56
SAMPLED	01/13/66	01/14/66	12/26/57
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PERM-NEVA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6416	6432	4785
WELLHEAD PRESSURE,PSIG	2278	2142	1195
OPEN FLOW, MCFD	70000	2500	3280
COMPONENT, MOLE PCT			
METHANE	85.3	85.4	88.0
ETHANE	7.0	7.0	3.0
PROPANE	2.6	2.5	2.1
N-BUTANE	1.0	1.0	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.4	0.7	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.3	0.3	0.1
HEXANES PLUS	0.7	0.7	0.2
NITROGEN	2.1	1.9	5.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.02	0.07	0.20
HEATING VALUE*	1173	1176	1061
SPECIFIC GRAVITY	0.678	0.678	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6169 SAMPLE 7332	INDEX 6170 SAMPLE 9409	INDEX 6171 SAMPLE 11207
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	AVARD NW
WELL NAME	ROMJUE	GARDNER NO. 1	PORTER NO. 1
LOCATION	SEC. 31, T27N, R15W	SEC. 35, T27N, R16W	SEC. 22, T27N, R15W
OWNER	CALVERT PETROLEUM CO.	SHELL OIL CO.	CALVERT EXPLORATION CO.
COMPLETED	NOT GIVEN	04/10/64	11/05/67
SAMPLED	01/07/60	06/18/64	11/05/67
FORMATION	PENN-TONKAWA	PENN-TONKAWA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4883	4917	6225
WELLHEAD PRESSURE,PSIG	1800	1574	1932
OPEN FLOW, MCFD	14000	5100	32869
COMPONENT, MOLE PCT			
METHANE	88.1	87.3	81.9
ETHANE	3.8	3.6	4.0
PROPANE	2.1	2.2	1.5
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	3.6	4.3	8.7
OXYGEN	1.0	TRACE	1.7
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.18	0.06
HEATING VALUE*	1100	1095	1016
SPECIFIC GRAVITY	0.648	0.653	0.671

	INDEX 6172 SAMPLE 11814	INDEX 6173 SAMPLE 11968	INDEX 6174 SAMPLE 12103
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	AVARD NW
WELL NAME	WADKINS NO. 1-30	FULTON NO. 1-A	GENE ERNEST NO. 1
LOCATION	SEC. 30, T27N, R16W	SEC. 27, T27N, R17W	SEC. 1, T26N, R17W
OWNER	CLEARY PETROLEUM CORP.	FLAG OIL CORP.	AUBREY C. BLACK
COMPLETED	12/03/68	05/31/68	NOT GIVEN
SAMPLED	04/07/69	NOT GIVEN	11/06/69
FORMATION	PENN-OSWEGO	PENN-OSWEGO	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5568	5544	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1934	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5400	4057	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.0	89.5	86.0
ETHANE	4.6	4.4	3.0
PROPANE	2.5	2.5	1.8
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	1.2	1.6	7.2
OXYGEN	0.0	0.6	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.05	0.05	0.26
HEATING VALUE*	1146	1120	1027
SPECIFIC GRAVITY	0.652	0.639	0.641

	INDEX 6175 SAMPLE 12504	INDEX 6176 SAMPLE 14324	INDEX 6177 SAMPLE 15520
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	AVARD NW
WELL NAME	SNOODY NO. 1-21	BOLAND NO. 1	MALLORY NO. 1
LOCATION	SEC. 21, T27N, R16W	SEC. 29, T26N, R16W	SEC. 6, T26N, R14W
OWNER	GRAHAM-MICHAELIS DRILLING CO	TUTHILL & BARBEE	SOUTHLAND ROYALTY CO.
COMPLETED	04/17/70	09/16/74	04/06/78
SAMPLED	11/05/70	05/06/75	11/13/78
FORMATION	DEVO-HUNTON	PENN-RED FORK	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6568	5903	6352
WELLHEAD PRESSURE,PSIG	2045	1890	2200
OPEN FLOW, MCFD	35000	6878	3048
COMPONENT, MOLE PCT			
METHANE	87.8	90.7	87.9
ETHANE	5.6	3.9	3.7
PROPANE	2.3	1.7	1.7
N-BUTANE	0.7	0.6	0.9
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.3	0.2	0.7
ISOPENTANE	TRACE	0.2	0.7
CYCLOPENTANE	0.1	TRACE	0.4
HEXANES PLUS	0.3	0.2	1.1
NITROGEN	2.3	2.0	2.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.07	0.09	0.06
HEATING VALUE*	1119	1094	1183
SPECIFIC GRAVITY	0.647	0.628	0.687

	INDEX 6178 SAMPLE 15332	INDEX 6179 SAMPLE 14523	INDEX 6180 SAMPLE 14524
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	CHEYENNE VALLEY	DACOMA NE	DACOMA NW
WELL NAME	HEPNER NO. 3	SCHICK NO. 25A	WHITE NO. 3a
LOCATION	SEC. 34, T23N, R18W	SEC. 23, T26N, R13W	SEC. 3, T25N, R15W
OWNER	KIRKPATRICK OIL CO.	RAN RICKS, JR.	RAN RICKS, JR.
COMPLETED	09/06/78	NOT GIVEN	NOT GIVEN
SAMPLED	07/20/78	10/99/75	10/99/75
FORMATION	PENN-RED FORK	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6858	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1976	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	89.2	89.4
ETHANE	5.2	5.4	5.3
PROPANE	2.7	2.4	2.4
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.6	1.0	1.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.09	0.04	0.04
HEATING VALUE*	1125	1125	1118
SPECIFIC GRAVITY	0.644	0.638	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6181 SAMPLE 11364	INDEX 6182 SAMPLE 15876	INDEX 6183 SAMPLE 14848
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	DACOMA S	EDITH S	FAIRVALLEY
WELL NAME	I. J. MORSE UNIT NO. 1	DEVINE NO. 1	MCGILL NO. 1-16
LOCATION	SEC. 25, T25N, R13W	SEC. 34, T27N, R18W	SEC. 16, T26N, R17W
OWNER	HESS CORP.	TEXAS OIL & GAS	TUTHILL & BARBEE
COMPLETED	11/17/57	NOT GIVEN	NOT GIVEN
SAMPLED	03/08/68	01/15/80	11/04/76
FORMATION	PENN-LAYTON	NOT GIVEN	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5313	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	90.1	93.7	90.0
ETHANE	4.7	3.2	3.1
PROPANE	2.0	1.1	1.1
N-BUTANE	0.8	0.3	0.3
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.4	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	1.1	0.8	3.8
OXYGEN	0.0	0.1	0.7
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.6
HELIUM	0.06	0.05	0.05
HEATING VALUE*	1120	1066	1017
SPECIFIC GRAVITY	0.636	0.599	0.615

	INDEX 6184 SAMPLE 15211	INDEX 6185 SAMPLE 10381	INDEX 6186 SAMPLE 13095
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	FAIRVALLEY	FREEDOM NW	GALENA S
WELL NAME	SNAPP "A" NO. 1	CLIFTON UNIT NO.1	HEPNER NO. 1-34
LOCATION	SEC. 12, T26N, R18W	SEC. 35, T27N, R18W	SEC. 34, T23N, R14W
OWNER	AMOCO PRODUCTION CO.	APACHE CORP.	KIRKPATRICK OIL CO.
COMPLETED	12/15/77	12/22/65	06/21/71
SAMPLED	02/22/78	02/04/66	10/19/71
FORMATION	MISS-ST. GENEVIEVE	PENN-TONKAWA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5654	4780	7016
WELLHEAD PRESSURE,PSIG	1948	2035	2300
OPEN FLOW, MCFD	5955	10800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	90.7	88.7
ETHANE	3.1	3.3	5.4
PROPANE	1.1	1.2	2.3
N-BUTANE	0.4	0.8	0.8
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	0.7	TRACE
HEXANES PLUS	0.2	1.0	0.1
NITROGEN	0.4	1.0	1.2
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.05	0.07	0.04
HEATING VALUE*	1088	1155	1118
SPECIFIC GRAVITY	0.608	0.656	0.642

	INDEX 6187 SAMPLE 15200	INDEX 6188 SAMPLE 11297	INDEX 6189 SAMPLE 11301
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	GREENSBURG SW	HOPETON N	HOPETON N
WELL NAME	MCCRAY NO. 1	MCGILL NO. 1-23	TOWNSEND NO. 1-15
LOCATION	SEC. 16, T24N, R14W	SEC. 23, T26N, R14W	SEC. 15, T26N, R14W
OWNER	TEXAS OIL & GAS CORP.	CLEARY PETROLEUM, INC.	CLEARY PETROLEUM, INC.
COMPLETED	09/26/77	01/03/67	NOT GIVEN
SAMPLED	01/25/78	02/19/68	02/15/67
FORMATION	PENN-RED FORK	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6325	6495	6454
WELLHEAD PRESSURE,PSIG	2060	2293	2135
OPEN FLOW, MCFD	3200	20430	340721
COMPONENT, MOLE PCT			
METHANE	89.3	86.4	86.9
ETHANE	5.7	6.7	6.6
PROPANE	1.9	2.3	2.2
N-BUTANE	0.4	0.8	1.0
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.6	2.5	2.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.09	0.07	0.07
HEATING VALUE*	1100	1124	1127
SPECIFIC GRAVITY	0.631	0.655	0.652

	INDEX 6190 SAMPLE 9685	INDEX 6191 SAMPLE 10769	INDEX 6192 SAMPLE 2665
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	LOVEDALE NW	LOVEDALE NW	NOT GIVEN
WELL NAME	GLEN NO. 1	WILSON NO. 2-10	SALT SPRING
LOCATION	SEC. 31, T29N, R20W	SEC. 10, T28N, R20W	EDITH, OKLA.
OWNER	GULF OIL CO. U.S.	PUBLISHERS PETROLEUM	SANTA FE SALT CO.
COMPLETED	10/27/64	11/07/65	NOT GIVEN
SAMPLED	01/08/65	11/06/66	02/17/34
FORMATION	PENN-MORROW	MISS-CHESTER	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5386	5674	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1770	1800	NOT GIVEN
OPEN FLOW, MCFD	17000	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.6	93.4	0.0
ETHANE	2.0	2.7	3.8
PROPANE	0.6	0.9	---
N-BUTANE	0.3	0.2	---
ISOBUTANE	0.1	0.3	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.7	1.8	95.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.09	0.09	0.21
HEATING VALUE*	1042	1053	68
SPECIFIC GRAVITY	0.594	0.606	0.970

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6193 SAMPLE 15939		INDEX 6194 SAMPLE 5920		INDEX 6195 SAMPLE 7861	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODS		WOODS		WOODS	
FIELD	NOT GIVEN		OAKDALE		OAKDALE	
WELL NAME	PARKER NO. 1-24		W. H. FARRIS NO. 1		SWALLOW NO. 1	
LOCATION	SEC. 24, T29N, R19W		SEC. 21, T24N, R13W		SEC. 6, T24N, R13W	
OWNER	BOSWELL ENERGY CORP.		AMERADA HESS CORP.		ASHLAND OIL & REFINING CO.	
COMPLETED	03/14/80		08/18/55		10/29/60	
SAMPLED	05/08/80		08/19/55		02/16/61	
FORMATION	MISS-		ORDO-SIMPSON		PENN-CHEROKEE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5709		7390		6053	
WELLHEAD PRESSURE,PSIG	1820		2200		2300	
OPEN FLOW, MCFD	1000		2000		9600	
COMPONENT, MOLE PCT						
METHANE	91.5		68.1		89.3	
ETHANE	3.6		9.4		5.3	
PROPANE	1.3		7.9		2.1	
N-BUTANE	0.4		2.8		0.8	
ISOBUTANE	0.2		1.1		0.5	
N-PENTANE	0.1		0.4		0.3	
ISOPENTANE	0.1		0.8		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.3	
NITROGEN	2.1		8.6		0.8	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.1	
HELIUM	0.10		0.09		0.20	
HEATING VALUE*	1068		1260		1138	
SPECIFIC GRAVITY	0.615		0.808		0.644	

	INDEX 6196 SAMPLE 9894		INDEX 6197 SAMPLE 9895		INDEX 6198 SAMPLE 9941	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODS		WOODS		WOODS	
FIELD	OAKDALE		OAKDALE		OAKDALE	
WELL NAME	TED GOODNO UNIT NO. 1		TED GOODNO UNIT NO. 1		WILT A-1	
LOCATION	SEC. 9, T23N, R13W		SEC. 9, T23N, R13W		SEC. 19, T24N, R13W	
OWNER	TEXACO INC.		TEXACO INC.		CITIES SERVICE OIL CO.	
COMPLETED	02/07/65		02/07/65		01/09/65	
SAMPLED	05/13/65		05/13/65		06/19/65	
FORMATION	MISS-CHESTER		PENN-RED FORK		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6508		6422		5948	
WELLHEAD PRESSURE,PSIG	1875		1925		2091	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		1820	
COMPONENT, MOLE PCT						
METHANE	87.3		88.2		87.9	
ETHANE	6.0		5.6		5.5	
PROPANE	2.7		2.3		2.4	
N-BUTANE	0.9		0.8		0.9	
ISOBUTANE	0.4		0.3		0.4	
N-PENTANE	0.1		0.3		0.3	
ISOPENTANE	0.3		0.2		0.2	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.2		0.5		0.5	
NITROGEN	1.2		1.2		1.5	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.3		0.2	
HELIUM	0.07		0.06		0.07	
HEATING VALUE*	1137		1145		1146	
SPECIFIC GRAVITY	0.657		0.655		0.657	

	INDEX 6199 SAMPLE 9942		INDEX 6200 SAMPLE 9943		INDEX 6201 SAMPLE 10761	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODS		WOODS		WOODS	
FIELD	OAKDALE		OAKDALE		OAKDALE	
WELL NAME	TRUEBLOOD A-1		VAN METER A-1		HOFEN NO. 1	
LOCATION	SEC. 18, T25N, R13W		SEC. 20, T25N, R13W		SEC. 12, T25N, R14W	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		EARLSBORO OIL & GAS CO., INC	
COMPLETED	05/26/65		06/22/65		08/29/65	
SAMPLED	06/19/65		06/19/65		10/26/66	
FORMATION	PENN-RED FORK		PENN-RED FORK		PENN-RED FORK	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5880		5914		5600	
WELLHEAD PRESSURE,PSIG	2130		2078		1950	
OPEN FLOW, MCFD	7330		513		1750	
COMPONENT, MOLE PCT						
METHANE	88.5		88.5		87.4	
ETHANE	5.2		5.1		5.5	
PROPANE	2.0		2.2		2.7	
N-BUTANE	0.6		0.8		0.9	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	0.2		0.1		0.1	
HEXANES PLUS	0.4		0.4		0.3	
NITROGEN	2.0		1.5		2.1	
OXYGEN	TRACE		0.1		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.5		0.2	
HELIUM	0.08		0.05		0.02	
HEATING VALUE*	1117		1128		1131	
SPECIFIC GRAVITY	0.646		0.651		0.658	

	INDEX 6202 SAMPLE 11994		INDEX 6203 SAMPLE 6294		INDEX 6204 SAMPLE 6561	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODS		WOODS		WOODS	
FIELD	WALGAMOTT		WAYNOKA NE		WAYNOKA NE	
WELL NAME	BOND-HOFER NO. 1		SHADE NO. 1		H. BARKER GAS UNIT NO. 1	
LOCATION	SEC. 22, T29N, R15W		SEC. 31, T25N, R14W		SEC. 29, T25N, R15W	
OWNER	CHAMPLIN PETROLEUM CO.		GULF OIL CORP.		TEXACO INC.	
COMPLETED	07/21/69		01/14/57		10/30/57	
SAMPLED	08/19/69		03/28/57		04/17/58	
FORMATION	PENN-CHEROKEE & MISSISSIPPI		DEVO-MISENER & HUNTON		PENN-COTTAGE GROVE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8839		7118		5557	
WELLHEAD PRESSURE,PSIG	1435		1660		600	
OPEN FLOW, MCFD	8748		154		5370	
COMPONENT, MOLE PCT						
METHANE	91.9		92.1		86.1	
ETHANE	4.6		3.5		3.4	
PROPANE	1.5		1.2		1.4	
N-BUTANE	0.5		0.5		0.6	
ISOBUTANE	0.1		0.2		0.3	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.2		0.3		0.3	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	1.5		1.8		6.2	
OXYGEN	0.0		0.0		1.2	
ARGON	TRACE		0.0		0.1	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.2	
HELIUM	0.06		0.06		0.10	
HEATING VALUE*	1196		1042		1022	
SPECIFIC GRAVITY	0.618		0.619		0.639	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6205 SAMPLE 7496	INDEX 6206 SAMPLE 12118	INDEX 6207 SAMPLE 13677
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	WAYNOKA NE	WAYNOKA NE	WAYNOKA NE
WELL NAME	WHIPPLE GAS UNIT NO. 1	RAUCH NO. 1-11	ABATA-BOLAND NO. 1
LOCATION	SEC. 31, T25N, R15W	SEC. 11, T25N, R16W	SEC. 30, T25N, R16W
OWNER	TEXOMA PRODUCTION CO.	KING RESOURCES CO.	CARL E. GUNGOLL
COMPLETED	01/13/60	01/27/69	NOT GIVEN
SAMPLED	04/11/60	11/23/69	08/14/73
FORMATION	PENN-COTTAGE GROVE	PENN-TONKAWA	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5586	4992	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1442	1701	1651
OPEN FLOW, MCFD	5400	3443	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	86.3	90.9
ETHANE	4.0	3.2	3.2
PROPANE	1.9	2.0	1.6
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	2.1	5.9	2.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.16	0.09
HEATING VALUE*	1100	1077	1098
SPECIFIC GRAVITY	0.635	0.658	0.632

	INDEX 6208 SAMPLE 8260	INDEX 6209 SAMPLE 11367	INDEX 6210 SAMPLE 11414
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	WINCHESTER NE	YELLOWSTONE	YELLOWSTONE
WELL NAME	CLINE NO. 1	H. DIAMOND NO. 1	MURDOCK NO. 2
LOCATION	SEC. 19, T29N, R14W	SEC. 17, T29N, R17W	SEC. 16, T29N, R17W
OWNER	YOUNGBLOOD & YOUNGBLOOD	CHAMPLIN PETROLEUM CO.	JAMES F. SMITH
COMPLETED	NOT GIVEN	07/21/63	NOT GIVEN
SAMPLED	10/24/61	03/11/68	03/27/68
FORMATION	MISS-	PENN-MARMATON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4956	4921	5812
WELLHEAD PRESSURE,PSIG	NOT GIVEN	755	1803
OPEN FLOW, MCFD	2310	1022	9234
COMPONENT, MOLE PCT			
METHANE	91.7	89.5	84.4
ETHANE	3.9	4.6	6.1
PROPANE	1.4	2.2	2.7
N-BUTANE	0.5	1.0	1.0
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.7	1.6	4.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.08	0.08	0.17
HEATING VALUE*	1080	1114	1119
SPECIFIC GRAVITY	0.615	0.637	0.668

	INDEX 6211 SAMPLE 11965	INDEX 6212 SAMPLE 6459	INDEX 6213 SAMPLE 6616
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	BOILING SPRINGS N	CEDARDALE NE	CEDARDALE NE
WELL NAME	LEHMAN NO. 1	I. GARVIE NO. 1-B	STATE NO. 1-24
LOCATION	SEC. 13, T24N, R20W	SEC. 23, T22N, R17W	SEC. 24, T22N, R17W
OWNER	MIDWEST OIL CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/08/69	10/09/57	01/28/58
SAMPLED	07/15/69	12/15/57	05/26/58
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MUSSELEM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7320	7137	6310
WELLHEAD PRESSURE,PSIG	2770	1922	2195
OPEN FLOW, MCFD	1650	13000	6200
COMPONENT, MOLE PCT			
METHANE	91.9	94.6	95.3
ETHANE	3.9	2.7	2.6
PROPANE	1.6	0.7	0.7
N-BUTANE	0.3	0.1	0.2
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.0	0.2	0.2
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.5
HELIUM	0.08	0.10	0.04
HEATING VALUE*	1083	1058	1054
SPECIFIC GRAVITY	0.613	0.598	0.590

	INDEX 6214 SAMPLE 6626	INDEX 6215 SAMPLE 11296	INDEX 6216 SAMPLE 12625
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	L. E. DERR NO. 1-25	BUTLER NO. 1-20	BLAKSLEY NO. 1-9
LOCATION	SEC. 25, T22N, R17W	SEC. 20, T22N, R16W	SEC. 9, T22N, R17W
OWNER	SHELL OIL CO.	SHELL OIL CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	04/24/58	04/28/59	11/30/70
SAMPLED	06/10/58	02/16/68	01/12/71
FORMATION	PENN-MUSSELEM	PENN-MUSSELEM	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6410	6217	6281
WELLHEAD PRESSURE,PSIG	2067	1517	2115
OPEN FLOW, MCFD	1378	3799	3000
COMPONENT, MOLE PCT			
METHANE	91.2	92.6	93.4
ETHANE	3.8	3.5	3.1
PROPANE	1.5	1.3	1.3
N-BUTANE	0.6	0.4	0.4
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.4	1.0	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.06	0.05
HEATING VALUE*	1091	1041	1087
SPECIFIC GRAVITY	0.622	0.611	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6217 SAMPLE 12689	INDEX 6218 SAMPLE 13107	INDEX 6219 SAMPLE 14254
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	JOHNS NO. 1-16	BLAKSLEY NO. 1	COPELAND NO. 24-1
LOCATION	SEC. 16, T22N, R17W	SEC. 9, T22N, R17W	SEC. 24, T24N, R18W
OWNER	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIF.	JONES & PELLOW OIL CO.
COMPLETED	02/10/71	11/30/70	11/19/74
SAMPLED	02/17/71	11/30/71	01/19/75
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7180	7085	6510
WELLHEAD PRESSURE,PSIG	2095	2289	2775
OPEN FLOW, MCFD	1300	7400	3084
COMPONENT, MOLE PCT			
METHANE	93.2	94.0	92.7
ETHANE	2.5	2.5	3.5
PROPANE	1.0	1.0	1.5
N-BUTANE	0.3	0.3	0.4
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.3	1.0	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.3
HELIUM	0.07	0.08	0.04
HEATING VALUE*	1063	1053	1086
SPECIFIC GRAVITY	0.612	0.598	0.610

	INDEX 6220 SAMPLE 9567	INDEX 6221 SAMPLE 10710	INDEX 6222 SAMPLE 7860
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NW	CEDARDALE NW	CHESTER W
WELL NAME	RIDENOUR NO. 1	OTTO ROBERTS NO. 1	EZELL NO. 1
LOCATION	SEC. 24, T22N, R18W	SEC. 26, T22N, R18W	SEC. 35, T21N, R17W
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	04/28/64	07/12/66	08/23/60
SAMPLED	09/08/64	09/08/66	02/17/61
FORMATION	PENN-COTTAGE GROVE	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6534	7632	7922
WELLHEAD PRESSURE,PSIG	2075	2774	2900
OPEN FLOW, MCFD	550	48462	24751
COMPONENT, MOLE PCT			
METHANE	92.0	94.0	95.4
ETHANE	3.6	2.2	2.4
PROPANE	1.5	0.8	0.5
N-BUTANE	0.6	0.3	0.1
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	0.8	1.5	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.9
HELIUM	0.08	0.06	0.02
HEATING VALUE*	1106	1061	1038
SPECIFIC GRAVITY	0.624	0.600	0.588

	INDEX 6223 SAMPLE 10771	INDEX 6224 SAMPLE 11981	INDEX 6225 SAMPLE 12345
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CHESTER W	CHESTER W	CHESTER W
WELL NAME	WHETSTONE UNIT NO. 2	BUTTEL NO. 1	DUER NO. 1-18
LOCATION	SEC. 36, T21N, R17W	SEC. 21, T21N, R17W	SEC. 18, T21N, R17W
OWNER	AMOCO PRODUCTION CO.	JOHN H. HILL	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	09/02/66	NOT GIVEN	NOT GIVEN
SAMPLED	11/11/66	07/22/69	NOT GIVEN
FORMATION	MISS-CHESTER	MISS-CHESTER	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7868	7835	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2550	2600	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	94.1	90.2
ETHANE	2.3	2.3	4.7
PROPANE	0.7	0.8	2.1
N-BUTANE	0.1	0.2	0.5
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.6	0.4
NITROGEN	0.3	0.6	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.7
HELIUM	0.04	0.04	0.02
HEATING VALUE*	1041	1080	1116
SPECIFIC GRAVITY	0.588	0.612	0.636

	INDEX 6226 SAMPLE 13100	INDEX 6227 SAMPLE 7638	INDEX 6228 SAMPLE 14035
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	EDITH S	EDITH S.	ELLWOOD
WELL NAME	GILBERT WALKER UNIT NO. 1	SELMAN-MORRIS UNIT NO. 1	STATE NO. 1-36
LOCATION	SEC. 8, T26N, R19W	SEC. 2, T26N, R19W	SEC. 36, T22N, R22W
OWNER	SUN OIL CO.	UNION OIL CO. OF CAL.	MAY PETROLEUM, INC.
COMPLETED	09/22/71	11/--/59	09/20/73
SAMPLED	11/03/71	08/08/60	06/30/74
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9362	5044	9257
WELLHEAD PRESSURE,PSIG	2715	1730	2943
OPEN FLOW, MCFD	25600	1300	7750
COMPONENT, MOLE PCT			
METHANE	94.6	82.7	90.4
ETHANE	1.5	5.6	5.2
PROPANE	0.3	3.5	1.7
N-BUTANE	0.1	1.2	0.4
ISOBUTANE	0.1	2.3	0.5
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.4	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	2.9	4.9	0.5
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.9
HELIUM	0.07	0.20	0.06
HEATING VALUE*	1035	1129	1095
SPECIFIC GRAVITY	0.585	0.684	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6229 SAMPLE 11992		INDEX 6230 SAMPLE 15804		INDEX 6231 SAMPLE 11585	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODWARD		WOODWARD		WOODWARD	
FIELD	FORT SUPPLY SE		FREEDOM		HARMON E	
WELL NAME	M. C. TUNE NO. 1		OKLAHOMA NO. 1-32		KARNES NO. 1	
LOCATION	SEC. 31, T24N, R22W		SEC. 32, T27N, R18W		SEC. 35, T20N, R22W	
OWNER	ASHLAND OIL & REFINING CO.		SOUTHLAND ROYALTY CO.		AMOCO PRODUCTION CO.	
COMPLETED	04/20/69		01/17/79		04/11/66	
SAMPLED	08/13/69		10/03/79		07/16/68	
FORMATION	PENN-MORROW		MISS-CHESTER		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7853		5600		10571	
WELLHEAD PRESSURE,PSIG	2250		1900		1686	
OPEN FLOW, MCFD	2988		4100		421	
COMPONENT, MOLE PCT						
METHANE	86.6		92.6		85.3	
ETHANE	5.3		3.3		7.4	
PROPANE	3.3		1.2		3.0	
N-BUTANE	1.0		0.3		0.9	
ISOBUTANE	0.6		0.2		0.6	
N-PENTANE	0.4		0.1		0.2	
ISOPENTANE	0.3		0.1		0.4	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.4		0.2		0.2	
NITROGEN	1.2		1.4		0.6	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.5		1.2	
HELIUM	0.06		0.06		0.04	
HEATING VALUE*	1166		1064		1165	
SPECIFIC GRAVITY	0.674		0.609		0.676	

	INDEX 6232 SAMPLE 15681		INDEX 6233 SAMPLE 11587		INDEX 6234 SAMPLE 11593	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODWARD		WOODWARD		WOODWARD	
FIELD	HARMON E		HARMON NE		KEENAN E	
WELL NAME	STATE OF OKLAHOMA NO. 1		CHANCE-SHAHAN NO. 1		FRITZLER NO. 1	
LOCATION	SEC. 16, T20N, R22W		SEC. 27, T20N, R22W		SEC. 27, T21N, R22W	
OWNER	ALAMO PETROLEUM CO.		AMOCO PRODUCTION CO.		J. M. HUBER CORP.	
COMPLETED	10/28/78		11/21/63		04/27/68	
SAMPLED	06/26/79		07/16/68		07/23/68	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10064		10404		9630	
WELLHEAD PRESSURE,PSIG	3400		1456		3257	
OPEN FLOW, MCFD	37000		827		15000	
COMPONENT, MOLE PCT						
METHANE	83.6		77.6		83.1	
ETHANE	8.4		8.5		9.1	
PROPANE	3.8		4.3		3.4	
N-BUTANE	0.9		1.3		0.6	
ISOBUTANE	0.8		0.8		0.5	
N-PENTANE	0.3		0.6		0.2	
ISOPENTANE	0.3		0.1		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.5		0.1	
NITROGEN	0.5		4.3		1.7	
OXYGEN	0.0		0.9		0.3	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.1		0.9	
HELIUM	0.04		0.05		0.06	
HEATING VALUE*	1193		1180		1152	
SPECIFIC GRAVITY	0.691		0.733		0.678	

	INDEX 6235 SAMPLE 12390		INDEX 6236 SAMPLE 7039		INDEX 6237 SAMPLE 13097	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODWARD		WOODWARD		WOODWARD	
FIELD	KEENAN SE		LOVEDALE		LOVEDALE	
WELL NAME	MCCASLIN NO. 1		G. D. DOTTER NO. 1		LUCAS NO. 1	
LOCATION	SEC. 24, T21N, R22W		SEC. 31, T26N, R19W		SEC. 7, T26N, R19W	
OWNER	SOHIO PETROLEUM CO.		ATLANTIC RICHFIELD CO.		SUN OIL CO.	
COMPLETED	06/--/70		03/09/59		02/09/71	
SAMPLED	08/18/70		04/25/59		10/28/71	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9500		6388		5950	
WELLHEAD PRESSURE,PSIG	3250		2726		2673	
OPEN FLOW, MCFD	3200		16500		17376	
COMPONENT, MOLE PCT						
METHANE	86.0		92.2		94.4	
ETHANE	7.9		3.4		3.1	
PROPANE	3.2		1.0		1.0	
N-BUTANE	0.6		0.6		0.2	
ISOBUTANE	0.5		0.0		0.2	
N-PENTANE	0.1		1.2		TRACE	
ISOPENTANE	0.1		0.0		0.1	
CYCLOPENTANE	TRACE		0.3		TRACE	
HEXANES PLUS	0.1		0.6		0.1	
NITROGEN	0.5		0.4		0.6	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.3		0.3	
HELIUM	0.06		0.10		0.07	
HEATING VALUE*	1147		1134		1061	
SPECIFIC GRAVITY	0.657		0.638		0.596	

	INDEX 6238 SAMPLE 13098		INDEX 6239 SAMPLE 13295		INDEX 6240 SAMPLE 11273	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODWARD		WOODWARD		WOODWARD	
FIELD	LOVEDALE		LOVEDALE		MUTUAL SE	
WELL NAME	WALKER NO. 1		DOTTER NO. 1		BARNEY NO. 1	
LOCATION	SEC. 8, T26N, R19W		SEC. 30, T26N, R19W		SEC. 29, T20N, R18W	
OWNER	SUN OIL CO.		PETROLEUM, INC.		ASHLAND OIL & REFINING CO.	
COMPLETED	09/22/71		05/--/72		06/20/63	
SAMPLED	10/28/71		06/28/72		02/07/68	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5960		6320		9165	
WELLHEAD PRESSURE,PSIG	2705		2405		715	
OPEN FLOW, MCFD	16224		8963		500	
COMPONENT, MOLE PCT						
METHANE	94.4		93.8		94.3	
ETHANE	3.3		3.3		2.1	
PROPANE	0.9		1.2		0.7	
N-BUTANE	0.3		0.2		0.1	
ISOBUTANE	0.1		0.2		0.2	
N-PENTANE	0.0		0.1		0.2	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	TRACE		0.1		0.1	
NITROGEN	0.4		0.5		1.7	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.4	
HELIUM	0.06		0.07		0.07	
HEATING VALUE*	1061		1071		1039	
SPECIFIC GRAVITY	0.594		0.602		0.599	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6241 SAMPLE 14387	INDEX 6242 SAMPLE 8636	INDEX 6243 SAMPLE 8637
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	QUINLAN	QUINLAN NW	QUINLAN NW
WELL NAME	BURKHART NO. 1	KATHRYN KEE NO. 1	KATHRYN KEE NO. 1
LOCATION	SEC. 31, T25N, R17W	SEC. 13, T23N, R18W	SEC. 13, T23N, R18W
OWNER	WALTER DUNCAN	GENE GOFF	GENE GOFF
COMPLETED	09/29/74	03/25/62	03/25/62
SAMPLED	06/17/75	07/10/62	07/10/62
FORMATION	MISS-CHESTER	PENN-COTTAGE GROVE	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6178	6143	6437
WELLHEAD PRESSURE,PSIG	1750	2275	2425
OPEN FLOW, MCFD	900	705	98000
COMPONENT, MOLE PCT			
METHANE	92.A	94.8	93.6
ETHANE	4.0	2.6	2.6
PROPANE	1.3	0.8	1.5
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	0.8	0.3	0.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.5
HELIUM	0.05	TRACE	0.05
HEATING VALUE*	1079	1059	1102
SPECIFIC GRAVITY	0.608	0.595	0.618

	INDEX 6244 SAMPLE 9719	INDEX 6245 SAMPLE 9926	INDEX 6246 SAMPLE 9928
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	QUINLAN NW	QUINLAN NW	QUINLAN NW
WELL NAME	HOLLOWAY NO. 1	BARANSY NO. 1	BINGHAM UNIT
LOCATION	SEC. 1, T24N, R18W	SEC. 1, T24N, R19W	SEC. 11, T24N, R18W
OWNER	OKLAHOMA NATURAL GAS CO.	SAMEDAN OIL CORP.	OKLAHOMA NATURAL GAS CO.
COMPLETED	10/22/64	12/20/64	05/07/65
SAMPLED	02/06/65	06/17/65	06/17/65
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6268	6650	6308
WELLHEAD PRESSURE,PSIG	2200	2183	2708
OPEN FLOW, MCFD	700	4500	22815
COMPONENT, MOLE PCT			
METHANE	93.A	93.6	93.7
ETHANE	3.2	3.5	3.6
PROPANE	1.0	1.1	0.6
N-BUTANE	0.3	0.4	0.1
ISOBUTANE	0.2	TRACE	TRACE
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	0.6	0.6	1.4
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.05	0.06	0.05
HEATING VALUE*	1073	1071	1033
SPECIFIC GRAVITY	0.603	0.601	0.588

	INDEX 6247 SAMPLE 11743	INDEX 6248 SAMPLE 11268	INDEX 6249 SAMPLE 16149
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	QUINLAN NW	RICHMOND	RICHMOND NW
WELL NAME	MCFADDEN NO. 1	L. LAMM A NO. 1	WYMAN "A" NO. 1-33
LOCATION	SEC. 11, T22N, R17W	SEC. 22, T20N, R18W	SEC. 33, T21N, R18W
OWNER	MIDWEST OIL CORP.	CONTINENTAL OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	11/21/68	02/07/66	08/21/80
SAMPLED	01/28/69	02/01/68	12/11/80
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7002	8802	8242
WELLHEAD PRESSURE,PSIG	2571	3222	2905
OPEN FLOW, MCFD	4200	2980	29643
COMPONENT, MOLE PCT			
METHANE	93.6	95.0	88.5
ETHANE	2.6	2.4	2.7
PROPANE	0.8	0.6	1.6
N-BUTANE	0.5	0.2	0.7
ISOBUTANE	TRACE	TRACE	0.9
N-PENTANE	0.2	0.2	0.8
ISOPENTANE	0.2	0.0	1.2
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.4	0.1	1.3
NITROGEN	0.8	0.3	1.5
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.4
HELIUM	0.05	0.04	0.07
HEATING VALUE*	1074	1042	1203
SPECIFIC GRAVITY	0.610	0.591	0.694

	INDEX 6250 SAMPLE 9892	INDEX 6251 SAMPLE 10004	INDEX 6252 SAMPLE 13112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SEILING NE	SEILING NE	SEILING NE
WELL NAME	GADON NO. A-1	JAQUITH NO. 1	JOHN F. GADON NO. 1-26
LOCATION	SEC. 35, T20N, R17W	SEC. 34, T20N, R17W	SEC. 26, T20N, R17W
OWNER	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.	MAY PETROLEUM, INC.
COMPLETED	01/30/65	06/30/64	05/18/69
SAMPLED	05/12/65	07/22/65	12/--/71
FORMATION	-PAYTON	MISS-CHESTER	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7079	8950	7042
WELLHEAD PRESSURE,PSIG	2100	3285	1043
OPEN FLOW, MCFD	4459	7000	28594
COMPONENT, MOLE PCT			
METHANE	78.7	92.5	79.7
ETHANE	9.3	3.9	9.7
PROPANE	4.9	1.5	5.7
N-BUTANE	1.6	0.4	1.4
ISOBUTANE	0.7	0.2	0.9
N-PENTANE	0.4	0.1	0.5
ISOPENTANE	0.6	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.7	0.3	0.3
NITROGEN	2.1	0.1	1.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.1
HELIUM	0.12	0.04	0.13
HEATING VALUE*	1284	1098	1261
SPECIFIC GRAVITY	0.742	0.620	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6253 SAMPLE 13915	INDEX 6254 SAMPLE 12290	INDEX 6255 SAMPLE 12896
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SHARON SW	SHARON W	SHARON W
WELL NAME	WREATH NO. 1	KEHL NO. 1	PHILLIPS NO. 7-1
LOCATION	SEC. 17, T20N, R21W	SEC. 1, T21N, R21W	SEC. 7, T21N, R20W
OWNER	ODESSA NATURAL CORP.	EASON OIL CO.	LEBEN OIL CORP.
COMPLETED	12/14/73	04/01/70	11/24/69
SAMPLED	02/12/74	06/12/70	07/12/71
FORMATION	PENN-MORROW	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10020	8900	8990
WELLHEAD PRESSURE,PSIG	2190	3200	1300
OPEN FLOW, MCFD	2287	7500	1850
COMPONENT, MOLE PCT			
METHANE	88.0	84.3	84.7
ETHANE	6.3	6.3	6.9
PROPANE	2.5	3.9	3.7
N-BUTANE	0.5	0.7	0.8
ISOBUTANE	0.5	0.8	0.8
N-PENTANE	0.1	TRACE	0.4
ISOPENTANE	0.2	0.9	0.0
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	1.0	0.1
NITROGEN	0.5	1.0	1.9
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	0.3
HELIUM	0.05	0.06	0.04
HEATING VALUE*	1130	1215	1154
SPECIFIC GRAVITY	0.648	0.702	0.671

	INDEX 6256 SAMPLE 14680	INDEX 6257 SAMPLE 8422	INDEX 6258 SAMPLE 11295
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SHARON W	TANGIER	TANGIER
WELL NAME	CLARK NO. 1	WEIDNER	BIESEL NO. 1-7
LOCATION	SEC. 15, T21N, R20W	SEC. 22, T22N, R22W	SEC. 7, T22N, R22W
OWNER	PAN EASTERN EXPLORATION CO.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	05/21/75	01/02/62	03/07/66
SAMPLED	05/27/75	03/03/62	02/16/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9042	8820	8406
WELLHEAD PRESSURE,PSIG	3218	3075	2408
OPEN FLOW, MCFD	4813	1060	23966
COMPONENT, MOLE PCT			
METHANE	85.3	90.9	89.4
ETHANE	3.1	4.9	5.0
PROPANE	1.1	2.1	1.8
N-BUTANE	0.3	0.4	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	7.3	0.3	1.1
OXYGEN	1.8	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.9
HELIUM	0.05	0.07	0.11
HEATING VALUE*	974	1105	1118
SPECIFIC GRAVITY	0.641	0.627	0.641

	INDEX 6259 SAMPLE 11444	INDEX 6260 SAMPLE 12847	INDEX 6261 SAMPLE 12184
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	TANGIER	TANGIER	VICI
WELL NAME	EZRA HOHWEILER NO. 1	MOREHART NO. 1	GRIFFITH NO. 1
LOCATION	SEC. 18, T22N, R22W	SEC. 31, T23N, R22W	SEC. 34, T20N, R20W
OWNER	SUN OIL CO.	SIDWELL OIL&GAS&TEXSTAR EXP.	VIERSEN + COCHRAN
COMPLETED	06/08/68	04/23/71	07/19/68
SAMPLED	04/09/76	06/09/71	01/31/70
FORMATION	PENN-MORROW	PENN-MORROW L	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8584	8232	12590
WELLHEAD PRESSURE,PSIG	2725	2500	3800
OPEN FLOW, MCFD	66194	14000	36817
COMPONENT, MOLE PCT			
METHANE	84.9	93.0	96.4
ETHANE	3.5	3.5	0.8
PROPANE	1.4	1.0	0.2
N-BUTANE	0.4	0.2	0.1
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	6.5	0.7	1.0
OXYGEN	1.4	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	1.1
HELIUM	0.09	0.05	0.03
HEATING VALUE*	1020	1058	1009
SPECIFIC GRAVITY	0.656	0.606	0.581

	INDEX 6262 SAMPLE 13141	INDEX 6263 SAMPLE 13715	INDEX 6264 SAMPLE 10412
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	VICI	VICI W	WAYNOKA SW
WELL NAME	GRIFFITH NO. 1	AUSTIN NO. 1	KELSEY NO. 1
LOCATION	SEC. 34, T20N, R20W	SEC. 8, T20N, R21W	SEC. 1, T24N, R17W
OWNER	VIERSEN & COCHRAN	ODESSA NATURAL CORP.	ASHLAND OIL & REFINING CO.
COMPLETED	NOT GIVEN	07/26/73	05/12/65
SAMPLED	01/27/72	08/15/73	02/23/66
FORMATION	MISS-	PENN-MORROW	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11990	9978	5750
WELLHEAD PRESSURE,PSIG	4052	3270	1925
OPEN FLOW, MCFD	33930	1984	1942
COMPONENT, MOLE PCT			
METHANE	96.8	86.6	92.3
ETHANE	1.2	7.1	3.2
PROPANE	0.4	2.8	1.2
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.2	0.6	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	0.4	0.7	1.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.0
HELIUM	0.03	0.05	0.07
HEATING VALUE*	1043	1146	1084
SPECIFIC GRAVITY	0.581	0.660	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6265 SAMPLE 9745	INDEX 6266 SAMPLE 15011	INDEX 6267 SAMPLE 7011
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WAYNOKA W	WILDCAT	WOODWARD
WELL NAME	CURTIS UNIT NO. 1	WEBER NO. 1	WALSH NO. 1
LOCATION	SEC. 35, T25N, R17W	SEC. 24, T21N, R20W	SEC. 2, T22N, R21W
OWNER	AMOCO PRODUCTION CO.	TOM BROWN, INC.	ATLANTIC RICHFIELD CO.
COMPLETED	12/08/64	12/09/76	11/23/58
SAMPLED	02/18/65	05/27/77	03/23/59
FORMATION	PENN-COTTAGE GROVE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5550	9200	8310
WELLHEAD PRESSURE,PSIG	1824	2941	2950
OPEN FLOW, MCFD	4250	1299	8174
COMPONENT, MOLE PCT			
METHANE	89.1	91.4	86.2
ETHANE	3.9	4.0	6.4
PROPANE	2.3	1.9	2.9
N-BUTANE	0.7	0.6	1.0
ISOBUTANE	0.3	0.2	0.8
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	2.9	0.8	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.7
HELIUM	0.11	0.07	TRACE
HEATING VALUE*	1049	1105	1193
SPECIFIC GRAVITY	0.636	0.629	0.682

	INDEX 6268 SAMPLE 11262	INDEX 6269 SAMPLE 11539	INDEX 6270 SAMPLE 14927
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WOODWARD	WOODWARD N	WOODWARD N
WELL NAME	CANFIELD NO. 1	BAKER UNIT NO. 1	PHILLIPS-DUNCAN NO. 1
LOCATION	SEC. 6, T22N, R20W	SEC. 13, T23N, R21W	SEC. 29, T23N, R21W
OWNER	UNION OIL CO. OF CALIFORNIA	APACHE CORP.	HILLIARD OIL & GAS, INC.
COMPLETED	--/--/59	11/07/66	12/18/75
SAMPLED	01/29/68	06/--/68	02/28/77
FORMATION	PENN-MORROW	PENN-MORROW	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8185	7711	10868
WELLHEAD PRESSURE,PSIG	321	2143	3523
OPEN FLOW, MCFD	NOT GIVEN	524	14091
COMPONENT, MOLE PCT			
METHANE	89.7	90.9	90.2
ETHANE	5.2	4.0	3.1
PROPANE	2.0	1.8	1.2
N-BUTANE	0.6	0.7	0.4
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	1.1	3.2
OXYGEN	0.0	0.2	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.7
HELIUM	0.07	0.05	0.09
HEATING VALUE*	1115	1100	1055
SPECIFIC GRAVITY	0.635	0.630	0.628

	INDEX 6271 SAMPLE 15991	INDEX 6272 SAMPLE 11365	INDEX 6273 SAMPLE 11413
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WOODWARD N	WOODWARD NE	WOODWARD NE
WELL NAME	PHILLIPS DUNCAN NO. 1	C. W. WITHGOTT NO. 1	FRANK HARRISON NO. 1
LOCATION	SEC. 29, T23N, R21W	SEC. 2, T23N, R20W	SEC. 5, T23N, R20W
OWNER	HILLIARD OIL & GAS CO.	ATLANTIC RICHFIELD CO.	DIAMOND SHAMROCK CORP.
COMPLETED	12/15/75	01/02/58	05/16/68
SAMPLED	06/18/80	03/13/68	03/28/68
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10336	7595	7642
WELLHEAD PRESSURE,PSIG	3055	304	3080
OPEN FLOW, MCFD	2067	754	1000
COMPONENT, MOLE PCT			
METHANE	92.8	86.0	91.7
ETHANE	2.7	4.6	4.0
PROPANE	0.8	1.4	1.7
N-BUTANE	0.3	1.2	0.4
ISOBUTANE	0.2	0.0	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	2.3	4.1	0.8
OXYGEN	0.0	1.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.3
HELIUM	0.08	0.06	0.08
HEATING VALUE*	1045	1067	1095
SPECIFIC GRAVITY	0.607	0.655	0.620

	INDEX 6274 SAMPLE 10580	INDEX 6275 SAMPLE 11261	INDEX 6276 SAMPLE 1729
STATE	OKLAHOMA	OKLAHOMA	OREGON
COUNTY	WOODWARD	WOODWARD	JACKSON
FIELD	WOODWARD S	WOODWARD SE	NOT GIVEN
WELL NAME	COLLIER NO. 1	MCCORMICK NO. 1	GAS SEEPAGE
LOCATION	SEC. 27, T22N, R21W	SEC. 14, T22N, R20W	NOT GIVEN
OWNER	J. N. CHAMPLIN	UNION OIL CO. OF CALIFORNIA	MRS. C. W. MCGREW
COMPLETED	03/01/66	04/01/63	NOT GIVEN
SAMPLED	06/02/66	01/29/68	03/20/29
FORMATION	PENN-MORROW	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	715
DEPTH, FEET	8788	8234	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3080	1488	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.5	93.6	0.4
ETHANE	5.3	3.3	0.0
PROPANE	2.2	1.0	---
N-BUTANE	1.6	0.3	---
ISOBUTANE	1.5	0.2	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.9	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	4.2	0.7	11.0
OXYGEN	TRACE	0.0	1.1
ARGON	0.1	0.0	---
HYDROGEN	6.6	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.5	87.5
HELIUM	0.12	0.07	0.00
HEATING VALUE*	1092	1069	4
SPECIFIC GRAVITY	0.681	0.606	1.459

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6277 SAMPLE 79	INDEX 6278 SAMPLE 810	INDEX 6279 SAMPLE 10273
STATE	OREGON	OREGON	PENNSYLVANIA
COUNTY	TILLAMOOK	TILLAMOOK	ALLEGHENY
FIELD	NOT GIVEN	NOT GIVEN	ELIZABETH
WELL NAME	NOT GIVEN	NOT GIVEN	BICKERTON NO. 124
LOCATION	SEC. 10, T2S, R9W	SEC. 10, T2S, R9W	JEFFERSON BORO
OWNER	HANANKRAFT	HARNSENKRAT & AUSTIN	CARNEGIE NATURAL GAS CO.
COMPLETED	--/--/16	NOT GIVEN	10/17/36
SAMPLED	09/09/19	NOT GIVEN	11/04/65
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-ELIZABETH
GEOLOGIC PROVINCE CODE	710	710	160
DEPTH, FEET	700	3000	2637
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	52
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25830
COMPONENT, MOLE PCT			
METHANE	2.4	0.0	88.3
ETHANE	0.0	4.4	6.2
PROPANE	---	---	1.9
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.3
NITROGEN	97.4	95.1	1.4
OXYGEN	0.0	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.24	0.12	0.09
HEATING VALUE*	34	79	1131
SPECIFIC GRAVITY	0.956	0.968	0.645

	INDEX 6280 SAMPLE 10437	INDEX 6281 SAMPLE 10440	INDEX 6282 SAMPLE 10444
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	FORWARD	FORWARD	FORWARD
WELL NAME	B-38-WALL	3544-FINLEY	B-31 - MANOWN
LOCATION	BROWN TOWNSHIP	BROWN TOWNSHIP	BROWN TOWNSHIP
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	12/20/48	01/01/28	01/01/42
SAMPLED	01/21/66	01/21/66	01/21/66
FORMATION	DEVO-BAYARD	DEVO-GANTZ	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2843	2260	2258
WELLHEAD PRESSURE,PSIG	80	230	20
OPEN FLOW, MCFD	3	18	61
COMPONENT, MOLE PCT			
METHANE	93.8	93.0	91.9
ETHANE	3.5	4.5	4.0
PROPANE	0.6	0.8	1.0
N-BUTANE	0.1	0.3	0.4
ISOBUTANE	0.1	0.0	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.4
NITROGEN	1.4	1.1	1.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.07	0.12	0.11
HEATING VALUE*	1045	1054	1085
SPECIFIC GRAVITY	0.592	0.594	0.617

	INDEX 6283 SAMPLE 10450	INDEX 6284 SAMPLE 10451	INDEX 6285 SAMPLE 10592
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	FORWARD	FORWARD	MIFFLIN
WELL NAME	F-48-CICCI, S.	F-48-CICCI, S.	O.W.10085-R.W.&B.S.PAUL NO.2
LOCATION	BROWN TOWNSHIP	BROWN TOWNSHIP	PITTSBURGH SW
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	SUMMERLEA INC.
COMPLETED	05/29/28	05/29/28	02/04/55
SAMPLED	01/21/66	01/21/66	03/01/66
FORMATION	MISS-BIG INJUN	DEVO-SPEECHLEY	DEVO-ELIZABETH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1547	3548	2307
WELLHEAD PRESSURE,PSIG	5	80	290
OPEN FLOW, MCFD	10	11	297
COMPONENT, MOLE PCT			
METHANE	92.7	92.8	93.1
ETHANE	4.7	3.0	3.5
PROPANE	0.9	0.9	0.8
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.8	2.2	1.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.10	0.12	0.03
HEATING VALUE*	1074	1049	1062
SPECIFIC GRAVITY	0.603	0.601	0.604

	INDEX 6286 SAMPLE 10603	INDEX 6287 SAMPLE 9730	INDEX 6288 SAMPLE 10608
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	MIFFLIN	MONROEVILLE	RENNERDALE
WELL NAME	O.W.10075-R.W.PAUL NO. 1	M. T. BURKE, PNG NO. 4424	SMITH NO. 3324
LOCATION	PITTSBURGH SW	MONROEVILLE BOROUGH	CARNEGIE NW
OWNER	SUMMERLEA INC.	THE PEOPLES NATURAL GAS CO.	EQUITABLE GAS CO.
COMPLETED	09/09/54	11/25/64	04/18/13
SAMPLED	03/01/66	NOT GIVEN	05/24/66
FORMATION	DEVO-SPEECHLEY	DEVO-THIRTY FOOT &SPEECHLEY	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3250	2052	2077
WELLHEAD PRESSURE,PSIG	300	650	NOT GIVEN
OPEN FLOW, MCFD	42	59	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.7	94.0	80.1
ETHANE	3.1	3.7	10.9
PROPANE	0.9	0.8	3.9
N-BUTANE	0.4	0.2	1.3
ISOBUTANE	0.2	0.2	1.0
N-PENTANE	0.1	TRACE	0.8
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.8
NITROGEN	2.0	0.8	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.13	0.09	0.10
HEATING VALUE*	1056	1058	1269
SPECIFIC GRAVITY	0.606	0.592	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6289 SAMPLE 10443	INDEX 6290 SAMPLE 10597	INDEX 6291 SAMPLE 9777
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ARMSTRONG	ARMSTRONG
FIELD	ROOFIELD	ATWOOD	BAUM STATION
WELL NAME	I. SUCAR - F-77	1096 EARHART	N. O. MOORE NO. 1
LOCATION	PITTSBURGH TOWNSHIP	R. V. SF	BOGGS TOWNSHIP
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	09/22/45	03/25/09	10/09/64
SAMPLED	01/21/66	05/25/66	NOT GIVEN
FORMATION	DEVO-BAYARD & SPEECHLEY	-SAND	DEVO-BALLTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2440	1380	2830
WELLHEAD PRESSURE,PSIG	268	20	855
OPEN FLOW, MCFD	10	25	354
COMPONENT, MOLE PCT			
METHANE	93.3	94.3	93.3
ETHANE	4.3	3.0	4.4
PROPANE	0.8	0.5	0.6
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.8	1.5	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	0.05	0.00
HEATING VALUE*	1066	1042	1051
SPECIFIC GRAVITY	0.598	0.590	0.591

	INDEX 6292 SAMPLE 9773	INDEX 6293 SAMPLE 10282	INDEX 6294 SAMPLE 10600
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	ELDERTON	GOHEENVILLE	JOHNETTA
WELL NAME	JOHN N. RALSTON NO. 1	JOHN HOUSER NO. 104	PA. E. SIDE LAND CO.-NO.3309
LOCATION	PLUMCREEK TOWNSHIP	LEECHBURG	FREEPORT NE
OWNER	PEOPLES NATURAL GAS CO.	APOLLO GAS CO.	EQUITABLE GAS CO.
COMPLETED	11/04/69	04/24/29	03/03/44
SAMPLED	NOT GIVEN	11/03/65	03/02/66
FORMATION	DEVO-BALLTOWN	PENN-KANE&MISS-MURRYSVILLE	MISS-MURRYSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2887	1140	1084
WELLHEAD PRESSURE,PSIG	690	13	31
OPEN FLOW, MCFD	623	915	2
COMPONENT, MOLE PCT			
METHANE	96.6	91.8	95.3
ETHANE	3.3	5.6	2.4
PROPANE	0.6	1.2	0.4
N-BUTANE	0.2	0.3	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.8	0.4	1.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.08	0.08	0.15
HEATING VALUE*	1053	1089	1019
SPECIFIC GRAVITY	0.588	0.609	0.577

	INDEX 6295 SAMPLE 10606	INDEX 6296 SAMPLE 6930	INDEX 6297 SAMPLE 10591
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	JOHNETTA	NOT GIVEN	PLUMVILLE
WELL NAME	MATHEWS - NO. 3314	MARGARET RUPERT NO. 1	NO. 3144 - WILSON
LOCATION	FREEPORT NE	NOT GIVEN	SMICK SW
OWNER	EQUITABLE GAS CO.	COLUMBIAN CARBON CO.	EQUITABLE GAS CO.
COMPLETED	02/14/45	NOT GIVEN	12/06/17
SAMPLED	03/02/66	01/23/59	03/02/66
FORMATION	-SAND	NOT GIVEN	MISS-MURRYSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1094	NOT GIVEN	1280
WELLHEAD PRESSURE,PSIG	142	NOT GIVEN	60
OPEN FLOW, MCFD	4	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	94.0	96.6	94.5
ETHANE	3.5	2.7	3.2
PROPANE	0.7	0.2	0.7
N-BUTANE	0.3	0.0	0.3
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.3	0.4	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.12	0.17	0.10
HEATING VALUE*	1043	1032	1043
SPECIFIC GRAVITY	0.589	0.573	0.586

	INDEX 6298 SAMPLE 10593	INDEX 6299 SAMPLE 10594	INDEX 6300 SAMPLE 10601
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	PLUMVILLE	PLUMVILLE	PLUMVILLE
WELL NAME	NO. 3226 - RUMMEL	NO. 3239 - ALLSHOUSE	NO. 3236 - MCCLAIN
LOCATION	SMICK SW	SMICK SW	SMICK SW
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	08/09/29	10/16/38	07/23/38
SAMPLED	03/02/66	03/02/66	03/02/66
FORMATION	DEVO-TIONA	DEVO-SPEECHLEY & BRADFORD	DEVO-BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2952	2773	3239
WELLHEAD PRESSURE,PSIG	285	160	95
OPEN FLOW, MCFD	17	8	8
COMPONENT, MOLE PCT			
METHANE	96.9	95.4	95.6
ETHANE	3.8	3.1	3.3
PROPANE	0.9	0.7	0.4
N-BUTANE	0.3	0.3	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.03	0.03	0.11
HEATING VALUE*	1056	1050	1038
SPECIFIC GRAVITY	0.587	0.583	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6301 SAMPLE 13358	INDEX 6302 SAMPLE 13359	INDEX 6303 SAMPLE 10284
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	ROARING RUN	ROARING RUN	SLATE LICK
WELL NAME	CANTERBURY COAL NO. RR-1	ASCS UNIT 25200540 NO. 1	M. W. FRANTZ NO. 793
LOCATION	SEC. D, ELDERS RIDGE QUAD	SEC. A, KISKIMINITAS QUAD	LEECHBURG
OWNER	PENNZOIL UNITED, INC.	PENNZOIL UNITED, INC.	APOLLO GAS CO.
COMPLETED	12/14/70	09/11/71	10/18/06
SAMPLED	08/16/72	08/16/72	11/03/65
FORMATION	DEVO-ORISKANY	DEVO-CHERT&ORISKANY	DEVO-SPEECHLEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7194	7300	2728
WELLHEAD PRESSURE,PSIG	3980	3950	NOT GIVEN
OPEN FLOW, MCFD	2170	2600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.2	95.3	88.0
ETHANE	3.0	2.8	6.9
PROPANE	0.2	0.2	2.4
N-BUTANE	0.0	TRACE	0.6
ISOBUTANE	0.0	TRACE	0.5
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.2
NITROGEN	0.4	1.4	0.8
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.02	0.08
HEATING VALUE*	1033	1021	1142
SPECIFIC GRAVITY	0.573	0.578	0.646

	INDEX 6304 SAMPLE 9775	INDEX 6305 SAMPLE 9215	INDEX 6306 SAMPLE 9726
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	BEDFORD	BEDFORD
FIELD	VALLEY	ARTEMUS	BIG MOUNTAIN
WELL NAME	W. J. SMAIL NO. 1	MARSHALL DIEHL NO. 2	ALDEN T. SMITH NO. 1
LOCATION	COWANSHANNOCK TOWNSHIP	NOT GIVEN	MANN TOWNSHIP
OWNER	PEOPLES NATURAL GAS CO.	NEW YORK STATE NAT. GAS CORP	FELMONT OIL CORP.
COMPLETED	12/04/64	09/22/63	12/07/64
SAMPLED	NOT GIVEN	01/06/64	02/08/65
FORMATION	DEVO-BRADFORD	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3308	4772	5397
WELLHEAD PRESSURE,PSIG	772	1778	1822
OPEN FLOW, MCFD	1516	24915	12000
COMPONENT, MOLE PCT			
METHANE	95.0	98.4	98.5
ETHANE	3.5	0.4	0.4
PROPANE	0.4	TRACE	0.0
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	1.0	1.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.08	0.10	0.11
HEATING VALUE*	1047	1004	1005
SPECIFIC GRAVITY	0.583	0.560	0.560

	INDEX 6307 SAMPLE 8661	INDEX 6308 SAMPLE 5036	INDEX 6309 SAMPLE 10373
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	BEDFORD	BEDFORD	BEDFORD
FIELD	FIVE FORKS	NOT GIVEN	PENNLAND POOL
WELL NAME	#. 1 DAVIS N-845	JESSE MILLER NO. 1	LAMASTER, ET UX. NO. N-944
LOCATION	NOT GIVEN	NAPIER TWP.	MANN TOWNSHIP
OWNER	NEW YORK STATE NAT. GAS CORP	SOUTH PENN OIL CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	06/16/62	NOT GIVEN	08/27/64
SAMPLED	08/30/62	02/05/51	01/26/66
FORMATION	DEVO-ORISKANY	ORDO-L	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5697	8872	4631
WELLHEAD PRESSURE,PSIG	2078	NOT GIVEN	1400
OPEN FLOW, MCFD	10504	50	4050
COMPONENT, MOLE PCT			
METHANE	98.5	60.1	98.4
ETHANE	0.6	0.1	0.3
PROPANE	TRACE	TRACE	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	38.5	1.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	0.2	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.6	TRACE
HELIUM	0.10	0.29	0.10
HEATING VALUE*	1009	611	1002
SPECIFIC GRAVITY	0.559	0.721	0.560

	INDEX 6310 SAMPLE 10374	INDEX 6311 SAMPLE 7938	INDEX 6312 SAMPLE 4787
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	BEDFORD	BLAIR	CAMBRIA
FIELD	PURCELL	BLUE KNOB	NOT GIVEN
WELL NAME	HERBERT P. AKERS,ET AL. NO.1	PENN-TR-26-A NO. 1	CLEARFIELD COAL CO. NO. 1
LOCATION	MONROE TOWNSHIP	GREENFIELD	NOT GIVEN
OWNER	CONSOLIDATED GAS SUPPLY CORP	PHILLIPS PETROLEUM CO.	PEOPLES NATURAL GAS CO.
COMPLETED	09/05/62	NOT GIVEN	03/31/49
SAMPLED	01/26/66	04/21/61	06/09/49
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-U
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4732	6859	3201
WELLHEAD PRESSURE,PSIG	1757	3185	1360
OPEN FLOW, MCFD	605	1440	33
COMPONENT, MOLE PCT			
METHANE	96.1	97.3	96.0
ETHANE	0.4	1.7	2.4
PROPANE	0.1	0.0	0.2
N-BUTANE	1.3	TRACE	0.2
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.7	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.9	0.7	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.18	0.04	0.09
HEATING VALUE*	1067	1017	1032
SPECIFIC GRAVITY	0.597	0.566	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6313 SAMPLE 11784		INDEX 6314 SAMPLE 12002		INDEX 6315 SAMPLE 10470	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CAMARIA		CAMBRIA		CAMBRIA	
FIELD	PATTON		PINDLTON		RAGER MOUNTAIN	
WELL NAME	BURLEY NO. 1		ALBERT KUBAT NO. 1		GEORGE L. READE NO. 1	
LOCATION	WEST CARROLL TOWNSHIP		BLACKLICK TWP.		SEC. D, JACKSON TOWNSHIP	
OWNER	KEWANEE OIL CO.		PEOPLES NATURAL GAS CO.		PEOPLES NATURAL GAS CO.	
COMPLETED	01/16/69		07/02/69		NOT GIVEN	
SAMPLED	02/25/69		08/11/69		03/08/66	
FORMATION	DEVO-ORISKANY		DEVO-ONONDAGA CHERT & ORISK.		DEVO-CHERT & ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	8496		8494		7699	
WELLHEAD PRESSURE,PSIG	3130		3854		3196	
OPEN FLOW, MCFD	2100		4750		8245	
COMPONENT, MOLE PCT						
METHANE	97.3		97.2		98.0	
ETHANE	1.5		1.6		1.2	
PROPANE	0.1		0.2		0.0	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.6		0.7		0.6	
OXYGEN	0.1		0.1		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	TRACE		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		TRACE		0.2	
HELIUM	0.02		0.02		0.03	
HEATING VALUE*	1015		1019		1014	
SPECIFIC GRAVITY	0.570		0.567		0.565	

	INDEX 6316 SAMPLE 10124		INDEX 6317 SAMPLE 10371		INDEX 6318 SAMPLE 13275	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CAMERON		CAMERON		CAMERON	
FIELD	DRIFTWOOD		DRIFTWOOD		EMPORIUM E	
WELL NAME	WELL NO. 337		SAMUEL C. EATON, JR. NO. 6		WN NO. 1185	
LOCATION	GIBSON TOWNSHIP		GIBSON TOWNSHIP		SEC. H, PORTAGE QUADRANGLE	
OWNER	THE SYLVANIA CORP.		CONSOLIDATED GAS SUPPLY CORP		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	10/03/51		10/13/52		10/21/71	
SAMPLED	09/17/65		01/21/66		06/20/72	
FORMATION	DEVO-ORISKANY		DEVO-ORISKANY		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	5922		5983		6654	
WELLHEAD PRESSURE,PSIG	166		3340		3715	
OPEN FLOW, MCFD	13		3449		15138	
COMPONENT, MOLE PCT						
METHANE	97.1		96.9		96.1	
ETHANE	2.0		2.1		2.1	
PROPANE	0.1		0.2		0.1	
N-BUTANE	0.0		TRACE		0.0	
ISOBUTANE	0.0		TRACE		0.0	
N-PENTANE	0.0		TRACE		0.0	
ISOPENTANE	0.0		TRACE		0.0	
CYCLOPENTANE	0.0		0.1		0.0	
HEXANES PLUS	0.0		0.1		0.0	
NITROGEN	0.6		0.4		1.6	
OXYGEN	0.1		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.02		0.03		0.02	
HEATING VALUE*	1022		1033		1014	
SPECIFIC GRAVITY	0.569		0.573		0.574	

	INDEX 6319 SAMPLE 8224		INDEX 6320 SAMPLE 4672		INDEX 6321 SAMPLE 10151	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CAMERON		CLARION		CLARION	
FIELD	WHIPPOORWILL TWP		APPALACHIAN		CLARION	
WELL NAME	N-813 PARDEE ESTATE NO. 3		FINNEFROCK NO. 3784		NO. 3953	
LOCATION	NOT GIVEN		MONROE TWP.		HIGHLAND TOWNSHIP	
OWNER	NEW YORK STATE NAT. GAS CORP		PEOPLES NATURAL GAS CO.		UNITED NATURAL GAS CO.	
COMPLETED	NOT GIVEN		05/11/48		10/31/30	
SAMPLED	10/06/61		02/08/49		09/20/65	
FORMATION	DEVO-ORISKANY		DEVO-		DEVO-SPEECHLEY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	6771		2611		2109	
WELLHEAD PRESSURE,PSIG	3400		810		80	
OPEN FLOW, MCFD	4939		57		4	
COMPONENT, MOLE PCT						
METHANE	97.1		88.0		87.0	
ETHANE	2.0		6.4		7.8	
PROPANE	0.1		2.3		2.5	
N-BUTANE	TRACE		0.8		0.7	
ISOBUTANE	0.0		0.4		0.3	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.4		0.2	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	0.5		1.3		1.0	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.1		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.02		0.11		0.08	
HEATING VALUE*	1023		1127		1138	
SPECIFIC GRAVITY	0.567		0.642		0.646	

	INDEX 6322 SAMPLE 10152		INDEX 6323 SAMPLE 10153		INDEX 6324 SAMPLE 10396	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CLARION		CLARION		CLEARFIELD	
FIELD	CLARION		CLARION		BOONE MOUNTAIN	
WELL NAME	NO. 3660		NO. 3852		A. J. PALUMBO NO. 3 N-684	
LOCATION	MILLCREEK TOWNSHIP		HIGHLAND TOWNSHIP		HUSTON TOWNSHIP	
OWNER	UNITED NATURAL GAS CO.		UNITED NATURAL GAS CO.		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	10/31/28		04/09/28		12/04/58	
SAMPLED	09/20/65		09/20/65		02/08/68	
FORMATION	DEVO-TIONA		DEVO-SHEFFIELD		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2160		2342		7133	
WELLHEAD PRESSURE,PSIG	148		225		3815	
OPEN FLOW, MCFD	4		7		5305	
COMPONENT, MOLE PCT						
METHANE	89.0		84.4		96.0	
ETHANE	6.4		11.1		1.9	
PROPANE	1.7		2.5		0.2	
N-BUTANE	0.5		0.4		0.0	
ISOBUTANE	0.3		0.5		0.0	
N-PENTANE	0.1		TRACE		0.0	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.1		0.0	
NITROGEN	1.5		0.7		1.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.4	
HELIUM	0.02		0.08		0.03	
HEATING VALUE*	1105		1158		1012	
SPECIFIC GRAVITY	0.633		0.656		0.576	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6325 SAMPLE 14234	INDEX 6326 SAMPLE 10398	INDEX 6327 SAMPLE 10296
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CLEARFIELD	CLEARFIELD	CLEARFIELD
FIELD	DECATOR W	LUTHERSBURG	REED-DEEMER
WELL NAME	GENERAL REFACTORIES NO. 1	MERLE MARSHALL NO. 1 N-864	FEE A NO. 66
LOCATION	SEC. C. HOUTZDALE QUADRANGLE	BRADY TOWNSHIP	BELL TOWNSHIP
OWNER	TEXACO INC.	CONSOLIDATED GAS SUPPLY CORP	KEWANEE OIL CO.
COMPLETED	03/30/73	10/27/62	09/15/65
SAMPLED	11/19/74	02/08/66	11/26/65
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7995	7344	3290
WELLHEAD PRESSURE,PSIG	4250	2437	1185
OPEN FLOW, MCFD	2196	696	1384
COMPONENT, MOLE PCT			
METHANE	97.7	97.1	94.1
ETHANE	1.5	2.0	3.0
PROPANE	0.1	0.1	0.4
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.3
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	0.5	0.5	0.9
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.02	0.02	0.07
HEATING VALUE*	1019	1022	1075
SPECIFIC GRAVITY	0.565	0.570	0.605

	INDEX 6328 SAMPLE 10200	INDEX 6329 SAMPLE 10123	INDEX 6330 SAMPLE 11124
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CLEARFIELD	CRAWFORD	CRAWFORD
FIELD	ROCKTON	INDIAN SPRINGS	INDIAN SPRINGS
WELL NAME	4474	NO. 401	O. S. BURNHAM NO. 3
LOCATION	SHAW PROPERTY	SUMMERHILL	SPRING TOWNSHIP
OWNER	MANUFACTURERS LT. & HEAT CO.	THE SYLVANIA CORP.	JAMES DRILLING CORP.
COMPLETED	09/12/57	12/03/63	07/07/66
SAMPLED	10/07/65	09/15/65	09/11/67
FORMATION	DEVO-ORISKANY	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7151	3766	3880
WELLHEAD PRESSURE,PSIG	480	1020	920
OPEN FLOW, MCFD	117	346	8
COMPONENT, MOLE PCT			
METHANE	97.0	87.9	85.8
ETHANE	2.2	4.7	4.7
PROPANE	0.1	1.3	1.3
N-BUTANE	0.0	0.3	0.5
ISOBUTANE	0.0	0.3	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	4.9	6.5
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.16	0.16
HEATING VALUE*	1025	1042	1029
SPECIFIC GRAVITY	0.570	0.626	0.638

	INDEX 6331 SAMPLE 9727	INDEX 6332 SAMPLE 452	INDEX 6333 SAMPLE 453
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CRAWFORD	ELK	ELK
FIELD	PALMER	BEAVER MEADOW	BEAVER MEADOW
WELL NAME	STEPHEN SZALAY NO. 1	SMITH-GRANT NO. 2	O. B. GRANT NO. 1
LOCATION	CONNEAUT TOWNSHIP	4 MI N RIDGWAY	3 MI N RIDGWAY
OWNER	FELMONT OIL CORP.	RIDGWAY LIGHT & HEAT CO.	RIDGWAY LIGHT & HEAT CO.
COMPLETED	11/05/64	--/--/15	--/--/02
SAMPLED	02/08/65	09/18/20	09/18/20
FORMATION	SILU-MEDINA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3740	2505	2100
WELLHEAD PRESSURE,PSIG	1125	120	220
OPEN FLOW, MCFD	1600	350	35
COMPONENT, MOLE PCT			
METHANE	87.6	75.9	88.4
ETHANE	4.1	22.0	11.0
PROPANE	1.1	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	6.3	0.0	0.0
OXYGEN	TRACE	0.5	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.0
HELIUM	0.16	0.00	0.00
HEATING VALUE*	1011	1163	1093
SPECIFIC GRAVITY	0.620	0.660	0.606

	INDEX 6334 SAMPLE 10370	INDEX 6335 SAMPLE 10397	INDEX 6336 SAMPLE 10198
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ELK	ELK	ELK
FIELD	BENEZETTE	BOONE MOUNTAIN	KANE
WELL NAME	PA. DEPT. F&W NO. 4 TRACT 33	LOGAN BOND NO. 1 N-507	WELL NO. 1524
LOCATION	BENEZETTE TOWNSHIP	HORTON TOWNSHIP	JONES TOWNSHIP
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	UNITED NATURAL GAS CO.
COMPLETED	04/03/54	03/25/57	09/20/07
SAMPLED	01/21/66	02/08/66	10/06/65
FORMATION	DEVO-ORISKANY	DEVO-ELK	DEVO-SPEECHLEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6178	2333	1628
WELLHEAD PRESSURE,PSIG	3500	870	170
OPEN FLOW, MCFD	4845	539	23
COMPONENT, MOLE PCT			
METHANE	97.2	95.4	87.1
ETHANE	2.1	3.0	7.4
PROPANE	0.2	0.5	2.4
N-BUTANE	0.0	0.1	0.6
ISOBUTANE	0.0	TRACE	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.4	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	0.03	0.09	0.12
HEATING VALUE*	1027	1042	1129
SPECIFIC GRAVITY	0.569	0.582	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6337 SAMPLE 10199		INDEX 6338 SAMPLE 10163		INDEX 6339 SAMPLE 9728	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	ELK		ELK		ERIE	
FIELD	KANE		MILLSTONE		CONNEAUT	
WELL NAME	1370		NO. 300		KRAMER FARM NO. 1608	
LOCATION	JONES TOWNSHIP		MILLSTONE TOWNSHIP		ELK CREEK TOWNSHIP	
OWNER	UNITED NATURAL GAS CO.		UNITED NATURAL GAS CO.		PENNSYLVANIA GAS CO.	
COMPLETED	11/12/03		11/10/91		12/29/64	
SAMPLED	10/06/65		09/21/65		02/11/65	
FORMATION	DEVO-ELK		DEVO-SHEFFIELD		SILU-MEDINA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2360		2313		3348	
WELLHEAD PRESSURE,PSIG	48		115		930	
OPEN FLOW, MCFD	7		8		499	
COMPONENT, MOLE PCT						
METHANE	73.6		78.2		91.0	
ETHANE	13.3		13.1		4.0	
PROPANE	6.6		4.8		0.7	
N-BUTANE	2.1		1.1		0.2	
ISOBUTANE	1.1		1.0		0.2	
N-PENTANE	0.3		0.2		TRACE	
ISOPENTANE	0.9		0.2		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.4		0.1		0.1	
NITROGEN	1.3		1.1		3.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		TRACE	
HELIUM	0.06		0.06		0.12	
HEATING VALUE*	1139		1144		1035	
SPECIFIC GRAVITY	0.775		0.714		0.605	

	INDEX 6340 SAMPLE 10325		INDEX 6341 SAMPLE 10869		INDEX 6342 SAMPLE 8474	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	ERIE		ERIE		ERIE	
FIELD	CONNEAUT		CONNEAUT		ERIE COUNTY	
WELL NAME	CHASE WELL NO. 1613		M&K FROMBACH NO. 1		NO. 1597	
LOCATION	CONNEAUT TOWNSHIP		SEC. E. GIRARD QUADRANGLE		MILLER PROPERTY, ELK CR.TWP.	
OWNER	PENNSYLVANIA GAS CO.		PENNSYLVANIA GAS CO.		PENNSYLVANIA GAS CO.	
COMPLETED	10/15/65		04/15/66		11/10/61	
SAMPLED	12/13/65		02/14/67		03/13/62	
FORMATION	SILU-MEDINA		SILU-MEDINA		SILU-	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3143		3127		3427	
WELLHEAD PRESSURE,PSIG	1020		950		1020	
OPEN FLOW, MCFD	3144		400		3000	
COMPONENT, MOLE PCT						
METHANE	89.9		90.6		90.4	
ETHANE	4.0		4.0		4.1	
PROPANE	0.8		1.0		0.8	
N-BUTANE	0.3		0.3		0.2	
ISOBUTANE	0.1		0.1		0.1	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.2		0.0		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	4.2		3.7		3.9	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	0.10		0.14		0.14	
HEATING VALUE*	1035		1038		1034	
SPECIFIC GRAVITY	0.614		0.610		0.611	

	INDEX 6343 SAMPLE 8514		INDEX 6344 SAMPLE 14045		INDEX 6345 SAMPLE 9907	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	ERIE		ERIE		ERIE	
FIELD	ERIE COUNTY		ERIE COUNTY		LEXINGTON	
WELL NAME	POSSITER NO. 1		MCLAUGHLIN NO. 1		CRIST NO. 1	
LOCATION	NOT GIVEN		MCKEAN TOWNSHIP		CONNEAUT TOWNSHIP	
OWNER	PENNSYLVANIA GAS CO.		NATIONAL FUEL GAS SUPPLY		WORLDWIDE PETROLEUM CORP.	
COMPLETED	10/25/61		01/17/73		04/30/65	
SAMPLED	05/11/62		07/10/74		05/29/65	
FORMATION	SILU-		DEVO-ORISKANY		SILU-MEDINA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3118		2175		3200	
WELLHEAD PRESSURE,PSIG	1050		808		1100	
OPEN FLOW, MCFD	3000		15000		1000	
COMPONENT, MOLE PCT						
METHANE	90.5		77.3		91.0	
ETHANE	4.1		4.9		4.0	
PROPANE	1.0		2.4		0.8	
N-BUTANE	0.2		0.6		0.2	
ISOBUTANE	0.2		0.3		0.2	
N-PENTANE	TRACE		0.1		TRACE	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.1		TRACE	
NITROGEN	3.7		11.7		3.5	
OXYGEN	TRACE		2.1		0.0	
ARGON	0.0		0.1		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		TRACE	
HELIUM	0.14		0.22		0.10	
HEATING VALUE*	1039		985		1032	
SPECIFIC GRAVITY	0.610		0.688		0.604	

	INDEX 6346 SAMPLE 10750		INDEX 6347 SAMPLE 8567		INDEX 6348 SAMPLE 11703	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	ERIE		FAYETTE		FAYETTE	
FIELD	SPRINGFIELD		CHALK HILL		ELLIOTSVILLE	
WELL NAME	N. MERRITT NO. 1		P.N.G. NO. 4271		FRANK WHITE NO. 1	
LOCATION	CONNEAUT TOWNSHIP		STEWART TWP.		WHARTON TOWNSHIP	
OWNER	CAYMAN CORP.		PEOPLES NATURAL GAS CO.ET AL		ZENITH EXPLORATION CO.	
COMPLETED	08/27/65		10/--/61		10/09/68	
SAMPLED	10/06/66		05/11/62		12/11/68	
FORMATION	SILU-MEDINA		DEVO-CHERT & ORISKANY		DEVO-SPEECHLEY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2716		7611		2820	
WELLHEAD PRESSURE,PSIG	420		3413		1100	
OPEN FLOW, MCFD	5400		3110		1000	
COMPONENT, MOLE PCT						
METHANE	96.7		97.5		95.6	
ETHANE	1.8		1.6		2.7	
PROPANE	0.9		TRACE		0.2	
N-BUTANE	0.3		0.0		0.1	
ISOBUTANE	0.1		TRACE		0.0	
N-PENTANE	0.1		0.0		0.1	
ISOPENTANE	0.1		TRACE		0.0	
CYCLOPENTANE	TRACE		0.0		0.1	
HEXANES PLUS	0.1		0.0		0.1	
NITROGEN	3.9		0.5		0.5	
OXYGEN	0.1		TRACE		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.4		0.0		0.5	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.2		TRACE	
HELIUM	0.17		0.10		0.10	
HEATING VALUE*	1033		1016		1040	
SPECIFIC GRAVITY	0.610		0.565		0.577	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6349 SAMPLE 12214	INDEX 6350 SAMPLE 10249	INDEX 6351 SAMPLE 13257
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	NOT GIVEN	OHIOPYLE	SPRUELL
WELL NAME	RYAN NO. 2D	B. G. & E. M. MUELLER NO. 45	E. M. ABBEY NO. 1
LOCATION	WHARTON TOWNSHIP	HENRY CLAY TOWNSHIP	STEWART TOWNSHIP
OWNER	ZENITH EXPLORATION CO.	MANUFACTURERS LT. & HEAT CO.	SNEE & EBERLY
COMPLETED	10/31/69	10/23/59	12/09/71
SAMPLED	03/05/70	10/20/65	06/07/72
FORMATION	DEVO-ORISKANY	DEVO-CHERT & ORISKANY	DEVO-CHERT + ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7657	8490	7578
WELLHEAD PRESSURE,PSIG	3400	3320	3086
OPEN FLOW, MCFD	2600	319000	3500
COMPONENT, MOLE PCT			
METHANE	97.2	97.5	97.6
ETHANE	1.6	1.7	1.6
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.6	0.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1016	1021	1020
SPECIFIC GRAVITY	0.568	0.567	0.566

	INDEX 6352 SAMPLE 10247	INDEX 6353 SAMPLE 10250	INDEX 6354 SAMPLE 10227
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FAYETTE	FAYETTE	FOREST
FIELD	SUMMIT	SUMMIT	GUITONVILLE
WELL NAME	W. R. BARTON NO. G-960	EUTSEY NO. 3907	NO. 2346
LOCATION	GEORGES TOWNSHIP	GEORGES TOWNSHIP	GREEN TOWNSHIP
OWNER	MANUFACTURERS LT. & HEAT CO.	MANUFACTURERS LT. & HEAT CO.	UNITED NATURAL GAS CO.
COMPLETED	01/27/44	06/21/47	10/01/06
SAMPLED	10/20/65	10/20/65	10/06/65
FORMATION	DEVO-CHERT & ORISKANY	DEVO-CHERT	DEVO-VENANGO
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7012	6873	947
WELLHEAD PRESSURE,PSIG	492	365	14
OPEN FLOW, MCFD	231214	121430	31
COMPONENT, MOLE PCT			
METHANE	97.7	97.6	76.2
ETHANE	1.5	1.5	9.8
PROPANE	0.1	0.1	6.3
N-BUTANE	0.0	0.0	2.7
ISOBUTANE	0.0	0.0	1.5
N-PENTANE	0.0	0.0	0.7
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	0.6	0.7	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.02	0.02	0.09
HEATING VALUE*	1019	1018	1351
SPECIFIC GRAVITY	0.566	0.567	0.779

	INDEX 6355 SAMPLE 10318	INDEX 6356 SAMPLE 10203	INDEX 6357 SAMPLE 2490
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FOREST	FOREST	GREENE
FIELD	MARIENVILLE	QUEEN	APPALACHIAN
WELL NAME	CROASMAN 42C	3137	NO. 2998
LOCATION	5 MI. SW MARIENVILLE	HICKORY TOWNSHIP	A. B. WADE FARM; TERRY TWP.
OWNER	NORTH PENN GAS CO.	UNITED NATURAL GAS CO.	EQUITABLE GAS CO.
COMPLETED	10/01/65	10/22/18	01/15/32
SAMPLED	10/13/65	10/06/65	04/08/32
FORMATION	PENN-CLARION	PERM-QUEEN	DEVO-GANTZ
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	986	1133	2966
WELLHEAD PRESSURE,PSIG	NOT GIVEN	209	685
OPEN FLOW, MCFD	150	52	6181
COMPONENT, MOLE PCT			
METHANE	90.6	80.8	90.5
ETHANE	4.5	11.7	4.9
PROPANE	1.3	3.8	---
N-BUTANE	0.5	0.8	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.1	1.9	3.8
OXYGEN	0.0	0.0	0.6
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.14	0.17	0.20
HEATING VALUE*	1083	1102	1005
SPECIFIC GRAVITY	0.621	0.683	0.597

	INDEX 6358 SAMPLE 10265	INDEX 6359 SAMPLE 10267	INDEX 6360 SAMPLE 15992
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	GREENE
FIELD	CARMICHAELS	FORDYCE	FORDYCE
WELL NAME	WILLIAM FLENNIKEN NO. 3-372	THOMAS BREWER NO. 1-809	HEADLEY NO. 5453
LOCATION	CUMBERLAND TOWNSHIP	CUMBERLAND TOWNSHIP	SEC. F, GARADS FORT QUAD.
OWNER	CARNEGIE NATURAL GAS CO.	CARNEGIE NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	05/04/22	12/31/34	02/05/80
SAMPLED	11/03/65	11/03/65	06/25/80
FORMATION	DEVO-ELIZABETH	DEVO-BAYARD	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	475
DEPTH, FEET	3091	3226	1590
WELLHEAD PRESSURE,PSIG	16	280	NOT GIVEN
OPEN FLOW, MCFD	21	12	7500
COMPONENT, MOLE PCT			
METHANE	88.2	91.9	88.5
ETHANE	6.6	5.2	6.3
PROPANE	2.2	1.1	2.2
N-BUTANE	0.7	0.2	0.5
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.1	1.0	1.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.08	0.09	0.11
HEATING VALUE*	1133	1076	1120
SPECIFIC GRAVITY	0.643	0.606	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6361 SAMPLE 10438		INDEX 6362 SAMPLE 10445		INDEX 6363 SAMPLE 10449	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	GREENE		GREENE		GREENE	
FIELD	GARRISON		GARRISON		GARRISON	
WELL NAME	S.F. RENNER - O.W. NO. 9332		WELL NO. 2673 - TAYLOR		A.M. SNYDER - O. W. NO. 5035	
LOCATION	MANNINGTON TOWNSHIP		MANNINGTON TOWNSHIP		MANNINGTON TOWNSHIP	
OWNER	BROWN & ALLEN		EQUITABLE GAS CO.		T. SMITH	
COMPLETED	09/29/48		11/27/17		12/23/54	
SAMPLED	01/12/66		01/12/66		01/12/66	
FORMATION	MISS-MAXTON		MISS-MAXTON & BIG INJUN		DEVO-BAYARD	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2294		2318		3645	
WELLHEAD PRESSURE,PSIG	12		14		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		1		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	80.6		73.7		56.3	
ETHANE	10.9		14.6		21.3	
PROPANE	3.9		5.9		12.5	
N-BUTANE	1.3		1.7		3.6	
ISOBUTANE	0.8		1.4		2.3	
N-PENTANE	0.5		0.4		0.7	
ISOPENTANE	0.2		0.5		1.3	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.5		0.5		0.9	
NITROGEN	1.3		0.9		0.8	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.09		0.04		0.05	
HEATING VALUE*	1230		1334		1614	
SPECIFIC GRAVITY	0.708		0.771		0.943	

	INDEX 6364 SAMPLE 10268		INDEX 6365 SAMPLE 10439		INDEX 6366 SAMPLE 10455	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	GREENE		GREENE		GREENE	
FIELD	GUMP		JEFFERSON		JEFFERSON	
WELL NAME	C. A. DULANEY 949		M-375 - HILL		VAN KIRK - NO. 1553	
LOCATION	WHITELEY TOWNSHIP		WAYNESBURG TOWNSHIP		WAYNESBURG TOWNSHIP	
OWNER	CARNEGIE NATURAL GAS CO.		EQUITABLE GAS CO.		EQUITABLE GAS CO.	
COMPLETED	08/11/48		05/21/19		07/10/04	
SAMPLED	11/03/65		01/12/66		01/12/66	
FORMATION	MISS-BIG INJUN		DEVO-BAYARD		DEVO-BAYARD	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2103		2360		2865	
WELLHEAD PRESSURE,PSIG	25		53		44	
OPEN FLOW, MCFD	8		11		9	
COMPONENT, MOLE PCT						
METHANE	87.1		92.3		92.0	
ETHANE	5.1		3.1		3.9	
PROPANE	2.0		0.5		0.7	
N-BUTANE	0.9		0.2		0.3	
ISOBUTANE	0.5		0.2		0.2	
N-PENTANE	0.4		TRACE		0.1	
ISOPENTANE	0.2		TRACE		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.5		0.1		0.2	
NITROGEN	2.7		3.0		2.2	
OXYGEN	0.0		0.3		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.16		0.12		0.15	
HEATING VALUE*	1128		1022		1056	
SPECIFIC GRAVITY	0.657		0.597		0.606	

	INDEX 6367 SAMPLE 10456		INDEX 6368 SAMPLE 10266		INDEX 6369 SAMPLE 340	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	GREENE		GREENE		GREENE	
FIELD	JEFFERSON		MCCRACKEN		WAYNESBURG	
WELL NAME	MOLESY - NO. 1492		G. E. HOUSTON NO. 186		JOHN MILLER NO. 779	
LOCATION	WAYNESBURG TOWNSHIP		ALEPPO & RICHHILL TOWNSHIP		FRANKLIN TWP.	
OWNER	H. D. FREELAND		CARNEGIE NATURAL GAS CO.		MANUFACTURERS LT. & HT. CO.	
COMPLETED	10/16/02		09/07/13		06/---/18	
SAMPLED	01/12/66		11/03/65		06/10/20	
FORMATION	DEVO-ELIZABETH		DEVO-FIFTY FOOT SAND		DEVO-BAYARD	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3125		2578		2807	
WELLHEAD PRESSURE,PSIG	80		37		17	
OPEN FLOW, MCFD	36		21		30	
COMPONENT, MOLE PCT						
METHANE	90.2		75.4		82.8	
ETHANE	5.2		11.1		14.4	
PROPANE	1.5		5.6		---	
N-BUTANE	0.6		2.3		---	
ISOBUTANE	0.4		1.2		---	
N-PENTANE	0.1		0.6		---	
ISOPENTANE	0.2		0.9		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	0.1		0.7		---	
NITROGEN	1.2		1.8		1.7	
OXYGEN	0.0		0.0		0.9	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		0.2		0.0	
HELIUM	0.10		0.10		0.10	
HEATING VALUE*	1108		1330		1097	
SPECIFIC GRAVITY	0.628		0.775		0.637	

	INDEX 6370 SAMPLE 341		INDEX 6371 SAMPLE 343		INDEX 6372 SAMPLE 920	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	GREENE		GREENE		GREENE	
FIELD	WAYNESBURG		WAYNESBURG		WAYNESBURG	
WELL NAME	C. L. HAYNES NO. 2203		GREEN CO. POOR FARM NO. 2267		NO. 2902	
LOCATION	3 MI E FRANKLIN		FRANKLIN TWP.		MORRIS TOWNSHIP	
OWNER	MANUFACTURERS LT. & HT. CO.		MANUFACTURERS LT. & HT. CO.		MANUFACTURERS LT. & HT. CO.	
COMPLETED	06/---/18		06/---/18		NOT GIVEN	
SAMPLED	06/10/20		06/10/20		09/15/24	
FORMATION	-GAS		-SALT		NOT GIVEN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1275		1212		3048	
WELLHEAD PRESSURE,PSIG	18		18		470	
OPEN FLOW, MCFD	35		35		1565	
COMPONENT, MOLE PCT						
METHANE	85.8		0.0		74.8	
ETHANE	11.3		0.0		23.4	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	2.2		0.0		1.4	
OXYGEN	0.9		0.0		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	1.3		0.0		0.0	
HELIUM	0.13		0.17		0.10	
HEATING VALUE*	1092		0		1177	
SPECIFIC GRAVITY	0.622		0.000		0.676	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6373 SAMPLE 10599	INDEX 6374 SAMPLE 10390	INDEX 6375 SAMPLE 9833
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	INDIANA	INDIANA
FIELD	WAYNESBURG	ARMAGH	BIG RUN
WELL NAME	O.W. NO. 10752 ALLISON	BEULAH STILES, ET AL. NO. 1	H. C. BONNER NO. 1
LOCATION	W86; SW	BUFFINGTON TOWNSHIP	BANKS TOWNSHIP
OWNER	J. T. GALEY	CONSOLIDATED GAS SUPPLY CORP	FAIRMAN DRILLING CO.
COMPLETED	11/12/63	07/08/58	10/12/64
SAMPLED	05/24/66	02/08/66	04/01/65
FORMATION	DEVO-BRADFORD	DEVO-CHERT & ORISKANY	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3890	8257	2465
WELLHEAD PRESSURE,PSIG	1215	NOT GIVEN	1170
OPEN FLOW, MCFD	250	444	1061
COMPONENT, MOLE PCT			
METHANE	89.5	97.5	96.0
ETHANE	6.6	1.7	2.6
PROPANE	2.0	0.0	0.6
N-BUTANE	0.5	0.0	0.2
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.03	0.03	0.07
HEATING VALUE*	1123	1018	1041
SPECIFIC GRAVITY	0.630	0.568	0.578

	INDEX 6376 SAMPLE 8891	INDEX 6377 SAMPLE 10532	INDEX 6378 SAMPLE 12568
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	CHERRY HILL	CHERRY HILL	CREEKSIDE
WELL NAME	A. B. CRICHTON NO. 1	O. M. GIBSON	INVESTMENT NO. 3
LOCATION	NOT GIVEN	CHERRY HILL TOWNSHIP	WASHINGTON TOWNSHIP
OWNER	MANUFACTURERS LT. & HT. CO.	DELTA DRILLING CO.	PEOPLES NATURAL GAS CO.
COMPLETED	01/07/63	02/24/66	07/08/70
SAMPLED	03/18/63	04/19/66	11/--/70
FORMATION	DEVO-HUNTERSVILLE	DEVO-ONONDAGA	DEVO-BALLTOWN & BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7565	7854	3369
WELLHEAD PRESSURE,PSIG	4033	4150	1225
OPEN FLOW, MCFD	7710	2000	2800
COMPONENT, MOLE PCT			
METHANE	97.7	96.7	93.4
ETHANE	1.6	1.7	3.6
PROPANE	0.1	0.1	1.1
N-BUTANE	TRACE	0.0	0.2
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.4	1.1	1.0
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.02	0.02	0.08
HEATING VALUE*	1021	1013	1062
SPECIFIC GRAVITY	0.567	0.571	0.596

	INDEX 6379 SAMPLE 12251	INDEX 6380 SAMPLE 12252	INDEX 6381 SAMPLE 12839
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	CRETE	CRETE	GRIP
WELL NAME	F.M.KINTER NO.2; PNG NO.4596	FRED A. BOWMAN NO.1;PNG 4589	CLEARFIELD COAL CORP. NO. 1
LOCATION	SEC. A; CENTER TOWNSHIP	SEC. A; CENTER TOWNSHIP	SEC.A, BARNESBORO QUADRANGLE
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	FELMONT OIL CORP.
COMPLETED	10/08/69	08/25/69	07/29/70
SAMPLED	04/05/70	04/09/70	05/21/71
FORMATION	DEVO-BALLTOWN (B&C)	DEVO-BALLTOWN & BRADFORD	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3047	3141	7964
WELLHEAD PRESSURE,PSIG	520	1200	4261
OPEN FLOW, MCFD	1000	6000	10250
COMPONENT, MOLE PCT			
METHANE	94.5	95.7	97.3
ETHANE	2.8	2.8	1.8
PROPANE	0.6	0.4	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.1	0.9	0.6
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.07	0.08	0.02
HEATING VALUE*	1051	1030	1020
SPECIFIC GRAVITY	0.591	0.575	0.570

	INDEX 6382 SAMPLE 9774	INDEX 6383 SAMPLE 10205	INDEX 6384 SAMPLE 9776
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	INDIANA	JACKSONVILLE	LEWISVILLE
WELL NAME	M. W. SIMPSON NO. 1	STEWART NO. 1, CO. NO. 4336	J. A. DIXON NO. 3
LOCATION	WHITE TOWNSHIP	YOUNG TOWNSHIP	CONEMAUGH TOWNSHIP
OWNER	PEOPLES NATURAL GAS CO.	MANUFACTURERS LT. & HEAT CO.	PEOPLES NATURAL GAS CO.
COMPLETED	12/10/64	NOT GIVEN	11/25/64
SAMPLED	NOT GIVEN	10/06/65	NOT GIVEN
FORMATION	DEVO-BRADFORD & BALLTOWN	DEVO-CHERT & ORISKANY	DEVO-BALLTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3015	7384	2916
WELLHEAD PRESSURE,PSIG	1300	1442	1250
OPEN FLOW, MCFD	1300	40	407
COMPONENT, MOLE PCT			
METHANE	94.7	97.2	94.6
ETHANE	3.1	2.0	3.0
PROPANE	0.6	0.2	0.6
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.1	0.0	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.9	0.4	1.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.08	0.02	0.07
HEATING VALUE*	1050	1026	1047
SPECIFIC GRAVITY	0.587	0.570	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6385 SAMPLE 8100		INDEX 6386 SAMPLE 12221		INDEX 6387 SAMPLE 12464	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	INDIANA		INDIANA		INDIANA	
FIELD	NOT GIVEN		PINETON		PINETON	
WELL NAME	SHUMAKER		RICHARD HANWELL NO. 1		CLEARFIELD COAL CORP. NO. 1	
LOCATION	T. BURRELL		GREEN TOWNSHIP		PINE TOWNSHIP	
OWNER	JAMES DRILLING CO.		FELMONT OIL CORP.		FELMONT OIL CORP.	
COMPLETED	11/19/60		12/20/69		07/31/70	
SAMPLED	06/18/61		03/05/70		10/19/70	
FORMATION	DEVO-BALLTOWN		DEVO-ORISKANY		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3100		8139		8053	
WELLHEAD PRESSURE,PSIG	1320		4261		4231	
OPEN FLOW, MCFD	850		6154		10500	
COMPONENT, MOLE PCT						
METHANE	92.5		96.6		97.6	
ETHANE	4.1		1.6		1.7	
PROPANE	1.2		0.1		0.1	
N-BUTANE	0.3		0.0		0.0	
ISOBUTANE	0.5		0.0		0.0	
N-PENTANE	0.1		0.0		0.0	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	0.1		0.0		0.0	
NITROGEN	0.7		1.2		0.4	
OXYGEN	0.0		0.2		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.10		0.02		0.03	
HEATING VALUE*	1083		1010		1022	
SPECIFIC GRAVITY	0.608		0.571		0.566	

	INDEX 6388 SAMPLE 12633		INDEX 6389 SAMPLE 12089		INDEX 6390 SAMPLE 9733	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	INDIANA		INDIANA		JEFFERSON	
FIELD	ROCHESTER MILLS		ROCHESTER MILLS POOL		BIG RUN	
WELL NAME	VERNER M. WACHOB NO. 2		D. J. SWANSON NO. 2		I. B. MILLER NO. 1	
LOCATION	MARCHAND TOWNSHIP		CANOE TOWNSHIP		GASKILL TOWNSHIP	
OWNER	CONSOLIDATED GAS SUPPLY CORP		CONSOLIDATED GAS SUPPLY CORP		NEW YORK STATE NAT. GAS CORP	
COMPLETED	09/11/70		06/24/69		12/05/64	
SAMPLED	01/18/71		10/13/69		02/11/65	
FORMATION	DEVO-SHEFFIELD & BRADFORD		DEVO-BRADFORD		DEVO-	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3252		3360		2892	
WELLHEAD PRESSURE,PSIG	986		967		1306	
OPEN FLOW, MCFD	2477		2144		3033	
COMPONENT, MOLE PCT						
METHANE	95.7		94.9		94.4	
ETHANE	3.2		3.0		2.8	
PROPANE	0.5		0.5		0.5	
N-BUTANE	0.0		0.2		0.1	
ISOBUTANE	0.0		0.0		0.1	
N-PENTANE	0.0		0.0		0.1	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.2	
NITROGEN	0.5		0.9		1.4	
OXYGEN	0.0		TRACE		0.2	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.3		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.0	
HELIUM	0.07		0.07		0.07	
HEATING VALUE*	1040		1036		1041	
SPECIFIC GRAVITY	0.578		0.579		0.589	

	INDEX 6391 SAMPLE 9832		INDEX 6392 SAMPLE 10389		INDEX 6393 SAMPLE 10365	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	JEFFERSON		JEFFERSON		JEFFERSON	
FIELD	BIG RUN		BIG RUN		ELK RUN	
WELL NAME	ROBERT MAINE NO. 1		B. WINEBERG, ET AL.N-978		R & P COAL CO. NO. 4	
LOCATION	GASKILL TOWNSHIP		GASKILL		YOUNG TOWNSHIP	
OWNER	FAIRMAN DRILLING CO.		CONSOLIDATED GAS SUPPLY CORP		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	10/31/64		08/12/65		11/23/65	
SAMPLED	04/01/65		02/07/66		01/14/66	
FORMATION	DEVO-		NOT GIVEN		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2500		2992		7235	
WELLHEAD PRESSURE,PSIG	1300		1081		3865	
OPEN FLOW, MCFD	670		1887		3499	
COMPONENT, MOLE PCT						
METHANE	95.8		95.0		97.1	
ETHANE	2.9		2.9		2.1	
PROPANE	0.4		0.7		0.0	
N-BUTANE	0.1		0.1		0.0	
ISOBUTANE	TRACE		0.1		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	TRACE		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.2		0.0	
NITROGEN	0.7		0.7		0.6	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.2	
HELIUM	0.09		0.07		0.02	
HEATING VALUE*	1042		1054		1021	
SPECIFIC GRAVITY	0.580		0.587		0.569	

	INDEX 6394 SAMPLE 10388		INDEX 6395 SAMPLE 10164		INDEX 6396 SAMPLE 10165	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	JEFFERSON		JEFFERSON		JEFFERSON	
FIELD	ELK RUN		MILLSTONE		MILLSTONE	
WELL NAME	R & P COAL CO. N-982		NO. 3538		NO. 760	
LOCATION	YOUNG		HEATH TOWNSHIP		HEATH TOWNSHIP	
OWNER	CONSOLIDATED GAS SUPPLY CORP		UNITED NATURAL GAS CO.		UNITED NATURAL GAS CO.	
COMPLETED	06/20/65		01/24/23		05/03/07	
SAMPLED	02/07/66		09/21/65		09/21/65	
FORMATION	DEVO-ORISKANY		DEVO-COPPER		DEVO-HASKELL	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	7170		2165		2950	
WELLHEAD PRESSURE,PSIG	3845		245		551	
OPEN FLOW, MCFD	7214		NOT GIVEN		66	
COMPONENT, MOLE PCT						
METHANE	96.6		90.4		88.9	
ETHANE	1.9		6.3		6.1	
PROPANE	0.1		1.3		1.5	
N-BUTANE	0.0		0.3		0.5	
ISOBUTANE	0.0		0.3		0.1	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.1		0.1	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.1	
NITROGEN	1.0		0.9		2.3	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.02		0.07		0.10	
HEATING VALUE*	1015		1096		1083	
SPECIFIC GRAVITY	0.571		0.618		0.625	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6397 SAMPLE 12034	INDEX 6398 SAMPLE 10166	INDEX 6399 SAMPLE 6136
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	JEFFERSON	JEFFERSON	LACKAWANNA
FIELD	ROCHESTER MILLS POOL	SIGEL	NEW
WELL NAME	L. N. BLOSE NO. 1	NO. 4074	RICHARDS NO. 1
LOCATION	YOUNG TOWNSHIP	HEATH TOWNSHIP	1.3 MILES NORTH RANSOM, PENN
OWNER	CONSOLIDATED GAS SUPPLY CORP	UNITED NATURAL GAS CO.	TRANSCONTINENTAL PROD. CO.
COMPLETED	05/14/69	09/24/65	NOT GIVEN
SAMPLED	09/12/69	09/22/65	04/11/56
FORMATION	DEVO-BRADFORD & SHEFFIELD	PENN-KANE	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3698	2402	2814
WELLHEAD PRESSURE,PSIG	1205	253	NOT GIVEN
OPEN FLOW, MCFD	3033	NOT GIVEN	267
COMPONENT, MOLE PCT			
METHANE	94.2	85.6	91.0
ETHANE	3.3	9.3	2.5
PROPANE	0.6	2.4	0.3
N-BUTANE	0.1	0.5	0.0
ISOBUTANE	0.1	0.3	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.1	1.2	5.5
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	0.1
HYDROGEN	0.2	0.1	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.07	0.06	0.12
HEATING VALUE*	1046	1141	976
SPECIFIC GRAVITY	0.587	0.650	0.593

	INDEX 6400 SAMPLE 11688	INDEX 6401 SAMPLE 10214	INDEX 6402 SAMPLE 14424
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	LACKAWANNA	MCKEAN	MCKEAN
FIELD	NOT GIVEN	ANNIN	BRADFORD
WELL NAME	WATER WELL	DILLENBECK NO. 1716	AMOCO-WITCO NO. 1
LOCATION	DALTON QUADRANGLE	ANNIN TOWNSHIP	SEC. 1, BRADFORD QUADRANGLE
OWNER	EUGENE DECKER	NORTH PENN GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/55	01/01/20	07/30/74
SAMPLED	11/14/68	10/14/65	08/01/75
FORMATION	DEVO-CATSKILL	DEVO-BRADFORD *	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	175	1465	5184
WELLHEAD PRESSURE,PSIG	NOT GIVEN	20	2250
OPEN FLOW, MCFD	NOT GIVEN	3000	3000
COMPONENT, MOLE PCT			
METHANE	67.6	78.7	82.1
ETHANE	0.0	12.6	11.7
PROPANE	TRACE	4.9	3.6
N-BUTANE	0.0	1.3	0.8
ISOBUTANE	0.0	0.9	0.6
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	31.6	0.3	0.6
OXYGEN	0.1	0.0	TRACE
ARGON	0.4	0.0	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.25	0.10	0.02
HEATING VALUE*	685	1266	1205
SPECIFIC GRAVITY	0.687	0.719	0.682

	INDEX 6403 SAMPLE 10179	INDEX 6404 SAMPLE 10181	INDEX 6405 SAMPLE 5
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	MCKEAN	MCKEAN	MCKEAN
FIELD	CLERMONT	HALSEY	MAIN GATHERING LINE
WELL NAME	NO. 3450	1104	LIBERTY, KEATING & ANNIN TWP
LOCATION	NORWICH TOWNSHIP	SERGEANT TOWNSHIP	NOT GIVEN
OWNER	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.	POTTER GAS CO.
COMPLETED	08/13/33	01/01/90	NOT GIVEN
SAMPLED	09/30/65	09/29/65	05/03/19
FORMATION	DEVO-HASKELL	DEVO-BRADFORD	DEVO-THIRD SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2133	1752	NOT GIVEN
WELLHEAD PRESSURE,PSIG	97	99	100
OPEN FLOW, MCFD	14	2	10000
COMPONENT, MOLE PCT			
METHANE	92.2	77.6	77.8
ETHANE	4.3	13.4	16.5
PROPANE	0.7	4.6	---
N-BUTANE	0.2	1.2	---
ISOBUTANE	0.1	0.7	---
N-PENTANE	0.1	0.3	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.4	---
NITROGEN	1.8	1.2	3.2
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.21	0.07	TRACE
HEATING VALUE*	1054	1256	1120
SPECIFIC GRAVITY	0.599	0.722	0.662

	INDEX 6406 SAMPLE 441	INDEX 6407 SAMPLE 442	INDEX 6408 SAMPLE 10180
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	MCKEAN	MCKEAN	MCKEAN
FIELD	PORT ALLEGANY	PORT ALLEGANY	RAINEY S
WELL NAME	554 COOPER NO. 1	456 GALLOUP NO. 1	1186
LOCATION	2 MI N PORT ALLEGANY	3 MI N PORT ALLEGANY	SERGEANT TOWNSHIP
OWNER	POTTER GAS CO.	POTTER GAS CO.	UNITED NATURAL GAS CO.
COMPLETED	NOT GIVEN	08/12/10	02/05/00
SAMPLED	09/17/20	09/17/20	09/29/65
FORMATION	PENN-KANE	PENN-KANE	PENN-KANE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1316	1385	2298
WELLHEAD PRESSURE,PSIG	190	150	51
OPEN FLOW, MCFD	300	200	10
COMPONENT, MOLE PCT			
METHANE	75.2	70.5	64.9
ETHANE	24.2	27.1	17.8
PROPANE	---	---	10.5
N-BUTANE	---	---	2.8
ISOBUTANE	---	---	1.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	1.4
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.4
NITROGEN	0.0	1.3	0.3
OXYGEN	0.3	0.7	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.11	0.11	0.05
HEATING VALUE*	1195	1200	1483
SPECIFIC GRAVITY	0.677	0.699	0.855

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6409 SAMPLE 10375	INDEX 6410 SAMPLE 440	INDEX 6411 SAMPLE 10218
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	POTTER	POTTER	POTTER
FIELD	BROOKLAND	FISHING CREEK	FORK E
WELL NAME	J. TORAK	CLARK NO. 1, WELL NO. 870	COSTELLO LANDS NO. 10-1699
LOCATION	ULYSSES TOWNSHIP GOLD	4 MI NW ROULETTE	4 MI. NE OF WHARTON
OWNER	CONSOLIDATED GAS SUPPLY CORP	POTTER GAS CO.	NORTH PENN GAS CO.
COMPLETED	01/26/66	09/05/17	07/20/40
SAMPLED	01/26/66	09/17/20	10/14/65
FORMATION	DEVO-ORISKANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5238	1055	893
WELLHEAD PRESSURE,PSIG	NOT GIVEN	120	170
OPEN FLOW, MCFD	50	75	12000
COMPONENT, MOLE PCT			
METHANE	96.7	89.3	94.9
ETHANE	1.7	9.3	2.6
PROPANE	0.2	---	0.5
N-BUTANE	0.0	---	0.2
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	1.2	1.2	1.5
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.04	0.14	0.10
HEATING VALUE*	1015	1071	1028
SPECIFIC GRAVITY	0.571	0.604	0.580

	INDEX 6412 SAMPLE 10316	INDEX 6413 SAMPLE 2570	INDEX 6414 SAMPLE 10212
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	POTTER	POTTER	POTTER
FIELD	FORK E	POTTER	ROULETTE
WELL NAME	GERALD LOGUE	NUGENT NO. 1	L. G. POTTER 985
LOCATION	4 MI. SW WHARTON	HEBRON TWP.	5 MI. NORTH OF COUDERSPORT
OWNER	WINTER ASSOCIATES	WILLIAMSPORT NATURAL GAS CO.	NORTH PENN GAS CO.
COMPLETED	01/01/52	06/25/32	11/01/26
SAMPLED	12/09/65	11/03/32	10/14/65
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-CRANDALL HILL
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5453	4876	975
WELLHEAD PRESSURE,PSIG	2450	2160	NOT GIVEN
OPEN FLOW, MCFD	3000	16604	21
COMPONENT, MOLE PCT			
METHANE	95.5	79.2	89.4
ETHANE	2.9	16.8	6.8
PROPANE	0.5	---	1.7
N-BUTANE	0.1	---	0.3
ISOBUTANE	TRACE	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.5	3.5	0.7
OXYGEN	TRACE	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.3
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.01	TRACE	0.10
HEATING VALUE*	1045	1103	1106
SPECIFIC GRAVITY	0.583	0.655	0.621

	ANDEX 6415 SAMPLE 10216	INDEX 6416 SAMPLE 10317	INDEX 6417 SAMPLE 14521
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	POTTER	POTTER	SCHUYLKILL
FIELD	SHARON	ULYSSES	ANTHRACITE COALFIELD
WELL NAME	RATHBURN-DONOVAN	HOLSEY M. D.	PARKER NO. 2
LOCATION	OSWAGO TOWNSHIP	3 MI. SW ULYSSES	SWATARA COAL TRACT
OWNER	NORTH PENN GAS CO.	FAIRMAN DRILLING CO.	PARKERS SWATARA COAL CO.
COMPLETED	09/18/39	09/22/62	09/16/75
SAMPLED	10/14/65	12/09/65	09/27/75
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	PENN-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4997	5260	602
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1300	NOT GIVEN
OPEN FLOW, MCFD	1600	65000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.8	97.0	93.7
ETHANE	1.0	2.0	0.1
PROPANE	0.2	0.2	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.8	0.7	6.0
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.03	0.03	TRACE
HEATING VALUE*	1041	1024	951
SPECIFIC GRAVITY	0.582	0.570	0.581

	INDEX 6418 SAMPLE 14522	INDEX 6419 SAMPLE 14526	INDEX 6420 SAMPLE 8565
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SCHUYLKILL	SCHUYLKILL	SOMERSET
FIELD	ANTHRACITE COALFIELD	SOUTHERN ANTHRACITE	FERRELTON
WELL NAME	PARKER NO. 3	PARKER NO. 2	P.N.G. NO. 4295
LOCATION	SWATARA COAL TRACT	NEAR MINERSVILLE PA.	QUEMAHONING TWP.
OWNER	PARKERS SWATARA COAL CO.	PARKERS SWATARA COAL CO.	PEOPLES NATURAL GAS CO.ET AL
COMPLETED	10/19/75	NOT GIVEN	04/17/62
SAMPLED	10/30/75	11/03/75	05/11/62
FORMATION	-COAL SEAM	PENN-	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	602	602	2756
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	805
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	610
COMPONENT, MOLE PCT			
METHANE	99.0	98.7	79.6
ETHANE	TRACE	0.1	0.4
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	1.1	18.9
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	TRACE	TRACE	0.70
HEATING VALUE*	1003	1002	816
SPECIFIC GRAVITY	0.559	0.559	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6421 SAMPLE 10248	INDEX 6422 SAMPLE 15816	INDEX 6423 SAMPLE 11139
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SOMERSET	SOMERSET	SOMERSET
FIELD	OHIOPYLE	SOMERSET W	WILDCAT
WELL NAME	STATE GAME LAND NO. 4562	S. G. ENGLEKA JR. NO. 1	A. A. DUPRE NO. 1
LOCATION	LOWER TURKEYFOOT TOWNSHIP	MURDOCK QUADRANGLE	MIDDLE CREEK TOWNSHIP
OWNER	MANUFACTURERS LT. & HEAT CO.	AMOCO PRODUCTION CO.	PEOPLES NATURAL GAS CO.
COMPLETED	01/23/60	11/21/77	NOT GIVEN
SAMPLED	10/20/65	10/--/79	08/25/67
FORMATION	DEVO-CHERT	DEVO-ORISKANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8147	9086	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3370	1000	NOT GIVEN
OPEN FLOW, MCFD	1917	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	98.0	97.5
ETHANE	1.5	1.1	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.6	0.6	0.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1012	1015	1014
SPECIFIC GRAVITY	0.572	0.565	0.566

	INDEX 6424 SAMPLE 14154	INDEX 6425 SAMPLE 2353	INDEX 6426 SAMPLE 14106
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SOMERSET	TIOGA	VENANGO
FIELD	WILDCAT	TIOGA COUNTY	BARKEYVILLE
WELL NAME	R.J. LAMBERT NO. 1	PALMER NO. 1	W.F. DUNCAN NO. 1
LOCATION	STONY CREEK TOWNSHIP	FARMINGTON TWP.	SEC. A; HILLARDS QUADRANGLE
OWNER	AMOCO PRODUCTION CO.	ALLEGANY GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	09/30/73	09/10/30	04/12/73
SAMPLED	08/28/74	03/01/31	07/16/74
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8636	4007	6535
WELLHEAD PRESSURE,PSIG	3250	1665	1638
OPEN FLOW, MCFD	1500	22000	5600
COMPONENT, MOLE PCT			
METHANE	98.3	98.9	94.1
ETHANE	0.9	0.0	2.2
PROPANE	0.1	---	0.2
N-BUTANE	0.0	---	TRACE
ISOBUTANE	0.0	---	TRACE
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	TRACE
NITROGEN	0.5	0.6	3.3
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.03	0.03	0.09
HEATING VALUE*	1014	1002	998
SPECIFIC GRAVITY	0.564	0.561	0.580

	INDEX 6427 SAMPLE 10215	INDEX 6428 SAMPLE 10122	INDEX 6429 SAMPLE 14835
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	VENANGO	VENANGO	VENANGO
FIELD	CLARION-VENANGO	HAMPTON	VENANGO
WELL NAME	SHAWKEY W. W. NO. 857	NO. 325	SMITH NO. 4872
LOCATION	12 MILES SE OF OIL CITY	PINEGROVE TOWNSHIP	NOT GIVEN
OWNER	NORTH PENN GAS CO.	UNITED NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	03/01/27	04/18/92	NOT GIVEN
SAMPLED	10/13/65	09/14/65	10/27/76
FORMATION	PENN-CLARION	DEVO-SPEECHLEY	SILU-CLINTON & MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	885	1976	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	13	1490
OPEN FLOW, MCFD	NOT GIVEN	8	250
COMPONENT, MOLE PCT			
METHANE	87.1	60.9	91.5
ETHANE	6.8	17.7	5.1
PROPANE	1.8	11.0	0.8
N-BUTANE	0.8	3.7	0.2
ISOBUTANE	0.6	2.1	0.2
N-PENTANE	0.6	0.9	TRACE
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	1.0	0.6	0.1
NITROGEN	0.9	2.1	2.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.10	0.06	0.07
HEATING VALUE*	1183	1509	1058
SPECIFIC GRAVITY	0.671	0.895	0.604

	INDEX 6430 SAMPLE 14107	INDEX 6431 SAMPLE 10346	INDEX 6432 SAMPLE 15036
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	VENANGO	WASHINGTON	WASHINGTON
FIELD	WESLEY	AMITY	BELLE VERNON
WELL NAME	TASA CORP. NO. 1	W. C. MCCOLLUM NO. 166	HALLIE E. TAYLOR NO. 1
LOCATION	SEC. A; HILLIARDS QUAD.	AMWELL TOWNSHIP	SEC. E, CALIF. QUADRANGLE
OWNER	PEOPLES NATURAL GAS CO.	CARNEGIE NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	12/19/72	11/15/12	10/11/76
SAMPLED	07/16/74	12/28/65	06/16/77
FORMATION	SILU-MEDINA	DEVO-GANTZ	DEVO-GANTZ
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6350	2599	2323
WELLHEAD PRESSURE,PSIG	1630	11	900
OPEN FLOW, MCFD	2740	NOT GIVEN	18600
COMPONENT, MOLE PCT			
METHANE	88.5	83.8	94.1
ETHANE	6.6	7.5	2.1
PROPANE	1.5	3.2	0.2
N-BUTANE	0.3	0.9	0.1
ISOBUTANE	0.3	0.8	TRACE
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	2.4	2.5	3.0
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.07	0.12	0.20
HEATING VALUE*	1093	1169	999
SPECIFIC GRAVITY	0.630	0.682	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6433 SAMPLE 10264	INDEX 6434 SAMPLE 10595	INDEX 6435 SAMPLE 10446
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	LINDEN	NOT GIVEN	RODFIELD
WELL NAME	W. A. DONALDSON NO. 1-961	J. LEWIS	DENNISON - F44
LOCATION	NORTH STRABANE TOWNSHIP	WAYNESBURG NW	PITTSBURGH TOWNSHIP
OWNER	CARNEGIE NATURAL GAS CO.	PETROTHERM IND.	EQUITABLE GAS CO.
COMPLETED	09/12/46	03/11/66	05/09/27
SAMPLED	11/04/65	05/24/66	01/21/66
FORMATION	MISS-BIG INJUN	PENN-LITTLE DUNKARD	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1462	1342	2305
WELLHEAD PRESSURE,PSIG	103	NOT GIVEN	25
OPEN FLOW, MCFD	8	NOT GIVEN	3
COMPONENT, MOLE PCT			
METHANE	92.0	77.2	93.8
ETHANE	4.8	5.1	2.9
PROPANE	1.1	5.1	0.4
N-BUTANE	0.4	3.3	0.2
ISOBUTANE	0.3	2.2	0.4
N-PENTANE	0.1	1.3	0.5
ISOPENTANE	0.1	0.9	TRACE
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.2	1.5	0.3
NITROGEN	0.6	2.6	1.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.07	0.02	0.15
HEATING VALUE*	1090	1373	1069
SPECIFIC GRAVITY	0.611	0.815	0.604

	INDEX 6436 SAMPLE 10447	INDEX 6437 SAMPLE 10452	INDEX 6438 SAMPLE 10263
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	RODFIELD	RODFIELD	SOMERSET
WELL NAME	R. GLASS - F-47	S. YANT - F-43	D. C. MCNARY - 1 - 733
LOCATION	PITTSBURGH TOWNSHIP	PITTSBURGH TOWNSHIP	SOMERSET TOWNSHIP
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	CARNEGIE NATURAL GAS CO.
COMPLETED	05/19/27	02/17/27	10/10/27
SAMPLED	01/21/66	01/21/66	11/04/65
FORMATION	DEVO-SPEECHLEY	DEVO-GANTZ	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3557	2400	2209
WELLHEAD PRESSURE,PSIG	105	45	19
OPEN FLOW, MCFD	2	140	29
COMPONENT, MOLE PCT			
METHANE	93.6	92.1	91.5
ETHANE	4.2	4.9	4.3
PROPANE	0.7	1.2	1.3
N-BUTANE	0.1	0.2	0.4
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.8	0.9	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.10	0.07	0.09
HEATING VALUE*	1061	1071	1095
SPECIFIC GRAVITY	0.595	0.604	0.621

	INDEX 6439 SAMPLE 336	INDEX 6440 SAMPLE 337	INDEX 6441 SAMPLE 4828
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	WASHINGTON	WASHINGTON	WASHINGTON
WELL NAME	W. K. LONG NO. 2041	J. A. BARR NO. 453	NO. L-4040
LOCATION	8 MI E WASHINGTON	9 1/2 MI E WASHINGTON	AMWELL TWP.
OWNER	MANUFACTURERS LT. & HT. CO.	MANUFACTURERS LT. & HT. CO.	MANUFACTURERS LT. & HT. CO.
COMPLETED	--/--/17	--/--/01	10/05/49
SAMPLED	06/09/20	06/09/20	12/27/49
FORMATION	MISS-BIG INJUN	DEVO-FIFTH	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3100	3077
WELLHEAD PRESSURE,PSIG	40	22	590
OPEN FLOW, MCFD	50	50	1739
COMPONENT, MOLE PCT			
METHANE	86.7	86.6	89.5
ETHANE	10.9	11.5	6.0
PROPANE	---	---	1.6
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	1.8	1.3	1.7
OXYGEN	0.3	0.4	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1074	1083	1088
SPECIFIC GRAVITY	0.619	0.618	0.622

	INDEX 6442 SAMPLE 10448	INDEX 6443 SAMPLE 10454	INDEX 6444 SAMPLE 4673
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WASHINGTON	WASHINGTON	WESTMORELAND
FIELD	ZOLLARSVILLE	ZOLLARSVILLE	APPALACHIAN
WELL NAME	NO. 1496 - H. H. RICHARDS	NO. 2087 - PIPER	HICKS COAL NO. 1
LOCATION	AMITY TOWNSHIP	AMITY TOWNSHIP	BELL TWP.
OWNER	G. W. GRAY & SON	EQUITABLE GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	10/28/02	11/04/24	02/25/43
SAMPLED	01/27/66	01/20/66	02/08/49
FORMATION	DEVO-ELIZABETH & WARREN	DEVO-FIFTY FOOD SAND &BAYARD	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3117	2754	3455
WELLHEAD PRESSURE,PSIG	74	41	85
OPEN FLOW, MCFD	29003	26	368
COMPONENT, MOLE PCT			
METHANE	91.0	92.2	93.9
ETHANE	5.0	4.7	3.6
PROPANE	1.1	0.8	0.7
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	1.4	1.2	1.0
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.08	0.09	0.10
HEATING VALUE*	1047	1073	1054
SPECIFIC GRAVITY	0.619	0.607	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6445 SAMPLE 10283	INDEX 6446 SAMPLE 9908	INDEX 6447 SAMPLE 9079
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	BAGDAD	BLAIR	BLAIRSVILLE
WELL NAME	J. H. BURNS NO. 860	PNG NO. 4441-J.S. BLAIR NO.4	NOT GIVEN
LOCATION	LEECHBURG	COOK TOWNSHIP	DERRY
OWNER	APOLLO GAS CO.	THE PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	04/28/48	03/24/65	03/28/63
SAMPLED	11/03/65	NOT GIVEN	09/04/63
FORMATION	DEVO-SPEECHLEY	DEVO-ORISKANY	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2741	8442	7764
WELLHEAD PRESSURE,PSIG	210	2765	4133
OPEN FLOW, MCFD	NOT GIVEN	11000	6300
COMPONENT, MOLE PCT			
METHANE	92.3	97.7	97.8
ETHANE	4.9	1.4	1.5
PROPANE	1.2	0.0	0.1
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.8	0.7	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.11	0.04	0.02
HEATING VALUE*	1081	1015	1020
SPECIFIC GRAVITY	0.606	0.565	0.565

	INDEX 6448 SAMPLE 9729	INDEX 6449 SAMPLE 10609	INDEX 6450 SAMPLE 4767
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	CRABTREE	GREENSBURG	NOT GIVEN
WELL NAME	L. B. HUFF NO. 8 PNG 4442	O.W. NO.10897 DUQUESNE GAS 1	WILLIAM PIPER NO. 1
LOCATION	UNITY TOWNSHIP	GREENSBURG NW	UNITY TWP.
OWNER	THE PEOPLES NATURAL GAS CO.	FOX-COEN-SLOAN	PEOPLES NATURAL GAS CO.
COMPLETED	12/12/64	08/17/65	08/17/49
SAMPLED	NOT GIVEN	05/25/66	10/27/49
FORMATION	DEVO-ORISKANY	DEVO-CHERT & ORISKANY	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7745	7490	8158
WELLHEAD PRESSURE,PSIG	3655	3832	3075
OPEN FLOW, MCFD	NOT GIVEN	1200	243
COMPONENT, MOLE PCT			
METHANE	96.6	96.6	96.2
ETHANE	1.9	2.5	2.2
PROPANE	0.3	0.2	0.4
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.6	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1020	1029	1033
SPECIFIC GRAVITY	0.576	0.572	0.577

	INDEX 6451 SAMPLE 5239	INDEX 6452 SAMPLE 9731	INDEX 6453 SAMPLE 9778
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	PIPER-MUSNUG	SALTSBURG	SALTSBURG W
WELL NAME	FRED MUSNUG NO. 1-3921	F. M. DRUMMOND NO.2 PNG 4426	S. E. BEATTY NO. 1
LOCATION	UNITY TWP.	LOYALHANNA TOWNSHIP	BELL TOWNSHIP
OWNER	PEOPLES NATURAL GAS CO.	THE PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	06/30/51	10/15/64	11/27/64
SAMPLED	04/25/52	NOT GIVEN	NOT GIVEN
FORMATION	DEVO-ONONDAGA	DEVO-BRADFORD	DEVO-BALLTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8004	3488	3540
WELLHEAD PRESSURE,PSIG	3675	1190	1200
OPEN FLOW, MCFD	7194	327	570
COMPONENT, MOLE PCT			
METHANE	97.1	95.5	93.4
ETHANE	1.7	2.4	3.2
PROPANE	0.1	0.2	0.8
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.7	1.5	1.4
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.03	0.09	0.11
HEATING VALUE*	1021	1016	1063
SPECIFIC GRAVITY	0.572	0.576	0.601

	INDEX 6454 SAMPLE 12047	INDEX 6455 SAMPLE 12520	INDEX 6456 SAMPLE 12521
STATE	PENNSYLVANIA	TEXAS	TEXAS
COUNTY	WESTMORELAND	ANDERSON	ANDERSON
FIELD	WILDCAT	BETHEL	BETHEL
WELL NAME	C. D. EVANS NO. 1	CUMMINS GAS UNIT O/A NO. 1	WALTON GAS UNIT NO. 1-L
LOCATION	E. HUNTINGTON TOWNSHIP	NOT GIVEN	NOT GIVEN
OWNER	SNEE AND EBERLY ET AL.	TEXACO INC.	TEXACO INC.
COMPLETED	08/20/69	07/30/58	NOT GIVEN
SAMPLED	09/15/69	11/04/70	11/04/70
FORMATION	MISS-MURRYSVILLE	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	160	260	260
DEPTH, FEET	2183	8232	8814
WELLHEAD PRESSURE,PSIG	601	2300	1050
OPEN FLOW, MCFD	13000	18500	4400
COMPONENT, MOLE PCT			
METHANE	93.7	85.0	94.9
ETHANE	2.8	6.8	2.2
PROPANE	0.7	2.8	0.6
N-BUTANE	0.2	0.8	0.1
ISOBUTANE	0.0	0.9	0.3
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	1.7	0.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.3	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.4	0.9
HELIUM	0.15	TRACE	0.01
HEATING VALUE*	1035	1168	1039
SPECIFIC GRAVITY	0.589	0.692	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6457 SAMPLE 12518	INDEX 6458 SAMPLE 12522	INDEX 6459 SAMPLE 9981
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	BETHEL DOME E	BETHEL DOME E	CAYUGA
WELL NAME	DERDIN GAS UNIT O/A NO. 1-U	DERDIN GAS UNIT O/A NO. 1-L	J. A. CAMPBELL 1-D
LOCATION	NOT GIVEN	NOT GIVEN	JAMES WILSON SUR. A-793
OWNER	TEXACO INC.	TEXACO INC.	TIDEWATER OIL CO.
COMPLETED	12/28/58	10/--/63	10/26/64
SAMPLED	11/04/70	11/04/70	07/17/65
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8190	8670	7878
WELLHEAD PRESSURE,PSIG	1800	1600	3090
OPEN FLOW, MCFD	2100	2600	11700
COMPONENT, MOLE PCT			
METHANE	94.8	95.2	86.6
ETHANE	2.3	2.0	6.6
PROPANE	0.6	0.6	2.4
N-BUTANE	0.2	0.1	0.7
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.7	0.6	1.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.9	1.0
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1041	1035	1136
SPECIFIC GRAVITY	0.597	0.589	0.661

	INDEX 6460 SAMPLE 9982	INDEX 6461 SAMPLE 12474	INDEX 6462 SAMPLE 12475
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	CAYUGA	CAYUGA	CAYUGA
WELL NAME	J. A. CAMPBELL 1-D	H. R. RAMPY NO. 1-D	H. R. RAMPY NO. 1-D
LOCATION	JAMES WILSON SUR. A-793	JAMES WILSON SUR.	JAMES WILSON SUR.
OWNER	TIDEWATER OIL CO.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	10/26/64	04/01/65	08/09/54
SAMPLED	07/17/65	10/21/70	10/21/70
FORMATION	CRET-TRINITY & RODESSA	CRET-PETTIT	CRET-TRINITY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7232	7852	7370
WELLHEAD PRESSURE,PSIG	671	745	923
OPEN FLOW, MCFD	455	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.8	86.4	84.2
ETHANE	6.5	6.5	7.0
PROPANE	2.8	2.6	2.5
N-BUTANE	1.1	0.7	0.9
ISOBUTANE	1.0	0.8	1.2
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.9	0.5	0.4
NITROGEN	0.8	1.2	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	1.3
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1203	1156	1168
SPECIFIC GRAVITY	0.701	0.670	0.689

	INDEX 6463 SAMPLE 10070	INDEX 6464 SAMPLE 5147	INDEX 6465 SAMPLE 4754
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	ELKHART	ISAAC LINDSEY	LONG LAKE
WELL NAME	ELKHART DOME GAS UNIT NO. 11	C. W. HANKS NO. L	J. O. MONNIG NO. 7
LOCATION	ELKHART	ISAAC LINDSEY SUR.	SIMON SANCHEZ SUR. NO. 2-10
OWNER	HUMBLE OIL & REFINING CO.	TEXAS CO.	TIDE WATER ASSOC.-SEABOARD
COMPLETED	08/13/65	08/28/51	12/24/48
SAMPLED	08/18/65	01/18/52	05/31/49
FORMATION	CRET-PETTIT	CRET-JAMES	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9917	10094	8834
WELLHEAD PRESSURE,PSIG	3428	5250	1350
OPEN FLOW, MCFD	1785	8000	150
COMPONENT, MOLE PCT			
METHANE	93.6	82.7	92.8
ETHANE	2.2	7.9	2.6
PROPANE	0.7	3.3	1.0
N-BUTANE	0.3	0.9	0.4
ISOBUTANE	0.3	0.7	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	0.5	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	0.5	1.2	0.8
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.7	2.3	1.5
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1059	1157	1065
SPECIFIC GRAVITY	0.615	0.695	0.621

	INDEX 6466 SAMPLE 9684	INDEX 6467 SAMPLE 11029	INDEX 6468 SAMPLE 11030
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	LONG LAKE	LONG LAKE	LONG LAKE
WELL NAME	J. O. MONNIG NO. 1-D-UT	LONG LAKE PR GAS UNIT NO. 1	LONG LAKE PR GAS UNIT NO. 1
LOCATION	S. SANCHEZ SUR. A-60,NO.1-11	SIMON SANCHEZ SUR. A-60	SIMON SANCHEZ SUR. A-60
OWNER	TIDEWATER OIL & TEXACO INC.	HUNT OIL CO.	HUNT OIL CO.
COMPLETED	11/02/64	11/30/66	11/30/66
SAMPLED	01/07/65	07/15/67	07/15/67
FORMATION	CRET-RODESSA	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8725	9103	9765
WELLHEAD PRESSURE,PSIG	3749	3165	4440
OPEN FLOW, MCFD	22000	3300	9000
COMPONENT, MOLE PCT			
METHANE	96.9	95.5	94.7
ETHANE	0.6	1.0	1.0
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.8	1.5	2.3
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	1.4
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1032	1012	1008
SPECIFIC GRAVITY	0.578	0.590	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6469 SAMPLE 9196	INDEX 6470 SAMPLE 11952	INDEX 6471 SAMPLE 5071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	MOUND PRAIRIE	NEVIS	PRAIRIE LAKE
WELL NAME	C. H. VALENTINE NO. 1	WALTER B. BROWN NO. 1	FRANK H. CARROLL NO. 1
LOCATION	JOHN LITTLE SUR. A-37	G.V. LUSK SUR. A-476	JUAN IGNACIO AGUILERA SUR.
OWNER	HUMBLE OIL & REFINING CO.	STANDARD OIL CO. OF TEXAS	CONTINENTAL OIL CO.
COMPLETED	01/27/62	08/05/68	03/14/51
SAMPLED	02/11/64	07/02/69	08/01/51
FORMATION	CRET-PETTIT	CRET-RODESSA	CRET-L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10688	8074	8814
WELLHEAD PRESSURE,PSIG	4925	3250	4667
OPEN FLOW, MCFD	1800	9600	100000
COMPONENT, MOLE PCT			
METHANE	80.8	87.1	91.0
ETHANE	10.1	4.6	3.5
PROPANE	2.9	2.5	1.5
N-BUTANE	1.2	0.7	0.6
ISOBUTANE	1.1	0.8	0.2
N-PENTANE	0.6	0.5	0.3
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.8	0.5	0.3
NITROGEN	0.6	1.7	1.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.6	1.1	1.2
HELIUM	0.01	0.04	0.02
HEATING VALUE*	1231	1132	1083
SPECIFIC GRAVITY	0.723	0.664	0.630

	INDEX 6472 SAMPLE 4844	INDEX 6473 SAMPLE 4847	INDEX 6474 SAMPLE 12526
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	TENNESSEE COLONY	TENNESSEE COLONY	TENNESSEE COLONY
WELL NAME	ROYALL NATIONAL BANK NO. 1-T	ROYALL NATIONAL BANK NO. 1-C	J. R. WILLIAMS NCT-1 NO. 1-C
LOCATION	A. G. MONROE SUR.	A. G. MONROE SUR.	NEAR PALESTINE
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	NOT GIVEN	NOT GIVEN	10/26/51
SAMPLED	02/10/50	02/10/50	11/06/70
FORMATION	CRET-L	CRET-L	CRET-RODESSA L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8865	8942	8962
WELLHEAD PRESSURE,PSIG	4640	4682	500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	83.0	85.3	80.3
ETHANE	7.4	6.8	6.6
PROPANE	4.0	2.6	4.2
N-BUTANE	1.5	0.7	1.7
ISOBUTANE	1.2	0.5	1.9
N-PENTANE	0.4	0.1	1.1
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.0	1.3
NITROGEN	0.4	0.9	0.7
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	0.2	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.0	2.3	1.9
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1225	1113	1288
SPECIFIC GRAVITY	0.713	0.668	0.764

	INDEX 6475 SAMPLE 4721	INDEX 6476 SAMPLE 6333	INDEX 6477 SAMPLE 4286
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	ANDREWS	BEDFORD	BLOCK 12
WELL NAME	CHAMPLIN UNIV. NO. 1	RATLIFF-BEDFORD	STATE OF TEXAS I NO. 2
LOCATION	SEC. 27, BLK. 12, UNIV. LAND	SEC. 4, BLK. 73, PSL SUR.	SEC. 22, BLK. 12, UNIV. LAND
OWNER	CHAMPLIN REFINING CO.	SHELL OIL CO.	TEXAS CO.
COMPLETED	02/15/49	NOT GIVEN	11/04/46
SAMPLED	07/20/49	06/01/57	12/16/46
FORMATION	PERM-YATES	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2830	2900	2950
WELLHEAD PRESSURE,PSIG	1950	NOT GIVEN	1675
OPEN FLOW, MCFD	1536	NOT GIVEN	2215
COMPONENT, MOLE PCT			
METHANE	53.1	0.9	48.8
ETHANE	7.8	TRACE	18.0
PROPANE	3.0	0.0	---
N-BUTANE	0.7	0.0	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.3	0.0	---
NITROGEN	34.6	98.2	32.8
OXYGEN	0.1	0.4	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	805	9	817
SPECIFIC GRAVITY	0.795	0.962	0.782

	INDEX 6478 SAMPLE 6099	INDEX 6479 SAMPLE 12810	INDEX 6480 SAMPLE 12753
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	EMMA	FUHRMAN	FUHRMAN-MASCHO
WELL NAME	UNIVERSITY NO. 7-F	WEST FUHRMAN UNIT NO. 46	J. W. BONER B NO. 10
LOCATION	SEC. 42, BLK. 9, ULS SUR.	SEC. 18, BLK. A-42, PSL SUR.	SEC. 25, BLK. A-43, PSL SUR.
OWNER	SKELLY OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	02/23/56	09/02/44	05/10/44
SAMPLED	07/05/56	05/03/71	04/05/71
FORMATION	MISS-	PERM-GRAYBURG	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10000	4270	4130
WELLHEAD PRESSURE,PSIG	700	40	50
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.6	75.5	12.4
ETHANE	18.3	11.2	1.8
PROPANE	14.2	5.5	0.7
N-BUTANE	8.6	1.6	0.2
ISOBUTANE	2.3	0.7	0.1
N-PENTANE	2.7	0.3	0.1
ISOPENTANE	3.3	0.7	0.0
CYCLOPENTANE	0.9	0.1	0.1
HEXANES PLUS	2.0	0.4	0.2
NITROGEN	3.0	3.8	84.0
OXYGEN	0.5	0.1	0.0
ARGON	TRACE	0.0	0.1
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.02	0.02	0.05
HEATING VALUE*	1499	1253	205
SPECIFIC GRAVITY	1.154	0.748	0.931

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6481 SAMPLE 2727	INDEX 6482 SAMPLE 7806	INDEX 6483 SAMPLE 8885
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MEANS	MEANS	MEANS
WELL NAME	J. S. MEANS NO. 7	MEAN LEASE NO. A-7	TR. 25-4W
LOCATION	SEC. 5, BLK. C-45, PSL SUR.	SEC. 2, BLK. A35, PSL SUR.	SEC. 10, BLK. A-34
OWNER	HUMBLE OIL & REFINING CO.	SHELL OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/02/36	01/28/61	03/06/63
SAMPLED	07/01/36	12/29/60	03/09/63
FORMATION	PERM-YATES	PERM-YATES	-SALT
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2565	2806	2670
WELLHEAD PRESSURE,PSIG	1925	NOT GIVEN	135
OPEN FLOW, MCFD	19040	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	1.7	1.4	1.9
ETHANE	2.2	0.2	0.8
PROPANE	---	0.1	0.9
N-BUTANE	---	0.2	0.5
ISOBUTANE	---	0.1	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	94.8	97.2	95.1
OXYGEN	0.7	0.1	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.05	0.03	0.02
HEATING VALUE*	37	44	91
SPECIFIC GRAVITY	0.965	0.970	0.976

	INDEX 6484 SAMPLE 5771	INDEX 6485 SAMPLE 5772	INDEX 6486 SAMPLE 5773
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MIDLAND FARMS	MIDLAND FARMS	MIDLAND FARMS
WELL NAME	MIDLAND FARMS AB NO. 12	UNIVERSITY BF NO. 5	MIDLAND FARMS F NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	01/17/55	01/17/55	01/17/55
FORMATION	PERM-GRAYBURG	PERM-GRAYBURG	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	42.6	33.4	51.1
ETHANE	26.5	28.4	17.4
PROPANE	8.0	8.0	14.5
N-BUTANE	2.1	1.7	5.9
ISOBUTANE	2.3	2.1	3.0
N-PENTANE	0.4	0.2	1.3
ISOPENTANE	1.1	0.9	2.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.3	0.5
NITROGEN	1.7	6.5	3.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.6	0.0	0.0
HYDROGEN SULFIDE**	5.3	9.2	0.0
CARBON DIOXIDE	8.7	9.2	0.2
HELIUM	0.02	0.07	0.03
HEATING VALUE*	1395	1308	1680
SPECIFIC GRAVITY	1.000	1.040	1.017

	INDEX 6487 SAMPLE 5774	INDEX 6488 SAMPLE 12747	INDEX 6489 SAMPLE 4097
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MIDLAND FARMS	MIDLAND FARMS	SHAFTER LAKE
WELL NAME	DAVID FASKEN D NO. 5	FASKEN N NO. 5	NOT GIVEN
LOCATION	NOT GIVEN	SEC. 41, BLK. 41, G&MMB&A SUR.	SEC. 11, BLK. 14, UNIVERSITY
OWNER	STANOLIND OIL & GAS CO.	AMOCO PRODUCTION CO.	ANDREWS PRODUCTION CO.
COMPLETED	NOT GIVEN	04/25/60	08/25/44
SAMPLED	01/18/55	04/01/71	NOT GIVEN
FORMATION	ORDO-ELLENBURGER	DEVO-	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11050	11050	2964
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1925
OPEN FLOW, MCFD	NOT GIVEN	2520	12
COMPONENT, MOLE PCT			
METHANE	58.8	73.7	55.5
ETHANE	14.5	13.7	24.1
PROPANE	13.8	6.0	---
N-BUTANE	5.0	2.0	---
ISOBUTANE	1.9	0.7	---
N-PENTANE	1.2	0.5	---
ISOPENTANE	1.0	0.6	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.3	0.4	---
NITROGEN	3.7	1.3	20.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.8	0.2
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1555	1314	994
SPECIFIC GRAVITY	0.937	0.771	0.759

	INDEX 6490 SAMPLE 4542	INDEX 6491 SAMPLE 4543	INDEX 6492 SAMPLE 15046
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	SHAFTER LAKE	SHAFTER LAKE	THREE-BAR
WELL NAME	J. STEVENSON NO. 1	STATE SCHOOL BOARD NO. 1	J. E. PARKER NO. 43
LOCATION	SEC. 13, BLK. A-36	SEC.14,BLK.A-36,PUB.SCHOOL	SEC. 2,BLK. A-54, PSL SUR.
OWNER	SINCLAIR PRAIRIE OIL CO.	GULF OIL CORP.	EXXON CO., U.S.A.
COMPLETED	08/15/48	09/28/48	11/05/75
SAMPLED	12/21/48	12/10/48	06/--/77
FORMATION	PERM-YATES	PERM-YATES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2985	2750	2884
WELLHEAD PRESSURE,PSIG	2160	1830	1603
OPEN FLOW, MCFD	1499	4500	8000
COMPONENT, MOLE PCT			
METHANE	52.8	51.5	50.6
ETHANE	26.0	26.4	7.7
PROPANE	---	---	2.7
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	21.3	21.4	37.8
OXYGEN	0.1	0.5	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	997	995	761
SPECIFIC GRAVITY	0.778	0.778	0.795

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6493 SAMPLE 14853	INDEX 6494 SAMPLE 15834	INDEX 6495 SAMPLE 16063
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANGELINA	ANGELINA	ANGELINA
FIELD	CAMERON-HAMILL	WILDCAT	WILDCAT
WELL NAME	CAMERON MINERAL NO. B-2	TUCKER NO. 1	TUCKER NO. 1
LOCATION	VICENTI MICHELI SUR. A-29	3 MI. EAST OF HUNTINGTON	SARAH ODELL SUR. A-494
OWNER	CLAUD B. HAMILL	HNG OIL CO.	HNG OIL CO.
COMPLETED	04/04/75	NOT GIVEN	NOT GIVEN
SAMPLED	11/07/76	11/07/79	09/08/80
FORMATION	CRET-GLEN ROSE	CRET-JAMES	CRET-JAMES
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7481	9963	9836
WELLHEAD PRESSURE,PSIG	1300	5200	NOT GIVEN
OPEN FLOW, MCFD	3000	500	2858
COMPONENT, MOLE PCT			
METHANE	94.4	93.6	93.9
ETHANE	1.4	1.9	1.8
PROPANE	0.6	1.0	0.9
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	2.1	0.4	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.7	1.7
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1037	1068	1062
SPECIFIC GRAVITY	0.601	0.620	0.616

	INDEX 6496 SAMPLE 13586	INDEX 6497 SAMPLE 13587	INDEX 6498 SAMPLE 10692
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	BARTELL PASS	BARTELL PASS	COPANO BAY S
WELL NAME	TEXAS STATE TRACT 118 NO. 1	TEXAS STATE TRACT 118 NO. 1	STATE TRACT 121 NO. 1
LOCATION	ARANSAS BAY	ARANSAS BAY	STATE TRACT 121
OWNER	GETTY OIL CO.	GETTY OIL CO.	ALUMINUM CO. OF AMERICA
COMPLETED	07/06/70	07/06/70	03/13/66
SAMPLED	04/24/73	04/24/73	08/08/66
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO L-2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9747	11204	8400
WELLHEAD PRESSURE,PSIG	3659	7485	3497
OPEN FLOW, MCFD	11800	19100	86000
COMPONENT, MOLE PCT			
METHANE	88.5	87.1	91.1
ETHANE	5.7	6.1	4.7
PROPANE	2.3	2.6	2.0
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	1.1	1.6	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.4	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1145	1157	1120
SPECIFIC GRAVITY	0.655	0.667	0.630

	INDEX 6499 SAMPLE 12757	INDEX 6500 SAMPLE 11162	INDEX 6501 SAMPLE 13128
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	EASTER COVE	FULTON BEACH W	HEADQUARTERS
WELL NAME	J. F. HEPWORTH UNIT NO. 2	COPANO STATE NO. 75-2	ST. CHARLES NO. 50
LOCATION	LOT 7, BLK. 246	STATE TRACT 75, COPANO BAY	ARANSAS CLS SUR. A-7
OWNER	KELLY BELL	SUN OIL CO.	CONTINENTAL OIL CO.
COMPLETED	02/10/69	03/24/66	04/19/70
SAMPLED	04/09/71	10/12/67	12/--/71
FORMATION	OLIG-FRIO	OLIG-FRIO H	OLIG-FRIO J SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8908	7636	9503
WELLHEAD PRESSURE,PSIG	3527	365	5710
OPEN FLOW, MCFD	11800	323	54000
COMPONENT, MOLE PCT			
METHANE	87.7	90.3	89.6
ETHANE	5.5	4.5	5.0
PROPANE	2.4	1.7	2.0
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	1.0	0.6	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.4	0.7
NITROGEN	1.4	1.1	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1145	1118	1154
SPECIFIC GRAVITY	0.666	0.635	0.655

	INDEX 6502 SAMPLE 15461	INDEX 6503 SAMPLE 15462	INDEX 6504 SAMPLE 5172
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	NINE MILE POINT W	NINE MILE POINT W	NOT GIVEN
WELL NAME	STATE TRACT 146 NO. 2	STATE TRACT 170 NO. 1	ST. CHARLES NO. 14
LOCATION	ARANSAS BAY	ARANSAS BAY	ISAAC DOWERS SUR. NO. A-53
OWNER	HOUSTON OIL & MINERALS CORP.	HOUSTON OIL & MINERALS CORP.	WESTERN NATURAL GAS CO.
COMPLETED	05/08/77	10/09/77	NOT GIVEN
SAMPLED	10/27/78	10/27/78	02/27/52
FORMATION	OLIG-FRIO D4	OLIG-FRIO M	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8244	10934	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3215	3265	NOT GIVEN
OPEN FLOW, MCFD	11000	4200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	87.8	91.7
ETHANE	5.7	6.5	3.7
PROPANE	2.5	2.8	1.2
N-BUTANE	0.6	0.6	0.4
ISOBUTANE	0.9	0.9	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.4	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.2	1.8
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1150	1152	1061
SPECIFIC GRAVITY	0.654	0.650	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6505 SAMPLE 15416		INDEX 6506 SAMPLE 12433		INDEX 6507 SAMPLE 5114	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ARANSAS		ARANSAS		ARANSAS	
FIELD	RATTLESNAKE POINT		ROCKPORT W		ST. CHARLES	
WELL NAME	STATE LEASE 122 NO. A1		ZEPH-ROUQUETTE NO. 2		NO. 13	
LOCATION	STATE TRACT 122		BLK. 1, C.B.LUCAS SUR. A-239		NOT GIVEN	
OWNER	SHENANDOAH OIL CORP.		CITIES SERVICE OIL CO.		WESTERN NATURAL GAS CO.	
COMPLETED	05/29/76		10/16/69		06/16/51	
SAMPLED	10/16/78		10/08/70		10/16/51	
FORMATION	OLIG-FRIO		OLIG-FRIO UPPER H		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8744		8520		10260	
WELLHEAD PRESSURE,PSIG	750		2165		6850	
OPEN FLOW, MCFD	8700		3960		6300	
COMPONENT, MOLE PCT						
METHANE	85.5		88.0		91.1	
ETHANE	7.0		4.6		4.5	
PROPANE	3.6		2.9		1.5	
N-BUTANE	1.0		0.9		0.5	
ISOBUTANE	1.0		1.5		0.0	
N-PENTANE	0.2		0.4		0.2	
ISOPENTANE	0.3		0.3		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.4		0.2	
NITROGEN	0.5		0.8		0.5	
OXYGEN	0.0		TRACE		0.1	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.5		0.2		1.2	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1189		1184		1087	
SPECIFIC GRAVITY	0.683		0.674		0.626	

	INDEX 6508 SAMPLE 13126		INDEX 6509 SAMPLE 12010		INDEX 6510 SAMPLE 12011	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ARANSAS		ARANSAS		ARANSAS	
FIELD	ST. CHARLES		VIRGINIA		VIRGINIA	
WELL NAME	ST. CHARLES NO. 9		V. H. TATTON NO. 18		V. H. TATTON NO. 1A	
LOCATION	R. D. BLASSMAN SUR. A-31		JOHN DURST SUR. A-51		JOHN DURST SUR. A-51	
OWNER	CONTINENTAL OIL CO.		UNION PRODUCING CO.		UNION PRODUCING CO.	
COMPLETED	05/20/70		12/06/68		12/06/68	
SAMPLED	12/--/71		08/26/69		08/26/69	
FORMATION	OLIG-FRIO P SAND		OLIG-FRIO 9050		OLIG-FRIO 9700	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9994		9038		9680	
WELLHEAD PRESSURE,PSIG	6455		3156		3020	
OPEN FLOW, MCFD	145000		16200		9400	
COMPONENT, MOLE PCT						
METHANE	89.6		45.3		46.7	
ETHANE	5.0		14.1		16.4	
PROPANE	2.2		15.9		15.1	
N-BUTANE	0.6		6.6		6.0	
ISOBUTANE	0.8		7.9		6.4	
N-PENTANE	0.3		3.0		3.0	
ISOPENTANE	0.1		2.2		2.0	
CYCLOPENTANE	0.2		0.5		0.5	
HEXANES PLUS	0.5		3.0		3.2	
NITROGEN	0.3		1.1		0.5	
OXYGEN	0.0		0.1		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.2		0.2	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1152		2008		1973	
SPECIFIC GRAVITY	0.651		1.193		1.163	

	INDEX 6511 SAMPLE 4518		INDEX 6512 SAMPLE 3705		INDEX 6513 SAMPLE 4904	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ARCHER		ARCHER		ARMSTRONG	
FIELD	HULL-SILK		SCOTLAND		NOT GIVEN	
WELL NAME	L. F. WILSON		W. M. COLEMAN NO. B-1		BRUCE COBB B	
LOCATION	NOT GIVEN		SEC. 74, ATNCL SUR.		SEC. 10, BLK. 1, TWNG SUR.	
OWNER	HELMERICH & PAYNE		SHELL OIL CO.		C. C. COX	
COMPLETED	NOT GIVEN		01/20/41		NOT GIVEN	
SAMPLED	05/04/48		12/15/43		07/28/50	
FORMATION	PENN-STRAWN		PENN-CADDO		NOT GIVEN	
GEOLOGIC PROVINCE CODE	425		425		435	
DEPTH, FEET	3800		4976		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	175		1200		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		250		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	0.6		56.8		0.3	
ETHANE	95.0		33.1		---	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	3.2		8.5		99.0	
OXYGEN	0.4		1.1		0.6	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.8		0.4		0.1	
HELIUM	0.03		0.10		0.00	
HEATING VALUE*	1108		1169		3	
SPECIFIC GRAVITY	1.048		0.763		0.967	

	INDEX 6514 SAMPLE 4974		INDEX 6515 SAMPLE 4114		INDEX 6516 SAMPLE 12463	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ARMSTRONG		ATASCOSA		ATASCOSA	
FIELD	NOT GIVEN		JOURDANTON		WILDCAT	
WELL NAME	BRUCE COBB NO. 1		HERMY SCHORSCH NO. 1		JOSEPH COURAND NO. 1	
LOCATION	SEC. 10, BLK. 1, TWNG SUR.		2 1/2 MI. SW OF JOURDANTON		NOAH SCOTT SUR. A-768	
OWNER	BRUCE COBB		HUMBLE OIL & REFINING CO.		W. CARL ROWE	
COMPLETED	NOT GIVEN		12/23/45		11/22/69	
SAMPLED	12/12/50		10/03/46		10/20/70	
FORMATION	NOT GIVEN		CRET-EDWARDS		CRET-EDWARDS	
GEOLOGIC PROVINCE CODE	435		220		220	
DEPTH, FEET	NOT GIVEN		7260		7642	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3380		2748	
OPEN FLOW, MCFD	18947		4400		4500	
COMPONENT, MOLE PCT						
METHANE	0.8		80.4		85.0	
ETHANE	0.1		9.1		2.7	
PROPANE	0.2		---		1.1	
N-BUTANE	0.1		---		0.8	
ISOBUTANE	0.2		---		0.5	
N-PENTANE	0.1		---		0.2	
ISOPENTANE	0.2		---		0.0	
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.1		---		0.5	
NITROGEN	98.1		1.8		1.5	
OXYGEN	0.1		0.6		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.1		---		0.1	
HYDROGEN SULFIDE**	---		---		1.1	
CARBON DIOXIDE	0.1		8.1		7.4	
HELIUM	0.09		0.21		0.01	
HEATING VALUE*	26		978		997	
SPECIFIC GRAVITY	0.968		0.682		0.686	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6517 SAMPLE 11973	INDEX 6518 SAMPLE 14560	INDEX 6519 SAMPLE 14559
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	AUSTIN
FIELD	NELSONVILLE	NELSONVILLE	NELSONVILLE N
WELL NAME	JOE MIKESKA NO. 1	FRANK SUROVIK NO. 1	LEONARD SCHROEDER NO. 1
LOCATION	S.F. AUSTIN SUR. A-4	S. F. AUSTIN LEAGUE, A-4	STEPHEN F. AUSTIN GRANT, A-4
OWNER	SUN OIL CO.	PRAIRIE PRODUCING CO.	PRAIRIE PRODUCING CO.
COMPLETED	12/02/68	02/19/74	04/12/74
SAMPLED	07/17/69	01/16/76	01/16/76
FORMATION	-MOUDRY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9830	9818	8392
WELLHEAD PRESSURE,PSIG	2836	3200	261
OPEN FLOW, MCFD	6704	15000	16750
COMPONENT, MOLE PCT			
METHANE	78.6	77.2	80.6
ETHANE	7.2	7.6	6.1
PROPANE	6.2	6.6	6.0
N-BUTANE	1.4	1.9	1.5
ISOBUTANE	1.4	1.5	1.9
N-PENTANE	0.4	0.3	0.0
ISOPENTANE	0.2	0.9	0.9
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	1.1	0.8	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	2.9	1.8
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1220	1274	1234
SPECIFIC GRAVITY	0.747	0.774	0.735

	INDEX 6520 SAMPLE 13886	INDEX 6521 SAMPLE 12462	INDEX 6522 SAMPLE 11323
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	AUSTIN
FIELD	NEW ULM SW	ORANGE HILL	RACCOON BEND
WELL NAME	HENRY FOERSTER UNIT NO. 1	MRS. O. C. HILLBOLDT NO. 1	MIOCENE GAS UNIT NO. 1
LOCATION	JAMES TYLEE SUR. A-304	A. JORDAN SUR. A-251	WM. C. WHITE SUR. A-101
OWNER	PRAIRIE PRODUCING CO.	ROBERT MOSBACHER	HUMBLE OIL & REFINING CO.
COMPLETED	10/04/72	06/21/69	NOT GIVEN
SAMPLED	11/12/73	10/21/70	02/27/68
FORMATION	EOCE-WILCOX	EOCE-WILCOX	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9366	9246	917
WELLHEAD PRESSURE,PSIG	2897	2300	390
OPEN FLOW, MCFD	9800	6650	8860
COMPONENT, MOLE PCT			
METHANE	49.6	86.3	93.0
ETHANE	14.8	6.4	0.6
PROPANE	18.5	2.8	0.4
N-BUTANE	5.2	0.6	0.0
ISOBUTANE	4.5	0.6	0.0
N-PENTANE	1.0	TRACE	0.0
ISOPENTANE	1.9	0.3	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.6	0.2	0.0
NITROGEN	0.4	0.5	3.8
OXYGEN	TRACE	0.0	0.5
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.2	2.2	1.7
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1736	1125	963
SPECIFIC GRAVITY	1.067	0.666	0.598

	INDEX 6523 SAMPLE 15252	INDEX 6524 SAMPLE 15253	INDEX 6525 SAMPLE 3789
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	BEE
FIELD	SEALY W	SEALY W	BLANCONIA
WELL NAME	FENKE NO. 1	HINTZ "A" NO. 1	E. B. TUTTLE NO. 1
LOCATION	GEORGE T. ALLEN SUR. 180	GEORGE T. ALLEN SUR. 180	J. M. KEATING SUR.
OWNER	RANGER OIL CO.	RANGER OIL CO.	SUN OIL CO.
COMPLETED	07/16/77	08/26/75	12/30/43
SAMPLED	04/06/78	04/06/78	04/15/44
FORMATION	EOCE-WILCOX	EOCE-WILCOX	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8860	10669	4086
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2770	1700
OPEN FLOW, MCFD	NOT GIVEN	12000	200000
COMPONENT, MOLE PCT			
METHANE	88.0	88.9	94.4
ETHANE	4.4	4.1	0.0
PROPANE	1.7	1.2	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	0.8	0.4	5.0
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	3.6	4.4	0.2
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1076	1043	956
SPECIFIC GRAVITY	0.661	0.649	0.579

	INDEX 6526 SAMPLE 4386	INDEX 6527 SAMPLE 4886	INDEX 6528 SAMPLE 4963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	BLANCONIA	BLANCONIA	BLANCONIA
WELL NAME	MICHAEL FOX B NO. 2	F. V. THOMAS NO. 1	FRED THOMAS NO. 2
LOCATION	J&M KEATING SUR. NO. A-33	JOHN KELLY SUR. NO. A-35	JOHN KELLY SUR. NO. A-35
OWNER	STANOLIND OIL & GAS CO.	BRIDWELL OIL CO.	BRIDWELL OIL CO.
COMPLETED	06/27/47	01/04/50	07/24/50
SAMPLED	12/04/47	05/17/50	11/01/50
FORMATION	FRT-	OLIG-SINTON	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4138	4137	4950
WELLHEAD PRESSURE,PSIG	1870	1715	1335
OPEN FLOW, MCFD	3000	9	1850
COMPONENT, MOLE PCT			
METHANE	97.4	97.6	91.9
ETHANE	1.4	0.6	4.1
PROPANE	---	0.1	0.8
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.2
NITROGEN	0.4	0.5	1.8
OXYGEN	0.4	0.1	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.8	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1012	1010	1046
SPECIFIC GRAVITY	0.569	0.570	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6529 SAMPLE 10116		INDEX 6530 SAMPLE 4438		INDEX 6531 SAMPLE 9565	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BEE		BEE		BEE	
FIELD	BLANCONIA		BLANCONIA S		BURK HOLLOW	
WELL NAME	M. FOX ESTATE NO. 3		CLARK WOOD NO. 1		LAURA D. THOMSON B-5	
LOCATION	N. KEATING SUR. A-33		NOT GIVEN		JOHN ROACH SUR. A-60	
OWNER	FLOURNOY PRODUCTION CO.		BRIDWELL OIL CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	07/09/65		08/30/46		02/23/64	
SAMPLED	09/08/65		01/13/48		09/21/64	
FORMATION	OLIG-SINTON		OLIG-SINTON		MIOC-CATAHOULA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	4032		4360		2574	
WELLHEAD PRESSURE,PSIG	1150		1870		998	
OPEN FLOW, MCFD	972		57000		4050	
COMPONENT, MOLE PCT						
METHANE	97.2		94.1		97.3	
ETHANE	1.7		3.4		0.1	
PROPANE	0.3		---		0.0	
N-BUTANE	0.0		---		0.0	
ISOBUTANE	0.0		---		0.0	
N-PENTANE	0.0		---		0.0	
ISOPENTANE	0.0		---		0.0	
CYCLOPENTANE	0.0		---		0.0	
HEXANES PLUS	0.0		---		0.0	
NITROGEN	0.5		0.8		2.1	
OXYGEN	0.0		0.5		0.3	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.3		1.2		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1023		1014		987	
SPECIFIC GRAVITY	0.571		0.589		0.567	

	INDEX 6532 SAMPLE 14280		INDEX 6533 SAMPLE 7132		INDEX 6534 SAMPLE 14379	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BEE		BEE		CADIZ	
FIELD	BURKE RIDGE		BURNELL		R. R. LAWSON NO. 1	
WELL NAME	SAMUEL DENVER CHESTNUTT NO.1		A. N. DAHL B NO. 1		A. C. GILLETT SUR. A-1203	
LOCATION	GARRET ROACH SUR. A-59		NOT GIVEN		HARKINS & CO.	
OWNER	EXXON CO., U.S.A.		TENNESSEE GAS TRANSMISSION		07/04/73	
COMPLETED	06/20/73		03/14/59		05/30/75	
SAMPLED	03/01/75		06/24/59		EOCE-WILCOX	
FORMATION	-GRETA		EOCE-WILCOX & SLICK		220	
GEOLOGIC PROVINCE CODE	220		220		9006	
DEPTH, FEET	1914		6654		3159	
WELLHEAD PRESSURE,PSIG	573		1659		9400	
OPEN FLOW, MCFD	A60		6250			
COMPONENT, MOLE PCT						
METHANE	98.7		85.0		81.1	
ETHANE	0.1		5.8		7.6	
PROPANE	TRACE		2.3		4.2	
N-BUTANE	0.0		0.7		1.0	
ISOBUTANE	0.0		0.0		0.7	
N-PENTANE	0.0		2.7		0.2	
ISOPENTANE	0.0		2.0		0.5	
CYCLOPENTANE	0.0		0.7		0.1	
HEXANES PLUS	0.0		1.4		0.2	
NITROGEN	1.0		0.1		0.3	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		1.2		4.2	
HELIUM	0.01		0.00		0.01	
HEATING VALUE*	1002		1262		1168	
SPECIFIC GRAVITY	0.559		0.728		0.723	

	INDEX 6535 SAMPLE 5448		INDEX 6536 SAMPLE 4730		INDEX 6537 SAMPLE 12131	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BEE		BEE		BEE	
FIELD	CAESAR		COSDEN W		HOLZMARK	
WELL NAME	R. E. MILLER NO. 1		DUGAT C NO. 2		HOLZMARK D NO. 1	
LOCATION	NOT GIVEN		JAMES GRAY SUR.		10 1/2 MI. NW BEEVILLE	
OWNER	SIZNOO OIL CORP.		DIRKS BROTHERS		SOUTH STATES OIL & GAS CO.	
COMPLETED	04/11/53		02/--/49		07/09/69	
SAMPLED	04/21/53		05/12/49		12/04/69	
FORMATION	EOCE-HOCKLEY		EOCE-		OLIG-VICKSBURG	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2280		7600		2766	
WELLHEAD PRESSURE,PSIG	951		3300		1081	
OPEN FLOW, MCFD	190		13000		5000	
COMPONENT, MOLE PCT						
METHANE	99.2		87.6		99.0	
ETHANE	TRACE		6.0		0.2	
PROPANE	0.0		2.8		TRACE	
N-BUTANE	0.0		0.6		0.0	
ISOBUTANE	0.0		0.3		0.0	
N-PENTANE	0.0		0.3		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.1		0.0	
HEXANES PLUS	0.0		0.2		0.0	
NITROGEN	0.5		0.6		0.3	
OXYGEN	0.1		0.1		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		1.5		0.4	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1005		1122		1007	
SPECIFIC GRAVITY	0.559		0.657		0.560	

	INDEX 6538 SAMPLE 12132		INDEX 6539 SAMPLE 13533		INDEX 6540 SAMPLE 3745	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BEE		BEE		BEE	
FIELD	HOLZMARK		LAURA THOMPSON		MINERAL	
WELL NAME	HOLZMARK G NO. 1		LAURA T BARROW B NO. 25		PAGE NO. 2	
LOCATION	11 MI NW OF BEEVILLE		MIGUEL DE LOS SANTOS SUR.		BILKINGTON SUR.	
OWNER	SOUTH STATES OIL & GAS CO.		EXXON CO., U.S.A.		DIRKS BROTHERS	
COMPLETED	07/08/55		04/06/71		03/--/43	
SAMPLED	12/04/69		02/13/73		03/31/44	
FORMATION	EOCE-WHITSETT		OLIG-FRIO		EOCE-CARRIZO & WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3198		4850		7460	
WELLHEAD PRESSURE,PSIG	1190		1703		2475	
OPEN FLOW, MCFD	5600000		19600		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	98.6		94.2		77.6	
ETHANE	0.6		2.9		19.5	
PROPANE	0.1		1.3		---	
N-BUTANE	0.0		0.9		---	
ISOBUTANE	0.0		0.7		---	
N-PENTANE	0.0		0.2		---	
ISOPENTANE	0.0		TRACE		---	
CYCLOPENTANE	0.0		TRACE		---	
HEXANES PLUS	0.0		0.2		---	
NITROGEN	0.4		0.4		0.8	
OXYGEN	TRACE		TRACE		0.4	
ARGON	TRACE		0.0		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		0.0		1.7	
HELIUM	TRACE		0.01		0.00	
HEATING VALUE*	1012		1082		1176	
SPECIFIC GRAVITY	0.560		0.602		0.673	

* GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6541 SAMPLE 5298	INDEX 6542 SAMPLE 4735	INDEX 6543 SAMPLE 9910
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	MINOAK	MINOAK N	NORMANNA S
WELL NAME	J. H. ANDREWS NO. 1	EHLERS-WOLTERS UNIT NO. 1	SUDIE SCOTT NO. 1-A
LOCATION	A.J.DAVIS & J.G.MORROW SUR.	A.B.&M. LEVI WRIGHT SUR.	JUAN MOLINA SUR. A-40
OWNER	STANOLIND OIL & GAS CO.	SUN OIL CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	04/16/52	01/08/49	05/11/63
SAMPLED	09/--/52	05/03/49	05/10/65
FORMATION	EOCE-	EOCE-SLICK	OLIG-FRIO 2050
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7352	7537	2041
WELLHEAD PRESSURE,PSIG	2635	3259	840
OPEN FLOW, MCFD	11250	5300	4300
COMPONENT, MOLE PCT			
METHANE	86.2	89.2	98.6
ETHANE	5.4	5.9	TRACE
PROPANE	2.4	2.3	0.0
N-BUTANE	0.6	0.5	0.0
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.4	0.2	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	0.2	0.0
NITROGEN	1.5	1.0	1.1
OXYGEN	0.2	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.0	0.1	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1123	1119	9990
SPECIFIC GRAVITY	0.673	0.634	0.560

	INDEX 6544 SAMPLE 4773	INDEX 6545 SAMPLE 8272	INDEX 6546 SAMPLE 11935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	NOT GIVEN	PAWNEE	PETTUS
WELL NAME	MCCURDY-MOSS NO. 1	F. TOMASEK ET AL NO. 1	G. A. RAY NO. 85
LOCATION	NOT GIVEN	SEC. 25, PLUMMER SUBD.	GEORGE A. KERR SUR. A-209
OWNER	WARREN OIL CORP.	SHELL OIL CO.	UNION PRODUCING CO.
COMPLETED	02/16/49	11/15/61	07/27/68
SAMPLED	10/26/49	11/14/61	06/14/69
FORMATION	NOT GIVEN	CRET-EDWARDS	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2518	13408	2900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4437	1170
OPEN FLOW, MCFD	46000	6700	9500
COMPONENT, MOLE PCT			
METHANE	98.4	91.5	94.9
ETHANE	0.1	0.2	0.1
PROPANE	0.1	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.4	3.3
OXYGEN	TRACE	0.1	0.8
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	7.5	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1008	936	963
SPECIFIC GRAVITY	0.565	0.632	0.579

	INDEX 6547 SAMPLE 14951	INDEX 6548 SAMPLE 4931	INDEX 6549 SAMPLE 4932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	PETTUS SE	PLUMMER	PLUMMER
WELL NAME	J. E. MCKINNEY NO. 2	W. A. ROBERSON NO. 1-T	W. A. ROBERSON NO. 1-C
LOCATION	L. C. RANDOLPH SUR. A-279	T. B. BARTON SUR.	T. B. BARTON SUR.
OWNER	HUGHES & HUGHES	MID STATES OIL CORP.	MID-STATES OIL CORP.
COMPLETED	06/18/75	02/14/50	02/14/50
SAMPLED	03/30/76	08/03/50	10/20/50
FORMATION	EOCE-WILCOX	EOCE-	EOCE-LULING
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8750	7017	6759
WELLHEAD PRESSURE,PSIG	4198	2442	2249
OPEN FLOW, MCFD	90000	26000	36000
COMPONENT, MOLE PCT			
METHANE	85.1	89.3	88.8
ETHANE	6.4	5.4	5.5
PROPANE	3.2	2.5	2.7
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	0.0	TRACE
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.1	1.2	1.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1130	1122	1127
SPECIFIC GRAVITY	0.681	0.644	0.646

	INDEX 6550 SAMPLE 12693	INDEX 6551 SAMPLE 12632	INDEX 6552 SAMPLE 10146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	SLIVA W	STRAUCH	TELERANA
WELL NAME	G. C. IMPSON NO. 1	R. G. VELA NO. 1	RAE WOOD WELDER NO. 5
LOCATION	C. C. DITCH CO. SUR. A-356	OSCAR FARRIS SUR. A-161	JAMES MCGEEHAN SUR. A-38
OWNER	RHODES & HICKS ET AL.	MILLS BENNETT ESTATE	FLOURNOY PRODUCTION CO.
COMPLETED	03/24/70	12/10/68	08/01/65
SAMPLED	02/23/71	01/12/71	09/21/65
FORMATION	OLIG-FRIO	EOCE-PETTUS	OLIG-SINTON
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2950	3997	4409
WELLHEAD PRESSURE,PSIG	1075	962	1400
OPEN FLOW, MCFD	4200	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	98.5	89.7	97.1
ETHANE	0.5	4.9	0.8
PROPANE	0.1	2.3	0.4
N-BUTANE	0.0	0.7	0.1
ISOBUTANE	0.0	0.5	TRACE
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.4	TRACE
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	0.6	0.8	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.03	TRACE	0.01
HEATING VALUE*	1009	1136	1045
SPECIFIC GRAVITY	0.563	0.643	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6553 SAMPLE 2554	INDEX 6554 SAMPLE 13856	INDEX 6555 SAMPLE 3746
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	TULETA	TULETA N	TULETA W
WELL NAME	COX NO. 1	W.E. MCKINNEY NO. 2	ROY HARRIS
LOCATION	NOT GIVEN	L.C. RANDOLPH SUR. A-279	RAGLEY SUBD.
OWNER	TEXAS CO.	HUGHES & HUGHES	DIRKS BROTHERS
COMPLETED	08/26/32	05/13/72	12/--/41
SAMPLED	10/04/32	01/02/74	03/31/44
FORMATION	EOCE-JACKSON	EOCE-WILCOX	EOCE-CARRIZO & WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8074	8935	7480
WELLHEAD PRESSURE,PSIG	1600	3905	2650
OPEN FLOW, MCFD	NOT GIVEN	82520	42000
COMPONENT, MOLE PCT			
METHANE	81.3	86.1	80.6
ETHANE	17.6	6.3	18.1
PROPANE	---	2.6	---
N-BUTANE	---	0.5	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	0.0	0.2	0.8
OXYGEN	0.6	0.0	0.3
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	3.3	0.2
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	1139	1104	1141
SPECIFIC GRAVITY	0.650	0.667	0.651

	INDEX 6556 SAMPLE 5023	INDEX 6557 SAMPLE 5056	INDEX 6558 SAMPLE 5177
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	J. S. HALL NO. 1	SALLIE RAGSDALE NO. 1	MENGER NO. 1
LOCATION	ANNA BURKE SUR. A-5	A. J. DAVIS SUR. A-155	NOT GIVEN
OWNER	BRIDWELL OIL CO.	TEXAS CO.	NEWMAN BROS. DRILLING CO.
COMPLETED	11/20/50	02/15/51	NOT GIVEN
SAMPLED	03/22/51	06/20/51	02/15/52
FORMATION	OLIG-VICKSBURG	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3700	8058	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3400	NOT GIVEN
OPEN FLOW, MCFD	13800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.5	68.9	92.9
ETHANE	0.3	6.3	4.0
PROPANE	0.1	6.1	1.0
N-BUTANE	TRACE	4.6	0.1
ISOBUTANE	TRACE	3.1	0.0
N-PENTANE	0.0	3.0	0.1
ISOPENTANE	0.0	0.8	0.0
CYCLOPENTANE	TRACE	0.5	TRACE
HEXANES PLUS	0.1	3.5	0.3
NITROGEN	0.7	0.6	1.0
OXYGEN	0.1	0.2	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	2.4	0.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1013	1586	1062
SPECIFIC GRAVITY	0.563	0.959	0.610

	INDEX 6559 SAMPLE 10117	INDEX 6560 SAMPLE 16056	INDEX 6561 SAMPLE 2663
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEXAR
FIELD	WILDCAT	YOWARD	NOT GIVEN
WELL NAME	M. FOX ESTATE B NO. 1	YOWARD NO. 2	NO. 1
LOCATION	NEAR BLANCONIA	3 MI. S.W. MINERAL	NOT GIVEN
OWNER	FLOURNOY PRODUCTION CO.	TEXAS OIL & GAS CORP.	ROBERT A. REINARZ
COMPLETED	07/19/65	06/05/80	NOT GIVEN
SAMPLED	09/08/65	08/20/80	01/03/34
FORMATION	OLIG-SINTON	EOCE-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	400
DEPTH, FEET	3992	8236	265
WELLHEAD PRESSURE,PSIG	1500	1950	NOT GIVEN
OPEN FLOW, MCFD	748	1050	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.6	87.6	0.0
ETHANE	0.4	5.9	4.1
PROPANE	0.1	2.5	---
N-BUTANE	0.0	0.7	---
ISOBUTANE	0.0	0.5	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	0.5	TRACE	95.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	2.0	0.3
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1009	1134	73
SPECIFIC GRAVITY	0.563	0.663	0.972

	INDEX 6562 SAMPLE 11746	INDEX 6563 SAMPLE 11747	INDEX 6564 SAMPLE 3857
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BOWIE	BOWIE	BOWIE
FIELD	MAUD	MAUD	NOT GIVEN
WELL NAME	J. D. OWENS NO. 1	HELEN HUGHES NO. 1	HEILBRON NO. 2
LOCATION	J. S. HERRING SUR. A-263	MERSH SUR. A-424	SEC. 38, H. JANES SUR.
OWNER	WESTLAND OIL DEV. CORP.	WESTLAND OIL DEV. CORP.	BARNSDALL OIL CO.
COMPLETED	06/15/67	07/27/67	NOT GIVEN
SAMPLED	01/27/69	01/29/69	07/15/44
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8550	8693	7686
WELLHEAD PRESSURE,PSIG	4394	2250	NOT GIVEN
OPEN FLOW, MCFD	70000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	40.8	20.9
ETHANE	5.1	4.9	13.4
PROPANE	0.4	4.3	---
N-BUTANE	1.3	3.4	---
ISOBUTANE	0.8	2.2	---
N-PENTANE	1.1	1.9	---
ISOPENTANE	0.6	0.6	---
CYCLOPENTANE	0.6	0.5	---
HEXANES PLUS	1.2	2.5	---
NITROGEN	1.3	26.1	65.6
OXYGEN	TRACE	0.2	0.1
ARGON	0.2	0.2	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.3	---
CARBON DIOXIDE	0.2	0.3	1.5
HELIUM	0.10	0.06	0.14
HEATING VALUE*	1098	1036	492
SPECIFIC GRAVITY	0.623	1.019	0.900

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6565 SAMPLE 15146	INDEX 6566 SAMPLE 15381	INDEX 6567 SAMPLE 14869
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ALLIGATOR POINT	ALLIGATOR POINT W	ALVIN CITY
WELL NAME	ALLIGATOR POINT UNIT 1	STATE LEASE 66709 NO. 1	TRIANGLE MOORE NO. 1
LOCATION	PIERCE MILLER SUR. A-348	BBB&C RR SUR. A-445	HOOPER & WADE SUR., A-422
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	MCCORMICK OIL & GAS CORP.
COMPLETED	02/06/76	01/05/77	11/06/75
SAMPLED	11/05/77	09/25/78	12/--/76
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11358	12214	9983
WELLHEAD PRESSURE,PSIG	7350	7835	3333
OPEN FLOW, MCFD	1250	15457	11928
COMPONENT, MOLE PCT			
METHANE	91.4	85.3	95.2
ETHANE	4.4	6.8	2.4
PROPANE	1.3	3.0	0.7
N-BUTANE	0.3	0.7	0.2
ISOBUTANE	0.4	1.2	0.1
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.1
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1085	1187	1045
SPECIFIC GRAVITY	0.625	0.688	0.591

	INDEX 6568 SAMPLE 15144	INDEX 6569 SAMPLE 15470	INDEX 6570 SAMPLE 15471
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ALVIN CITY	ALVIN N	ALVIN N
WELL NAME	M.C. BAIRD NO. 1	REESE GU NO. 1	REESE GU NO. 1
LOCATION	HT&BRR SUR. A-228	HT&B RR SUR. 19, A-229	HT&B RR SUR. 19, A-229
OWNER	CROWN CENTRAL PETROLEUM	BUTTES RESOURCES CO.	BUTTES RESOURCES CO.
COMPLETED	06/17/76	11/25/76	11/25/76
SAMPLED	11/11/77	10/06/78	10/06/78
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9995	8108	8534
WELLHEAD PRESSURE,PSIG	2475	2832	3010
OPEN FLOW, MCFD	6800	11162	33782
COMPONENT, MOLE PCT			
METHANE	95.5	92.5	93.1
ETHANE	2.4	3.5	3.4
PROPANE	0.7	1.6	1.4
N-BUTANE	0.2	0.4	0.4
ISOBUTANE	0.1	0.5	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.1	0.6	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1056	1090	1086
SPECIFIC GRAVITY	0.592	0.612	0.611

	INDEX 6571 SAMPLE 9601	INDEX 6572 SAMPLE 10983	INDEX 6573 SAMPLE 15409
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ALVIN S	ANGLETON	ANGLETON
WELL NAME	LOCKHART BANK UNIT NO. 1	BLACKWELL GAS UNIT NO. 1	D. M. MOODY, TRUSTEE NO. 1
LOCATION	MYLES ODONNELL SUR. A-488	VALDERAS SUR. A-380	J. W. CLOUD SUR., A-160
OWNER	SUPERIOR OIL CO.	MONSANTO CO.	GOLDKING PRODUCTION CO.
COMPLETED	03/26/63	01/20/67	12/03/76
SAMPLED	10/16/64	06/07/67	10/02/78
FORMATION	OLIG-FRIO	MISS-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10490	11000	10250
WELLHEAD PRESSURE,PSIG	5375	5852	3065
OPEN FLOW, MCFD	75000	96000	3800
COMPONENT, MOLE PCT			
METHANE	90.8	91.6	92.9
ETHANE	3.7	4.7	2.7
PROPANE	1.8	1.3	1.1
N-BUTANE	0.7	0.2	0.3
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.6	0.1	0.2
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.6	0.1	0.2
NITROGEN	TRACE	0.7	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	1.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1143	1075	1065
SPECIFIC GRAVITY	0.650	0.616	0.616

	INDEX 6574 SAMPLE 5157	INDEX 6575 SAMPLE 15412	INDEX 6576 SAMPLE 14226
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	BASTROP BAY	BELL LAKE	BRAZOS BLOCK 386-S
WELL NAME	STATE A NO. 1	BALWIN NASH YOUNG NO. 1	NO. 3
LOCATION	STATE TRACT NO. 13	J. E. A. PHELPS SUR., A-117	BLK. 307-L, OFFSHORE
OWNER	CHAMPLIN REFINING CO.	GEOLOGICAL RESEARCH CORP.	MOBIL OIL CORP.
COMPLETED	09/12/51	02/15/77	08/04/72
SAMPLED	02/20/52	10/12/78	11/18/74
FORMATION	MIOC-	TERT-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5772	9818	6895
WELLHEAD PRESSURE,PSIG	2660	4775	2055
OPEN FLOW, MCFD	60000	11700	24000
COMPONENT, MOLE PCT			
METHANE	95.6	94.5	96.6
ETHANE	1.9	2.7	1.9
PROPANE	0.5	0.8	0.5
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.2	0.3	0.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	0.6	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1032	1067	1045
SPECIFIC GRAVITY	0.587	0.601	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6577 SAMPLE 14227	INDEX 6578 SAMPLE 12676	INDEX 6579 SAMPLE 4738
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	BRAZOS BLOCK 386-S	BUFFALO CAMP	CHOCOLATE BAYOU
WELL NAME	NO. 5	J. R. SMITH ET AL. NO. 1	HOUSTON H NO. 1
LOCATION	BLOCK 307-L, OFFSHORE	S. F. AUSTIN SUR. A-19	BLK. 23, E. ANDREWS SUR.
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	08/04/72	08/14/70	10/18/48
SAMPLED	11/14/74	02/11/71	04/27/49
FORMATION	MIOC-	OLIG-FRIO F-9	OLIG-M
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6495	10716	11020
WELLHEAD PRESSURE,PSIG	2055	3882	6380
OPEN FLOW, MCFD	24000	142000	5000
COMPONENT, MOLE PCT			
METHANE	96.6	91.7	89.5
ETHANE	1.9	3.1	5.3
PROPANE	0.6	1.5	2.0
N-BUTANE	0.1	0.4	0.5
ISOBUTANE	0.2	0.6	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	0.4	1.1	1.0
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.9	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1048	1090	1105
SPECIFIC GRAVITY	0.582	0.629	0.639

	INDEX 6580 SAMPLE 13382	INDEX 6581 SAMPLE 15413	INDEX 6582 SAMPLE 12684
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	CHOCOLATE BAYOU	CHOCOLATE BAYOU	CLEMENS N
WELL NAME	HOUSTON M NO. 1	GRACE MCILVAINE GU NO. 1	STATE TRACT 5 NO. 2
LOCATION	PERRY & AUSTIN SUR. A-110	ASA ARTHAM SUR. A47	WM. CUMMINGS SUR. A-59
OWNER	PHILLIPS PETROLEUM CO.	SUPERIOR OIL CO.	P. R. RUTHERFORD
COMPLETED	12/08/70	10/10/76	07/26/69
SAMPLED	09/06/72	10/16/78	02/15/71
FORMATION	OLIG-FRIO P	OLIG-FRIO	OLIG-FRIO C
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11000	13566	10800
WELLHEAD PRESSURE,PSIG	1817	9056	3898
OPEN FLOW, MCFD	60000	5530	14000
COMPONENT, MOLE PCT			
METHANE	88.8	89.0	83.2
ETHANE	5.8	5.1	8.3
PROPANE	2.5	1.7	3.7
N-BUTANE	0.6	0.4	1.0
ISOBUTANE	0.6	0.4	1.5
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	2.4	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1136	1095	1222
SPECIFIC GRAVITY	0.649	0.648	0.705

	INDEX 6583 SAMPLE 12685	INDEX 6584 SAMPLE 13924	INDEX 6585 SAMPLE 13925
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	CLEMENS N	CLEMENS SW	CLEMENS SW
WELL NAME	STATE TRACT 5 NO. 2	E.M. MCCARTHY NO. 1	E.M. MCCARTHY NO. 1
LOCATION	WM. CUMMINGS SUR. A-59	T.B. BELL SUR.; A-41	T.B. BELL SUR.; A-41
OWNER	P. R. RUTHERFORD	DOW CHEMICAL CO. U.S.A.	DOW CHEMICAL CO. U.S.A.
COMPLETED	07/26/69	10/23/72	10/23/72
SAMPLED	02/15/71	02/14/74	02/14/74
FORMATION	OLIG-FRIO B	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10486	11352	12692
WELLHEAD PRESSURE,PSIG	2544	2780	7770
OPEN FLOW, MCFD	18515	14300	706
COMPONENT, MOLE PCT			
METHANE	83.5	94.0	92.8
ETHANE	8.2	2.8	3.1
PROPANE	3.8	0.9	1.1
N-BUTANE	0.8	0.2	0.2
ISOBUTANE	1.6	0.3	0.4
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.2	0.5	0.4
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	1.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1223	1056	1058
SPECIFIC GRAVITY	0.703	0.601	0.614

	INDEX 6586 SAMPLE 5004	INDEX 6587 SAMPLE 5165	INDEX 6588 SAMPLE 4693
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	COLLINS LAKE	COWTRAP	DAMON MOUND
WELL NAME	M. J. JAMISON ESTATE NO. 1	NO. 1	CONOCO FEE NO. 1
LOCATION	C. SMITH LEAGUE	ABST. NO. A368	NOT GIVEN
OWNER	MCCARTHY OIL & GAS CORP.	BRAZOS OIL & GAS CO.	TEXAS CO.
COMPLETED	10/30/50	09/02/51	12/21/48
SAMPLED	02/15/51	01/27/52	03/12/49
FORMATION	OLIG-HACKBERRY	MIOC-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11428	3067	3966
WELLHEAD PRESSURE,PSIG	5050	1395	1536
OPEN FLOW, MCFD	90687	11000	13200
COMPONENT, MOLE PCT			
METHANE	88.5	97.7	98.1
ETHANE	5.5	0.6	0.4
PROPANE	2.7	0.1	0.2
N-BUTANE	0.6	0.0	TRACE
ISOBUTANE	1.0	0.0	0.1
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.2	1.2	0.7
OXYGEN	0.1	0.1	0.1
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.2	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1136	1008	1015
SPECIFIC GRAVITY	0.657	0.568	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6589 SAMPLE 3759	INDEX 6590 SAMPLE 4663	INDEX 6591 SAMPLE 4664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	DANBURY	DANBURY	DANBURY
WELL NAME	TEXAS RICE PROD. CO. NO. 1	BENNETT OIL & GAS CO. NO. 6	ROBERSON ESTATE NO. 1
LOCATION	NOT GIVEN	HT&B RR SUR. A-265	HENRY AUSTIN SUR. A-13
OWNER	HUMBLE & STANOLIND	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	02/24/49	05/02/48
SAMPLED	04/01/48	03/01/49	03/10/49
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	8378	7545
WELLHEAD PRESSURE, PSIG	2500	3895	3450
OPEN FLOW, MCFD	NOT GIVEN	36000	38000
COMPONENT, MOLE PCT			
METHANE	89.2	90.6	94.3
ETHANE	8.8	4.9	2.7
PROPANE	---	1.6	0.9
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	1.0	1.2	0.6
OXYGEN	0.4	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.4	0.7
HELIUM	0.00	TRACE	0.01
HEATING VALUE*	1061	1091	1057
SPECIFIC GRAVITY	0.610	0.625	0.600

	INDEX 6592 SAMPLE 4666	INDEX 6593 SAMPLE 4964	INDEX 6594 SAMPLE 10886
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	DANBURY	DANBURY	HASTINGS
WELL NAME	JOHN CHOWANEC, JR., NO. 1	DANBURY GAS UNIT NO. 1	EMIL GROTE NO. 14
LOCATION	HENRY AUSTIN SUR. A-13	H. AUSTIN LEA. SUR. NO. A-13	ACH & B SUR. 2 A-462
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	10/20/48	08/23/50	02/22/67
SAMPLED	03/10/49	11/28/50	03/07/67
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8310	9275	3918
WELLHEAD PRESSURE, PSIG	3625	4325	1608
OPEN FLOW, MCFD	38000	5750	50000
COMPONENT, MOLE PCT			
METHANE	92.0	92.4	98.3
ETHANE	3.2	3.2	0.3
PROPANE	1.4	1.1	TRACE
N-BUTANE	0.5	0.4	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	0.6	0.9	1.0
OXYGEN	0.1	0.2	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.2	1.3	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1083	1061	1001
SPECIFIC GRAVITY	0.624	0.618	0.563

	INDEX 6595 SAMPLE 13049	INDEX 6596 SAMPLE 13048	INDEX 6597 SAMPLE 12335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	HASTINGS	HASTINGS E	HASTINGS W
WELL NAME	H. G. WILLIAMS NO. 5	R. O. SURFACE NO. 6	EMIL GROTE NO. 14
LOCATION	ACH&B SUR. NO.1, A-416	BBB&C SUR. A-160	NOT GIVEN
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PETROLEUM CORP.
COMPLETED	03/17/70	02/21/70	07/13/70
SAMPLED	10/01/71	10/01/71	07/21/70
FORMATION	MIOC-HASTINGS M-6	MIOC-HASTINGS M-12	MIOC-HASTINGS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3301	4570	3690
WELLHEAD PRESSURE, PSIG	2074	1536	1512
OPEN FLOW, MCFD	210000	28000	16500
COMPONENT, MOLE PCT			
METHANE	99.1	97.7	97.3
ETHANE	0.1	0.9	0.4
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.5	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	1.8
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1008	1014	995
SPECIFIC GRAVITY	0.560	0.571	0.576

	INDEX 6598 SAMPLE 3697	INDEX 6599 SAMPLE 13631	INDEX 6600 SAMPLE 14532
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	LOCHRIDGE	MARTIN RANCH	MARTIN RANCH
WELL NAME	RAMSEY B NO. 1	T. MARTIN FEE NO. 1	T. MARTIN NO. 4
LOCATION	J. W. HALL SUR.	PERRY&AUSTIN SUR. A-106	PERRY & MARTIN SUR. A-106
OWNER	SHELL OIL CO.	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.
COMPLETED	09/02/37	01/08/73	02/14/74
SAMPLED	10/31/43	06/01/73	11/05/75
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6360	14600	14888
WELLHEAD PRESSURE, PSIG	2756	10800	9450
OPEN FLOW, MCFD	1000	56000	13645
COMPONENT, MOLE PCT			
METHANE	83.0	88.6	91.6
ETHANE	16.0	3.6	3.6
PROPANE	---	1.0	0.9
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.1	3.1	0.4
OXYGEN	0.2	0.7	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	2.4	2.9
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	1128	1002	1034
SPECIFIC GRAVITY	0.642	0.628	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6601 SAMPLE 13827	INDEX 6602 SAMPLE 13828	INDEX 6603 SAMPLE 13829
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OLD OCEAN	OLD OCEAN
WELL NAME	OLD OCEAN UNIT NO. 27	OLD OCEAN UNIT NO. 148L	OLD OCEAN NO. 171
LOCATION	RATTLE, BERRY & WILLIAMS SUR	CHARLES BREEN LEAGUE	DAVID MCCORMICK LEAGUE
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	11/22/60	11/20/47	11/10/60
SAMPLED	11/26/73	11/26/73	11/26/73
FORMATION	OLIG-F8	OLIG-LARSON	OLIG-F7
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9538	10755	9342
WELLHEAD PRESSURE,PSIG	2600	1050	1500
OPEN FLOW, MCFD	2550	95000	18500
COMPONENT, MOLE PCT			
METHANE	90.5	90.1	89.9
ETHANE	3.4	4.1	5.2
PROPANE	0.9	1.7	2.1
N-BUTANE	0.2	0.3	0.5
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	2.5	0.9	0.4
OXYGEN	0.3	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1046	1092	1128
SPECIFIC GRAVITY	0.625	0.638	0.639

	INDEX 6604 SAMPLE 13830	INDEX 6605 SAMPLE 13831	INDEX 6606 SAMPLE 13832
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OLD OCEAN	OLD OCEAN
WELL NAME	OLD OCEAN UNIT NO. 105	OLD OCEAN UNIT NO. 223	OLD OCEAN UNIT NO. 110U
LOCATION	CHARLES BREEN LEAGUE	OLIVER JONES LEAGUE	CHARLES BREEN LEAGUE
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	07/31/53	08/09/67	05/01/71
SAMPLED	11/27/73	11/26/73	11/26/73
FORMATION	OLIG-F-13	OLIG-HELLMUTH	OLIG-F-9 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10170	12473	9629
WELLHEAD PRESSURE,PSIG	2712	2760	3150
OPEN FLOW, MCFD	7200	36400	10500
COMPONENT, MOLE PCT			
METHANE	93.3	95.1	87.2
ETHANE	3.4	2.1	3.7
PROPANE	0.7	0.7	1.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	0.3	4.9
OXYGEN	0.1	0.0	1.2
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1053	1038	1005
SPECIFIC GRAVITY	0.607	0.591	0.631

	INDEX 6607 SAMPLE 13833	INDEX 6608 SAMPLE 15175	INDEX 6609 SAMPLE 15238
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OYSTER CREEK	PEACH POINT
WELL NAME	OLD OCEAN UNIT NO. 127-T	SUN-FEE NO. 1	AUSTIN COLLEGE NO. 1
LOCATION	OLIVER JONES LEAGUE	JOHN MARTIN SUR. A-33	STEPHEN F. AUSTIN SUR. A-27
OWNER	AMOCO PRODUCTION CO.	HILLIARD OIL & GAS, INC.	MONSANTO CO.
COMPLETED	08/12/64	02/03/75	06/17/76
SAMPLED	11/26/73	12/27/77	03/17/78
FORMATION	OLIG-CAMPBELL	OLIG-FRIO	OLIG-FRIO A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10477	7000	11250
WELLHEAD PRESSURE,PSIG	1425	3300	7340
OPEN FLOW, MCFD	7000	64000	92045
COMPONENT, MOLE PCT			
METHANE	93.1	96.2	94.4
ETHANE	3.6	2.1	3.0
PROPANE	1.0	0.5	0.8
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.4	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1057	1049	1058
SPECIFIC GRAVITY	0.607	0.583	0.601

	INDEX 6610 SAMPLE 16101	INDEX 6611 SAMPLE 15237	INDEX 6612 SAMPLE 8908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	PEACH POINT	PEACH POINT S	PERRY LANDING
WELL NAME	AUSTIN COLLEGE NO. 2	AUSTIN COLLEGE NO. 2	ST. OF TEXAS, TR.49016 NO. 1
LOCATION	STEVEN F. AUSTIN SUR. A-27	STEPHEN F. AUSTIN SUR. A-27	TR. 49016
OWNER	MONSANTO CO.	MONSANTO CO.	MOBIL OIL CO.
COMPLETED	08/--/78	01/06/77	11/23/62
SAMPLED	10/15/80	NOT GIVEN	03/27/63
FORMATION	OLIG-FRIO	OLIG-FRIO A	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11216	11350	10382
WELLHEAD PRESSURE,PSIG	5255	4835	4666
OPEN FLOW, MCFD	5730	28455	34000
COMPONENT, MOLE PCT			
METHANE	93.8	94.3	94.5
ETHANE	3.4	2.8	2.9
PROPANE	0.9	0.8	0.8
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.2	0.2	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1075	1062	1066
SPECIFIC GRAVITY	0.607	0.602	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6613 SAMPLE 3758	INDEX 6614 SAMPLE 15180	INDEX 6615 SAMPLE 14516
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	PLEDGER	PLEDGER	RATTLESNAKE MOUND
WELL NAME	HUNT NO. 2	T. L. SMITH NO. 8	SWEET NO. 1-A
LOCATION	NOT GIVEN	GRAY & MOORE SUR., A-65	ALFRED SWINGLE SUR, A-369
OWNER	DANCIGER OIL & REFINING CO.	EXXON CORP.	GENERAL CRUDE OIL CO.
COMPLETED	--/--/33	08/04/76	03/27/75
SAMPLED	04/02/44	01/04/78	10/22/75
FORMATION	OLIG-FRIO	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6752	4806	7017
WELLHEAD PRESSURE,PSIG	3600	1941	2975
OPEN FLOW, MCFD	25000	490000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	94.8	93.0
ETHANE	7.2	2.7	3.4
PROPANE	---	0.9	1.4
N-BUTANE	---	0.3	0.3
ISOBUTANE	---	0.2	0.6
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	0.4	0.4	0.5
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1061	1071	1088
SPECIFIC GRAVITY	0.595	0.600	0.611

	INDEX 6616 SAMPLE 15149	INDEX 6617 SAMPLE 14870	INDEX 6618 SAMPLE 15177
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	RATTLESNAKE MOUND	RATTLESNAKE MOUND W	SWEENEY
WELL NAME	E.A. SWEET NO. 2-A	SHELL POINT UNIT NO. 1	BERNARD RIVER LD. DEV. NO. 1
LOCATION	A. SWINGLE SUR. A-369	PERRY & AUSTIN SUR. A-106	OLIVER JONES SUR. A-78
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	02/03/76	12/14/74	06/27/76
SAMPLED	11/05/77	12/14/76	12/29/77
FORMATION	MIOC-	OLIG-FRIO SCHENCK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5288	14128	11670
WELLHEAD PRESSURE,PSIG	2000	6500	4375
OPEN FLOW, MCFD	15000	6092	2490
COMPONENT, MOLE PCT			
METHANE	97.8	84.0	93.8
ETHANE	1.0	9.2	3.1
PROPANE	0.2	2.0	0.7
N-BUTANE	TRACE	0.4	0.2
ISOBUTANE	TRACE	0.4	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	0.7	0.4
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.6	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1019	1117	1048
SPECIFIC GRAVITY	0.567	0.672	0.603

	INDEX 6619 SAMPLE 4768	INDEX 6620 SAMPLE 13487	INDEX 6621 SAMPLE 3880
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZOS	BRAZOS
FIELD	WILDCAT	FEDERAL BLOCK 538	MILLICAN
WELL NAME	BLACKWELL NO. 1	FEDERAL BLOCK 538 NO. A-5	WHARTON WEEMS NO. 1
LOCATION	I&GN SUR. NO. 27 A622-B	BLOCK 538 OFFSHORE	J. M. BARRERA SUR.
OWNER	ROWAN & TEXAS GULF	TEXACO INC.	PHILLIPS PETROLEUM CO.
COMPLETED	06/--/49	NOT GIVEN	04/02/44
SAMPLED	10/--/49	12/04/72	09/17/44
FORMATION	OLIG-FRIO	MIOC-6000 FT. SAND	EOCE-WILCOX U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10554	7059	3096
WELLHEAD PRESSURE,PSIG	4990	2220	NOT GIVEN
OPEN FLOW, MCFD	2	NOT GIVEN	5800
COMPONENT, MOLE PCT			
METHANE	95.6	94.9	96.9
ETHANE	2.1	1.5	1.0
PROPANE	0.7	0.6	---
N-BUTANE	0.2	0.2	---
ISOBUTANE	0.1	0.4	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.3	TRACE	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.0	0.4	---
NITROGEN	0.3	1.5	1.2
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.3	0.8
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1052	1057	1000
SPECIFIC GRAVITY	0.591	0.602	0.573

	INDEX 6622 SAMPLE 6295	INDEX 6623 SAMPLE 9716	INDEX 6624 SAMPLE 15527
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRISCOE	BROOKS	BROOKS
FIELD	NOT GIVEN	ALTA MESA	ALTA MESA E
WELL NAME	RITCHE NO. 2	GARCIA NO. 1-20	PEREZ GAS UNIT NO. 1
LOCATION	SEC. 34, BLK. 5, G&A SUR.	NOT GIVEN	LA ENCANTADA GRANT, A-97
OWNER	J. F. SMITHE & J. W. COLLINS	STANDARD OIL CO. OF TEXAS	SAMEDAN OIL CORP.
COMPLETED	NOT GIVEN	04/30/63	04/13/76
SAMPLED	04/02/57	01/29/65	11/29/78
FORMATION	NOT GIVEN	OLIG-VICKSBURG	EOCE-LOMA BLANCA
GEOLOGIC PROVINCE CODE	435	220	220
DEPTH, FEET	NOT GIVEN	7300	8717
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4300	6217
OPEN FLOW, MCFD	NOT GIVEN	8680	5800
COMPONENT, MOLE PCT			
METHANE	89.3	90.6	91.3
ETHANE	0.0	5.1	4.7
PROPANE	0.0	1.8	1.8
N-BUTANE	0.0	0.5	0.4
ISOBUTANE	0.0	0.6	0.4
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	8.2	0.5	0.1
OXYGEN	2.2	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	905	1125	1114
SPECIFIC GRAVITY	0.602	0.633	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6625 SAMPLE 12175		INDEX 6626 SAMPLE 15214		INDEX 6627 SAMPLE 9596	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROOKS		BROOKS		BROOKS	
FIELD	BOEDECKER W		CARL PETERS		ENCINITAS	
WELL NAME	ED RACHAL FOUNDATION NO. 1		O. J. SULLIVAN "F" NO. 6		BRAULIA DE GARCIA NO. 23	
LOCATION	JOSE NAVAZ SUR, 660, A-420		S. A. DEL ENCINAL GT, A-370		R. G. SALINAS SUR, A-480	
OWNER	FOREST OIL CORP.		EXXON CO., U.S.A.		STANDARD OIL CO. OF TEXAS	
COMPLETED	09/01/69		12/03/73		--/--/63	
SAMPLED	07/--/70		02/17/78		10/08/64	
FORMATION	OLIG-FRIO		MIOC-		OLIG-SALINAS	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7566		7014		9970	
WELLHEAD PRESSURE,PSIG	2722		2370		3500	
OPEN FLOW, MCFD	4600		3400		1240	
COMPONENT, MOLE PCT						
METHANE	92.8	----------	93.7	----------	89.9	----------
ETHANE	3.5		3.0		5.4	
PROPANE	1.2	----------	1.0	----------	1.9	----------
N-BUTANE	0.1		0.3		0.7	
ISOBUTANE	0.2	----------	0.3	----------	0.5	----------
N-PENTANE	TRACE		0.2		0.3	
ISOPENTANE	0.2	----------	0.1	----------	0.2	----------
CYCLOPENTANE	TRACE		0.1		0.2	
HEXANES PLUS	0.1	----------	0.3	----------	0.6	----------
NITROGEN	1.5		0.7		TRACE	
OXYGEN	0.2	----------	0.1	----------	TRACE	----------
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE	----------	0.1	----------	0.2	----------
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1058	----------	1081	----------	1157	----------
SPECIFIC GRAVITY	0.601		0.607		0.648	

	INDEX 6628 SAMPLE 12573		INDEX 6629 SAMPLE 14622		INDEX 6630 SAMPLE 10649	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROOKS		BROOKS		BROOKS	
FIELD	ENCINITAS E		FLOWELLA		KELSEY DEEP	
WELL NAME	HECTOR LOPEZ NO. 1		NEWMONT NO. 1		MCGILL BROTHERS NO. 350	
LOCATION	LA RUICA GRANT A-481		SEC. 14, LOMA BLANCO GNT.		SAN ANTONIO GRANT A-214	
OWNER	COASTAL STATES GAS PROD. CO.		CROWN CENTRAL PETR. CORP.		HUMBLE OIL & REFINING CO.	
COMPLETED	03/10/70		05/17/74		10/21/65	
SAMPLED	12/08/70		03/20/76		07/07/66	
FORMATION	OLIG-VICKSBURG		OLIG-VICKSBURG		OLIG-VICKSBURG 26-A	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9100		10220		7835	
WELLHEAD PRESSURE,PSIG	3500		5889		2995	
OPEN FLOW, MCFD	37000		10000		29000	
COMPONENT, MOLE PCT						
METHANE	88.5	----------	88.5	----------	89.7	----------
ETHANE	5.6		6.1		4.2	
PROPANE	2.4	----------	2.3	----------	2.1	----------
N-BUTANE	0.5		0.4		0.8	
ISOBUTANE	0.8	----------	0.7	----------	0.6	----------
N-PENTANE	0.2		0.2		0.4	
ISOPENTANE	0.3	----------	0.1	----------	0.3	----------
CYCLOPENTANE	0.2		TRACE		0.4	
HEXANES PLUS	0.5	----------	0.2	----------	1.1	----------
NITROGEN	0.9		0.5		0.3	
OXYGEN	0.1	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	1.0	----------	0.2	----------
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1157	----------	1126	----------	1187	----------
SPECIFIC GRAVITY	0.657		0.647		0.670	

	INDEX 6631 SAMPLE 13900		INDEX 6632 SAMPLE 10186		INDEX 6633 SAMPLE 10114	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROOKS		BROOKS		BROOKS	
FIELD	KELSY DEEP		LA ENCANTADA		LA GLORIA	
WELL NAME	MCGILL BROTHERS NO. 203 T		T. MANGEL NO. 1		LAGLORIA GAS UNIT 49-T	
LOCATION	LA BLANCO GRANT		LA ENCANTADA GRANT, TRACT 4		BLK. 8, JACOBS SUBDIVISION	
OWNER	EXXON CO., U.S.A.		BLOWELL & BRADY		SOCONY MOBIL OIL CO., INC.	
COMPLETED	09/09/72		04/14/62		11/21/63	
SAMPLED	01/30/74		09/30/65		09/09/65	
FORMATION	OLIG-FRIO-19-K-NW		OLIG-VICKSBURG		OLIG-ONEIL	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5906		9268		6924	
WELLHEAD PRESSURE,PSIG	1910		6315		1640	
OPEN FLOW, MCFD	8857		6100		4400	
COMPONENT, MOLE PCT						
METHANE	92.8	----------	91.6	----------	91.9	----------
ETHANE	3.9		4.6		4.1	
PROPANE	1.5	----------	1.7	----------	1.8	----------
N-BUTANE	0.4		0.5		0.4	
ISOBUTANE	0.4	----------	0.4	----------	0.4	----------
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.3	----------	0.3	----------	0.2	----------
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1	----------	0.2	----------	0.3	----------
NITROGEN	0.3		0.3		0.5	
OXYGEN	0.1	----------	0.0	----------	0.2	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.3	----------	0.0	----------
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1098	----------	1112	----------	1110	----------
SPECIFIC GRAVITY	0.614		0.625		0.623	

	INDEX 6634 SAMPLE 4385		INDEX 6635 SAMPLE 10257		INDEX 6636 SAMPLE 13839	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROOKS		BROOKS		BROOKS	
FIELD	MARIPOSA		MARIPOSA		MILLS BENNETT	
WELL NAME	O. J. SULLIVAN C-8		O. J. SULLIVAN NO. 2		MILLS BENNETT FEE NO. 34	
LOCATION	TM RR CO. SUR. NO. 151		KINGSVILLE DIST., FLOYD SUR.		PALO BLANCO GRANT A-258	
OWNER	HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.		MILLS BENNETT ESTATE	
COMPLETED	04/19/46		08/14/51		07/27/72	
SAMPLED	11/14/47		10/29/65		12/21/73	
FORMATION	OLIG-FRIO		OLIG-VICKSBURG M-10		OLIG-FRIO-L-3, SEG. 3	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7502		8834		5706	
WELLHEAD PRESSURE,PSIG	3535		3560		1788	
OPEN FLOW, MCFD	22000		7220		7170	
COMPONENT, MOLE PCT						
METHANE	87.2	----------	98.4	----------	89.6	----------
ETHANE	11.5		3.3		4.5	
PROPANE	---	----------	0.9	----------	2.4	----------
N-BUTANE	---		0.3		0.6	
ISOBUTANE	---	----------	0.3	----------	0.7	----------
N-PENTANE	---		0.1		0.1	
ISOPENTANE	---	----------	0.1	----------	0.2	----------
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---	----------	0.1	----------	0.2	----------
NITROGEN	0.6		0.4		1.7	
OXYGEN	0.4	----------	0.0	----------	0.0	----------
ARGON	---		TRACE		0.0	
HYDROGEN	---	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.3	----------	0.1	----------	0.1	----------
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1049	----------	1073	----------	1117	----------
SPECIFIC GRAVITY	0.619		0.598		0.640	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6637 SAMPLE 13536	INDEX 6638 SAMPLE 15907	INDEX 6639 SAMPLE 15986
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	PITA	RUCIAS N	RUCIAS N
WELL NAME	O.J. SULLIVAN NO. 8-29F	CARTER RANCH NO. 1	BARBARA LIPS "C" NO. 1
LOCATION	SAN ANTONIO DE ENCINAL GRANT	LA RUCIO GT., A-481	9 MI. SW RACHAL
OWNER	EXXON CO., U.S.A.	MCCORMICK O&G CORP.	HILLIARD OIL & GAS, INC.
COMPLETED	09/--/70	02/21/80	10/16/79
SAMPLED	02/15/73	02/17/80	06/18/80
FORMATION	OLIG-FRIO	TERT-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8254	10314	10470
WELLHEAD PRESSURE,PSIG	2975	7696	8360
OPEN FLOW, MCFD	33	18000	43000
COMPONENT, MOLE PCT			
METHANE	93.6	85.4	71.8
ETHANE	3.6	7.8	9.0
PROPANE	1.2	3.4	6.7
N-BUTANE	0.2	0.7	3.2
ISOBUTANE	0.4	0.9	3.2
N-PENTANE	0.1	0.2	1.3
ISOPENTANE	0.1	0.3	1.9
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	1.5
NITROGEN	0.5	0.3	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.8	1.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1078	1179	1499
SPECIFIC GRAVITY	0.601	0.675	0.878

	INDEX 6640 SAMPLE 16099	INDEX 6641 SAMPLE 15524	INDEX 6642 SAMPLE 3834
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	RUCIAS N	SANTA FE E	SCOTT & HOPPER
WELL NAME	BARBARA LIPS "C" NO. 1	SANTA FE NO. 33-D	SCOTT & HOPPER NO. 1
LOCATION	VARGAS GRANT, A-192	SAN SALVADOR DEL TULE GRANT	SEC. 107, ACH&B SUR.
OWNER	HILLIARD OIL & GAS, INC.	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.
COMPLETED	10/16/79	04/19/77	NOT GIVEN
SAMPLED	10/14/80	11/14/78	05/04/44
FORMATION	OLIG-VICKSBURG	OLIG-MASSIVE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10470	8150	6536
WELLHEAD PRESSURE,PSIG	8500	1200	1700
OPEN FLOW, MCFD	3000	1700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.8	94.0	84.4
ETHANE	10.2	3.5	11.3
PROPANE	7.9	0.9	---
N-BUTANE	3.6	0.2	---
ISOBUTANE	3.7	0.3	---
N-PENTANE	1.5	0.1	---
ISOPENTANE	2.0	0.1	---
CYCLOPENTANE	0.3	TRACE	---
HEXANES PLUS	1.9	0.2	---
NITROGEN	0.0	0.5	4.0
OXYGEN	0.1	0.0	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	0.2	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1579	1074	1057
SPECIFIC GRAVITY	0.928	0.601	0.629

	INDEX 6643 SAMPLE 10184	INDEX 6644 SAMPLE 15212	INDEX 6645 SAMPLE 11594
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	SKIPPER	TIO AYOLA	VIBORAS W
WELL NAME	SKIPPER GAS UNIT 1 WELL NO.1	R. J. KLEBERG JR. NO. 17	LOS MUERTOS PASTURE NO. 9D
LOCATION	LA ENCANTADA GRANT, A-97	TIO AYOLA GRANT A-389	EL LUZERO GRANT A-199
OWNER	HUMBLE OIL & TEXAS CO.	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.
COMPLETED	06/22/65	01/20/75	03/23/67
SAMPLED	10/01/65	02/15/78	07/29/68
FORMATION	OLIG-FRIO 1-2M	MIOC-8-25	OLIG-FRIO I-12
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8219	1258	7850
WELLHEAD PRESSURE,PSIG	5360	485	2500
OPEN FLOW, MCFD	54000	NOT GIVEN	89000
COMPONENT, MOLE PCT			
METHANE	90.0	98.2	78.1
ETHANE	4.7	0.2	3.9
PROPANE	1.8	TRACE	1.5
N-BUTANE	0.5	0.0	0.3
ISOBUTANE	0.4	0.0	0.5
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.1	1.5	12.2
OXYGEN	0.0	0.0	2.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1105	998	949
SPECIFIC GRAVITY	0.614	0.561	0.678

	INDEX 6646 SAMPLE 7959	INDEX 6647 SAMPLE 10895	INDEX 6648 SAMPLE 7963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BROWN	BROWN
FIELD	BROOKESMITH	BLAKE-CADDO	BROOKESMITH
WELL NAME	LEWIS HENDERSON NO. 1-A	G. W. WILLIAMS NO. 1-A	LEWIS & EMMA HENDERSON NO. 1
LOCATION	NOT GIVEN	J. BECK SUR. NO. 792	NOT GIVEN
OWNER	LEECO GAS & OIL CO.	KIRK & NEEB	LEECO GAS & OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/16/61	02/21/67	05/16/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1214	2732	1155
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	565
OPEN FLOW, MCFD	250	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	80.7	69.2	81.2
ETHANE	2.8	12.4	1.9
PROPANE	1.5	8.0	0.8
N-BUTANE	0.6	1.9	0.2
ISOBUTANE	0.2	0.9	0.1
N-PENTANE	0.1	0.5	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	TRACE
NITROGEN	13.0	6.3	15.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.6	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.40	0.10	0.40
HEATING VALUE*	949	1274	892
SPECIFIC GRAVITY	0.651	0.788	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6649 SAMPLE 7965		INDEX 6650 SAMPLE 7958		INDEX 6651 SAMPLE 7960	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROWN		BROWN		BROWN	
FIELD	BROOKESMITH		BROOKESMITH E		BROOKESMITH E	
WELL NAME	CONNAWAY NO. 1		MCNURLEN & KIRKPATRICK NO. 1		MCNURLEN & KIRKPATRICK NO. E	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	LEECO GAS & OIL CO.		LEECO GAS & OIL CO.		LEECO GAS & OIL CO.	
COMPLETED	NOT GIVEN		06/--/59		02/--/60	
SAMPLED	05/16/61		05/16/61		05/16/61	
FORMATION	PENN-MARBLE FALLS		PENN-MARBLE FALLS		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	1112		1262		1102	
WELLHEAD PRESSURE,PSIG	575		613		635	
OPEN FLOW, MCFD	2200		1100		4200	
COMPONENT, MOLE PCT						
METHANE	81.6		77.0		79.6	
ETHANE	1.7		3.7		4.4	
PROPANE	0.6		1.7		1.9	
N-BUTANE	0.1		0.4		0.4	
ISOBUTANE	TRACE		0.3		0.2	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	0.1		TRACE		0.1	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	TRACE		TRACE		TRACE	
NITROGEN	14.9		16.1		12.6	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.2		0.2	
HELIUM	0.40		0.50		0.40	
HEATING VALUE*	880		914		964	
SPECIFIC GRAVITY	0.635		0.666		0.660	

	INDEX 6652 SAMPLE 7961		INDEX 6653 SAMPLE 7962		INDEX 6654 SAMPLE 7967	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROWN		BROWN		BROWN	
FIELD	BROOKESMITH E		BROOKESMITH E		BROOKESMITH E	
WELL NAME	BAXTER & KIRKPATRICK NO. 1		ZELMA FRY NO. 1-A		GRELLE-KIRKPATRICK NO. 1	
LOCATION	NOT GIVEN		W. GUTHRIE SUR.		NOT GIVEN	
OWNER	LEECO GAS & OIL CO.		LEECO GAS & OIL CO.		LEECO GAS & OIL CO.	
COMPLETED	01/--/60		NOT GIVEN		10/24/60	
SAMPLED	05/16/61		05/16/61		05/16/61	
FORMATION	PENN-MARBLE FALLS		PENN-MARBLE FALLS		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	1286		1286		1223	
WELLHEAD PRESSURE,PSIG	600		625		613	
OPEN FLOW, MCFD	480		900		840	
COMPONENT, MOLE PCT						
METHANE	77.3		77.0		78.1	
ETHANE	3.7		3.8		3.9	
PROPANE	1.6		1.7		1.6	
N-BUTANE	0.4		0.5		0.3	
ISOBUTANE	0.3		0.2		0.3	
N-PENTANE	TRACE		0.1		TRACE	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	0.0		TRACE		0.0	
HEXANES PLUS	TRACE		0.1		TRACE	
NITROGEN	15.6		15.8		14.9	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.1		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.2		0.2	
HELIUM	0.50		0.50		0.50	
HEATING VALUE*	919		929		927	
SPECIFIC GRAVITY	0.667		0.674		0.662	

	INDEX 6655 SAMPLE 4935		INDEX 6656 SAMPLE 4937		INDEX 6657 SAMPLE 863	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROWN		BROWN		BROWN	
FIELD	BROWN COUNTY REGULAR		BROWN COUNTY REGULAR		BROWNWOOD	
WELL NAME	J. M. MOORE HEIRS NO. 1		G. W. WILLIAMS NO. 1		CAPPS	
LOCATION	J. C. BAILEY SUR. NO. 137		JOHN BECK SUR. NO. 792		NOT GIVEN	
OWNER	HICKOK&REYNOLDS ROYALTY CO.		HICKOK&REYNOLDS ROYALTY CO.		H. G. LUCAS	
COMPLETED	09/02/50		04/30/50		NOT GIVEN	
SAMPLED	08/21/50		08/21/50		04/20/24	
FORMATION	PENN-MARBLE FALLS		PENN-FRY		PENN-CADDO U	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	2714		1473		1450	
WELLHEAD PRESSURE,PSIG	700		600		725	
OPEN FLOW, MCFD	4000		8500		1500	
COMPONENT, MOLE PCT						
METHANE	76.3		77.7		91.1	
ETHANE	10.3		5.2		2.8	
PROPANE	4.5		2.3		---	
N-BUTANE	1.0		0.7		---	
ISOBUTANE	0.3		0.1		---	
N-PENTANE	0.2		0.2		---	
ISOPENTANE	0.1		TRACE		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	0.2		0.2		---	
NITROGEN	6.6		12.8		4.7	
OXYGEN	0.2		0.1		0.8	
ARGON	TRACE		TRACE		---	
HYDROGEN	---		TRACE		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.2		0.3	
HELIUM	0.14		0.41		0.30	
HEATING VALUE*	1136		946		973	
SPECIFIC GRAVITY	0.712		0.677		0.594	

	INDEX 6658 SAMPLE 7964		INDEX 6659 SAMPLE 7966		INDEX 6660 SAMPLE 7046	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	BROWN		BROWN		BROWN	
FIELD	BROWNWOOD S		BROWNWOOD S		MAY W	
WELL NAME	THOMPSON NO. 1		E. J. BALL NO. 1		L. GARNETT & J. CLARK NO. 1	
LOCATION	NOT GIVEN		NOT GIVEN		J. UDO SUR. NO. 16	
OWNER	LEECO GAS & OIL CO.		LEECO GAS & OIL CO.		CHAPMAN OIL CO.	
COMPLETED	12/24/59		09/18/58		09/21/58	
SAMPLED	05/16/61		05/16/61		04/20/59	
FORMATION	NOT GIVEN		PENN-MARBLE FALLS		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	1141		1336		2552	
WELLHEAD PRESSURE,PSIG	408		517		1020	
OPEN FLOW, MCFD	3450		600		150	
COMPONENT, MOLE PCT						
METHANE	82.1		74.3		77.7	
ETHANE	5.2		5.2		2.5	
PROPANE	2.3		1.3		4.3	
N-BUTANE	0.6		0.3		1.1	
ISOBUTANE	0.3		0.2		0.5	
N-PENTANE	0.1		TRACE		0.1	
ISOPENTANE	0.1		0.1		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		TRACE		0.2	
NITROGEN	8.8		19.8		5.3	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.1		TRACE		TRACE	
HYDROGEN SULFIDE**	0.2		0.0		0.0	
CARBON DIOXIDE	0.5		0.1		0.7	
HELIUM	0.30		0.60		0.20	
HEATING VALUE*	1129		845		1156	
SPECIFIC GRAVITY	0.662		0.674		0.711	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6661 SAMPLE 15408	INDEX 6662 SAMPLE 12494	INDEX 6663 SAMPLE 13866
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BURLESON	CALHOUN	CALHOUN
FIELD	CLAY NE	APPLING SE	APPLING SE
WELL NAME	JESSE MOORE ESTATE NO. 2	TRULL HEIRS NO. 1	FLORENCE M. TRULL NO. 1
LOCATION	J. B. CHANCE SUR. A-9	JAMES HUGHSON SUR.A-23	JAMES HUGHSON SUR. A-23
OWNER	HILL PRODUCTION CO.	HARKINS & CO.	ROBERT MOSBACHER
COMPLETED	11/27/76	07/10/69	12/02/71
SAMPLED	10/10/78	10/02/70	01/17/74
FORMATION	CRET-AUSTIN	OLIG-MASSIVE	OLIG-MELBOURNE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11436	8320	8237
WELLHEAD PRESSURE,PSIG	4842	4650	4812
OPEN FLOW, MCFD	30500	9800	12400
COMPONENT, MOLE PCT			
METHANE	80.8	87.8	88.9
ETHANE	9.2	4.2	4.1
PROPANE	2.3	1.6	1.7
N-BUTANE	0.7	0.4	0.3
ISOBUTANE	0.5	0.7	0.8
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	0.2	3.4	3.0
OXYGEN	0.0	0.7	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.2	0.3	0.7
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1124	1081	1078
SPECIFIC GRAVITY	0.710	0.646	0.638

	INDEX 6664 SAMPLE 9223	INDEX 6665 SAMPLE 12745	INDEX 6666 SAMPLE 12746
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	GREEN LAKE W	HEYSER	HEYSER
WELL NAME	NO. 1-LT	H. T. MARSHALL NO. 11F	H. T. MARSHALL NO. 11D
LOCATION	MUELLER GAS UNIT	AGATON SISNEROS SUR. A-36	AGATON SISNEROS SUR. A-36
OWNER	PAN AMER. PET. CORP. ET AL.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/--/61	--/--/70	--/--/70
SAMPLED	01/15/64	03/31/71	03/31/71
FORMATION	OLIG-FRIO & SHERIFF	MIOC-3500 FT SD.	MIOC-3700 FT SD.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9115	3500	3700
WELLHEAD PRESSURE,PSIG	2300	1400	1405
OPEN FLOW, MCFD	7322	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.1	99.2	99.3
ETHANE	5.3	0.1	0.1
PROPANE	2.0	TRACE	TRACE
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.3	0.5	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1129	1007	1008
SPECIFIC GRAVITY	0.638	0.557	0.557

	INDEX 6667 SAMPLE 10528	INDEX 6668 SAMPLE 13129	INDEX 6669 SAMPLE 13130
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	JUAN CANO SUR. A-5	KELLER'S BAY	KELLER'S BAY
WELL NAME	STOFFR-EIBAND NO. 1	STATE GAS UNIT NO. 18	STATE GAS UNIT NO. 18
LOCATION	POWDERHORN RANCH	STATE TRACT 55, LAVACA BAY	STATE TRACT 55, LAVACA BAY
OWNER	VIKING DRILLING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/11/65	02/10/70	02/10/70
SAMPLED	04/19/66	12/27/71	12/27/71
FORMATION	MIOC-OAKVILLE	OLIG-MELBOURNE	-FOESTER
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3498	8258	8727
WELLHEAD PRESSURE,PSIG	1498	600	600
OPEN FLOW, MCFD	6500	1900	34000
COMPONENT, MOLE PCT			
METHANE	96.9	91.9	91.9
ETHANE	0.8	4.0	3.8
PROPANE	0.2	1.6	1.6
N-BUTANE	TRACE	0.5	0.4
ISOBUTANE	TRACE	0.5	0.6
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.7	0.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	-0.4	0.4
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1015	1114	1101
SPECIFIC GRAVITY	0.574	0.630	0.624

	INDEX 6670 SAMPLE 13522	INDEX 6671 SAMPLE 9599	INDEX 6672 SAMPLE 9600
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	KELLER'S CREEK	LAVACA BAY	LAVACA BAY
WELL NAME	L.B. GRIFFITH NO. 1	ST. TRACT 23 NO. 1-LT	ST. TRACT 23 NO. 1-UT
LOCATION	SAMUEL HOUSTON SUR. A-22	NOT GIVEN	NOT GIVEN
OWNER	COTTON PETROLEUM CORP.	ALUMINUM CO. OF AMERICA	ALUMINUM CO. OF AMERICA
COMPLETED	06/17/71	05/23/64	05/23/64
SAMPLED	02/06/73	09/--/64	09/--/64
FORMATION	-GRIFFITH	OLIG-FRIO L	OLIG-FRIO L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8787	9763	9588
WELLHEAD PRESSURE,PSIG	3320	4430	4226
OPEN FLOW, MCFD	9000	13000	15000
COMPONENT, MOLE PCT			
METHANE	85.2	88.8	89.1
ETHANE	7.4	5.8	5.7
PROPANE	3.2	2.4	2.4
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.9	0.6	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.3	0.3	0.1
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1164	1144	1142
SPECIFIC GRAVITY	0.673	0.648	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6673 SAMPLE 10173	INDEX 6674 SAMPLE 11155	INDEX 6675 SAMPLE 11156
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	LAVACA BAY	LAVACA BAY	LAVACA BAY
WELL NAME	STATE TRACT 7A NO. 1	STATE TRACT 26 NO. 3	STATE TRACT 26 NO. 3
LOCATION	STATE TRACT 7A	LAVACA BAY	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	ALUMINUM CO. OF AMERICA	ALUMINUM CO. OF AMERICA
COMPLETED	11/03/64	04/23/66	04/23/66
SAMPLED	09/30/65	10/10/67	10/10/67
FORMATION	OLIG-FRIO	OLIG-FRIO F-33	OLIG-FRIO F-33
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8920	9538	9538
WELLHEAD PRESSURE,PSIG	3007	4604	4610
OPEN FLOW, MCFD	17200	63000	63000
COMPONENT, MOLE PCT			
METHANE	91.9	88.4	89.0
ETHANE	3.7	5.4	5.5
PROPANE	1.5	2.3	2.3
N-BUTANE	0.3	0.6	0.6
ISOBUTANE	0.5	0.8	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.1	1.0	0.6
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	TRACE	0.03	TRACE
HEATING VALUE*	1077	1126	1128
SPECIFIC GRAVITY	0.617	0.652	0.644

	INDEX 6676 SAMPLE 5037	INDEX 6677 SAMPLE 4339	INDEX 6678 SAMPLE 13117
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	LONG MOTT	MATAGORDA BAY	MAUDE B. TRAYLOR
WELL NAME	JAMIF HYNES NO. 1	STATE OF TEXAS NO. 1 TR. 118	MAUDE B. TRAYLOR NO. 5
LOCATION	J. F. DE LA FUENTES SUR.	TRACT 118, MATAGORDA BAY	PHILLIP DIMMIT SUR. A-11
OWNER	QUITAQUE PETROLEUM CORP.	TEXAS CO.	SUPERIOR OIL CO.
COMPLETED	12/07/50	NOT GIVEN	09/22/70
SAMPLED	04/01/51	08/12/47	12/16/71
FORMATION	OLIG-FRIO U	MIOC-	OLIG-FRIO 35A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7788	4716	8714
WELLHEAD PRESSURE,PSIG	4864	NOT GIVEN	4712
OPEN FLOW, MCFD	10200	40000	7000
COMPONENT, MOLE PCT			
METHANE	90.3	98.8	89.0
ETHANE	5.1	0.6	5.4
PROPANE	2.1	---	2.4
N-BUTANE	0.6	---	0.5
ISOBUTANE	0.5	---	0.8
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	0.2	0.2	0.6
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.2	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1121	1012	1136
SPECIFIC GRAVITY	0.635	0.561	0.647

	INDEX 6679 SAMPLE 13118	INDEX 6680 SAMPLE 12041	INDEX 6681 SAMPLE 4861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	MAUDE B. TRAYLOR	PANTHER REEF SW	POWDERHORN
WELL NAME	MAUDE B. TRAYLOR NO. 3	STATE TRACT 90 NO. 3	POWDER HORN NO. 2
LOCATION	PHILLIP DIMMIT SUR. A-11	STATE TRACT 90	SEC.4, BLK.J, JUAN CANO SUR.
OWNER	SUPERIOR OIL CO.	SUN OIL CO.	BRAZOS OIL & GAS CO.
COMPLETED	09/14/70	08/26/68	08/05/50
SAMPLED	12/16/71	09/17/69	04/07/50
FORMATION	OLIG-FRIO 85	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9957	8706	4640
WELLHEAD PRESSURE,PSIG	5932	5152	2000
OPEN FLOW, MCFD	54000	15000	23
COMPONENT, MOLE PCT			
METHANE	87.5	87.9	93.8
ETHANE	6.9	6.0	4.6
PROPANE	2.7	2.8	0.3
N-BUTANE	0.8	0.6	0.1
ISOBUTANE	0.4	1.0	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	0.2	0.8	0.6
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.2	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1163	1152	1051
SPECIFIC GRAVITY	0.643	0.654	0.589

	INDEX 6682 SAMPLE 12513	INDEX 6683 SAMPLE 5159	INDEX 6684 SAMPLE 14989
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	POWDERHORN	STEAMBOAT PASS	STEAMBOAT PASS
WELL NAME	STATE OF TEXAS NO. 15-C	STATE LEASE 35951 NO. 172-1	STATE TRACT 184 NO. 1
LOCATION	STATE OF TEXAS TRACT NO. 49	SAN ANTONIO BAY ST TRACT 172	ESPRITU SANTO BAY
OWNER	DOW CHEMICAL CO.	ALCOA MINING CO.	HOUSTON OIL & MINERALS CORP.
COMPLETED	05/14/69	06/04/51	10/05/75
SAMPLED	10/21/70	03/07/52	05/01/77
FORMATION	MIOC-2-A SAND	MIOC-OAKVILLE	MIOC-
GEOLOGIC PROVINCE CODE	220	220	954
DEPTH, FEET	6415	2630	1700
WELLHEAD PRESSURE,PSIG	1050	1155	700
OPEN FLOW, MCFD	14400	5900	1200
COMPONENT, MOLE PCT			
METHANE	95.2	97.9	97.0
ETHANE	3.0	0.1	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.2	1.8	2.8
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1021	1002	984
SPECIFIC GRAVITY	0.576	0.566	0.567

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6685 SAMPLE 12109		INDEX 6686 SAMPLE 10078		INDEX 6687 SAMPLE 8152	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CALHOUN		CALLAHAN		CALLAHAN	
FIELD	STOFER		CALLAHAN COUNTY REGULAR		HUTCHINSON	
WELL NAME	MARY A. STOFER NO. 1		OSCAR ROSE NO. 1		R. D. HUTCHINSON NO. 1	
LOCATION	WM. P. LEWIS SUR. A-100		SEC. 8, BLK 8, SPRR SUR.		BBB&C SUR. SEC. 119	
OWNER	MAYFAIR MINERALS, INC.		DIXON DRILLING CO.		FULWILER, WATKINS & FRALEY	
COMPLETED	03/24/69		07/25/64		05/17/54	
SAMPLED	11/09/69		08/01/65		08/10/61	
FORMATION	OLIG-BRAUN		PENN-MORRIS		PENN-BEND CONGLOMERATE	
GEOLOGIC PROVINCE CODE	220		425		425	
DEPTH, FEET	8090		3397		4112	
WELLHEAD PRESSURE,PSIG	2907		1254		1080	
OPEN FLOW, MCFD	4500		9200		1100	
COMPONENT, MOLE PCT						
METHANE	90.2		70.0		71.0	
ETHANE	4.2		8.4		11.8	
PROPANE	1.9		4.7		4.8	
N-BUTANE	0.5		1.3		1.2	
ISOBUTANE	0.6		0.6		0.7	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.4		0.3		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	1.1		13.6		9.0	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.2	
HELIUM	0.01		0.34		0.30	
HEATING VALUE*	1116		1085		1155	
SPECIFIC GRAVITY	0.635		0.747		0.743	

	INDEX 6688 SAMPLE 12629		INDEX 6689 SAMPLE 4749		INDEX 6690 SAMPLE 14756	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CALLAHAN		CALLAHAN		CALLAHAN	
FIELD	MYERS		NOT GIVEN		PUTNAM NE	
WELL NAME	MAGGIE SHAFFRINA		MYRTLE WILSON NO. 1		YARBROUGH NO. 1	
LOCATION	BBR&C RR CO. SUR.		BLK. 1, SUR. NO. 6		SEC. 3197, TE&L SUR. A508	
OWNER	DIXON OIL CO.		SKELLY OIL CO.		DALLAS PRODUCTION CO.	
COMPLETED	NOT GIVEN		12/--/48		03/16/75	
SAMPLED	01/13/71		05/27/49		09/14/76	
FORMATION	CRET-GARDNER		NOT GIVEN		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3600		NOT GIVEN		3952	
WELLHEAD PRESSURE,PSIG	500		1380		1535	
OPEN FLOW, MCFD	895		2190		2700	
COMPONENT, MOLE PCT						
METHANE	75.9		72.5		72.1	
ETHANE	6.2		8.6		10.1	
PROPANE	3.1		5.1		4.4	
N-BUTANE	0.7		0.9		1.2	
ISOBUTANE	0.4		0.2		0.4	
N-PENTANE	0.1		0.3		0.3	
ISOPENTANE	0.1		0.0		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.4		0.3		0.1	
NITROGEN	12.5		13.6		10.6	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.34		0.49		0.34	
HEATING VALUE*	1030		1030		1110	
SPECIFIC GRAVITY	0.701		0.717		0.731	

	INDEX 6691 SAMPLE 8957		INDEX 6692 SAMPLE 9072		INDEX 6693 SAMPLE 10894	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CALLAHAN		CALLAHAN		CALLAHAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	BROWN NO. 1		NO. 2A		MYRTLE WILSON NO. 1	
LOCATION	SEC. 80, BAYLAND ASYLUM SUR.		SEC. 79, BOA SUR.		LAVACA CO. SCHOOL LAND SEC.	
OWNER	W.C. CUMMINGS & T. STEWART		SLIP INC.		SKELLY OIL CO.	
COMPLETED	04/10/63		08/15/63		NOT GIVEN	
SAMPLED	05/09/63		08/28/63		02/22/67	
FORMATION	CRET-GARDNER		CRET-GARDNER		PENN-DUFFER	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	2614		2620		3798	
WELLHEAD PRESSURE,PSIG	1070		1270		1265	
OPEN FLOW, MCFD	NOT GIVEN		8		3000	
COMPONENT, MOLE PCT						
METHANE	77.7		78.1		72.0	
ETHANE	3.4		3.5		8.9	
PROPANE	1.4		1.4		3.6	
N-BUTANE	0.3		0.2		1.0	
ISOBUTANE	TRACE		0.1		0.2	
N-PENTANE	TRACE		TRACE		0.2	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		TRACE		0.1	
NITROGEN	16.0		15.7		13.0	
OXYGEN	0.1		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.2	
HELIUM	0.50		0.52		0.50	
HEATING VALUE*	903		909		1045	
SPECIFIC GRAVITY	0.660		0.658		0.716	

	INDEX 6694 SAMPLE 14371		INDEX 6695 SAMPLE 10702		INDEX 6696 SAMPLE 10747	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CAMERON		CAMERON		CAMERON	
FIELD	HOLLY BEACH		SAN MARTIN		SAN MARTIN	
WELL NAME	STATE TRACT 713 NO. 2-L		GATEWOOD NEWBERRY NO. 1-L		GATEWOOD NEWBERRY NO. 1	
LOCATION	LAGUNA MADRE BLOCK 713		SAN MARTIN GRANT		H. M. SKELTON SUR. A-269	
OWNER	TEXACO INC.		SKELLY OIL CO.		SKELLY OIL CO.	
COMPLETED	11/09/73		03/03/65		03/03/65	
SAMPLED	05/13/75		08/26/66		10/13/66	
FORMATION	MIOC-LM-8		MIOC-		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7495		9385		8943	
WELLHEAD PRESSURE,PSIG	2900		4634		3657	
OPEN FLOW, MCFD	8711		8600		19500	
COMPONENT, MOLE PCT						
METHANE	95.8		95.9		96.0	
ETHANE	2.1		1.9		1.7	
PROPANE	0.3		0.4		0.3	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	1.5		1.6		1.5	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.4	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1016		1016		1011	
SPECIFIC GRAVITY	0.575		0.580		0.576	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6697 SAMPLE 14589		INDEX 6698 SAMPLE 7426		INDEX 6699 SAMPLE 7544	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CAMERON		CARSON		CARSON	
FIELD	VISTA DEL MAR		BOBBITT		BOBBITT	
WELL NAME	BROWNSVILLE N.D. NO. 1		BOBBITT NO. 1		STA. IN SEC.1,BLK.1,TT&RRSUR	
LOCATION	SAN MARTIN GRANT, A-6		SEC. 95, BLK. 2, TT&RR SUR.		INLET LINE	
OWNER	ATLANTIC RICHFIELD CO.		TEXAS GULF PROD. CO.		TEXAS GULF PRODUCING CO.	
COMPLETED	12/01/73		NOT GIVEN		05/01/60	
SAMPLED	02/20/76		03/01/60		05/11/60	
FORMATION	MIOC-		PERM-WICHITA-ALBANY		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		440		440	
DEPTH, FEET	7212		3247		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1200		497		520	
OPEN FLOW, MCFD	11300		9500		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.1		59.7		59.6	
ETHANE	1.8		2.0		2.4	
PROPANE	0.3		0.9		0.5	
N-BUTANE	0.0		0.0		0.1	
ISOBUTANE	0.0		0.0		0.1	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		TRACE	
NITROGEN	1.5		35.2		34.7	
OXYGEN	TRACE		0.0		0.2	
ARGON	TRACE		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.0		0.1	
HELIUM	0.01		2.00		2.10	
HEATING VALUE*	1014		664		666	
SPECIFIC GRAVITY	0.574		0.711		0.711	

	INDEX 6700 SAMPLE 8013		INDEX 6701 SAMPLE 11662		INDEX 6702 SAMPLE 11663	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	BOBBITT		BOBBITT		BOBBITT	
WELL NAME	VANCE NO. 1		BOBBITT NO. 1		BOBBITT NO. 1	
LOCATION	SEC. 41, BLK. T, W&NE SUR.		SEC. 95, BLK 2, TTRR SUR.		SEC. 95, BLK 2, TTRR SUR.	
OWNER	TEXAS-GULF PROD. CO.		SINCLAIR OIL & GAS CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	NOT GIVEN		03/01/60		03/01/60	
SAMPLED	06/11/61		10/10/68		10/09/68	
FORMATION	NOT GIVEN		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3235		3239		3239	
WELLHEAD PRESSURE,PSIG	530		524		524	
OPEN FLOW, MCFD	4400		9600		9600	
COMPONENT, MOLE PCT						
METHANE	59.1		60.4		59.3	
ETHANE	2.4		2.1		2.2	
PROPANE	0.5		0.6		0.6	
N-BUTANE	0.1		0.0		0.0	
ISOBUTANE	0.1		0.0		0.0	
N-PENTANE	TRACE		0.0		0.0	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	TRACE		0.0		0.0	
NITROGEN	34.6		34.6		35.5	
OXYGEN	0.1		0.2		0.3	
ARGON	0.1		0.1		0.2	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.1		0.1	
HELIUM	2.20		1.90		1.93	
HEATING VALUE*	461		665		656	
SPECIFIC GRAVITY	0.717		0.709		0.715	

	INDEX 6703 SAMPLE 11667		INDEX 6704 SAMPLE 13764		INDEX 6705 SAMPLE 13779	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	BOBBITT		BOBBITT AREA		BOBBITT AREA	
WELL NAME	MARTIN L. VANCE NO. 1		LOOTEN NO. 1		LOOTEN NO. 1	
LOCATION	SEC. 1, BLK. T, W&NW SUR.		SEC. 86, BLK.2, TTRR SUR.		SEC. 86, BLK.2, TTRR SUR.	
OWNER	SINCLAIR OIL & GAS CO.		HUNTER OIL CORP.		HUNTER OIL CORP.	
COMPLETED	06/19/61		10/23/73		10/23/73	
SAMPLED	10/11/68		10/23/73		10/25/73	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3367		3342		3304	
WELLHEAD PRESSURE,PSIG	533		487		475	
OPEN FLOW, MCFD	9400		100		250	
COMPONENT, MOLE PCT						
METHANE	59.9		55.3		59.1	
ETHANE	2.4		1.9		2.0	
PROPANE	0.6		0.5		0.5	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	34.8		32.6		33.9	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.2		0.1		0.1	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		7.9		2.6	
HELIUM	2.11		1.67		1.74	
HEATING VALUE*	665		607		647	
SPECIFIC GRAVITY	0.709		0.774		0.728	

	INDEX 6706 SAMPLE 6863		INDEX 6707 SAMPLE 8014		INDEX 6708 SAMPLE 6555	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	NOT GIVEN		NOT GIVEN		PANHANDLE	
WELL NAME	MAUDIE NO. 1		MCDOWELL NO. 1		MCCRAY NO. 4	
LOCATION	SEC. 30, BLK. 2		SEC. 12, BLK. 7, I&GN SUR.		SEC. 2, BLK. 2, TTRR SUR.	
OWNER	NAVAJO NATURAL GAS CORP.		CONSOLIDATED GAS & EQUIP. CO		CONSOLIDATED GAS & EQUIP. CO	
COMPLETED	NOT GIVEN		10/24/50		10/23/56	
SAMPLED	--/--/58		06/23/61		05/20/58	
FORMATION	NOT GIVEN		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		2912		3252	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		768	
COMPONENT, MOLE PCT						
METHANE	67.1		62.5		64.4	
ETHANE	16.3		5.0		4.6	
PROPANE	16.9		5.4		2.9	
N-BUTANE	4.7		0.9		1.1	
ISOBUTANE	3.5		0.6		0.6	
N-PENTANE	1.5		0.2		0.3	
ISOPENTANE	2.2		0.1		0.3	
CYCLOPENTANE	2.8		TRACE		0.1	
HEXANES PLUS	1.2		0.1		0.2	
NITROGEN	4.0		25.9		20.3	
OXYGEN	0.1		0.2		2.9	
ARGON	TRACE		0.1		0.2	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.29		1.30		0.30	
HEATING VALUE*	1747		479		927	
SPECIFIC GRAVITY	1.086		0.747		0.753	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6709 SAMPLE 11215	INDEX 6710 SAMPLE 11216	INDEX 6711 SAMPLE 11217
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
WELL NAME	MCCONNELL NO. 6	MCCONNELL A NO. 5	MCCONNELL A NO. 4
LOCATION	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.
OWNER	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN
COMPLETED	10/10/63	07/12/66	11/25/65
SAMPLED	11/10/67	11/10/67	11/10/67
FORMATION	PERM-GRANITE WASH	-ARKOSIC & GRANITE WASH	-ARKOSIC & GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3204	3078	NOT GIVEN
WELLHEAD PRESSURE,PSIG	70	70	NOT GIVEN
OPEN FLOW, MCFD	50	100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.9	48.8	60.7
ETHANE	8.6	18.2	11.7
PROPANE	6.9	16.1	11.2
N-BUTANE	3.5	5.9	4.7
ISOBUTANE	1.9	2.8	2.4
N-PENTANE	0.9	1.2	1.5
ISOPENTANE	1.7	1.8	1.5
CYCLOPENTANE	0.4	0.3	0.1
HEXANES PLUS	1.0	0.9	1.0
NITROGEN	5.7	3.3	4.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.4
HELIUM	0.19	0.03	0.12
HEATING VALUE*	1391	1718	1538
SPECIFIC GRAVITY	0.856	1.044	0.939

	INDEX 6712 SAMPLE 11218	INDEX 6713 SAMPLE 11219	INDEX 6714 SAMPLE 11220
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
WELL NAME	MCCONNELL A NO. 8	MCCONNELL A NO. 1	MCCONNELL A NO. 6
LOCATION	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.
OWNER	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN
COMPLETED	10/01/66	08/26/64	07/15/67
SAMPLED	11/10/67	11/10/67	11/10/67
FORMATION	-ARKOSIC & GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3204	3228	3268
WELLHEAD PRESSURE,PSIG	70	70	70
OPEN FLOW, MCFD	50	350	100
COMPONENT, MOLE PCT			
METHANE	62.3	72.7	62.2
ETHANE	14.7	7.9	13.4
PROPANE	11.2	6.2	11.0
N-BUTANE	3.6	2.5	3.9
ISOBUTANE	1.8	1.2	1.8
N-PENTANE	0.6	0.8	0.7
ISOPENTANE	1.1	0.8	1.4
CYCLOPENTANE	0.3	0.2	0.3
HEXANES PLUS	0.5	0.6	0.8
NITROGEN	3.3	6.6	3.9
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	0.07	0.19	0.10
HEATING VALUE*	1477	1270	1490
SPECIFIC GRAVITY	0.890	0.791	0.904

	INDEX 6715 SAMPLE 390	INDEX 6716 SAMPLE 837	INDEX 6717 SAMPLE 839
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BURNETT NO. 1	TEXAS CO. NO. 2	TEXAS CO. NO. 1
LOCATION	SEC. 118, BLK. 5, I&GN SUR.	SEC. 92, BLK. 5	SEC. 114, BLK. 5
OWNER	THE GULF PRODUCTION CO.	TEXAS CO.	TEXAS CO.
COMPLETED	07/--/20	NOT GIVEN	NOT GIVEN
SAMPLED	08/10/20	NOT GIVEN	NOT GIVEN
FORMATION	-GREY LIME	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2391	2000	2000
WELLHEAD PRESSURE,PSIG	450	430	380
OPEN FLOW, MCFD	75000	17000	25000
COMPONENT, MOLE PCT			
METHANE	0.0	74.6	72.9
ETHANE	0.0	18.0	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	6.7	7.4
OXYGEN	0.0	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.4	0.3
HELIUM	0.43	0.33	0.38
HEATING VALUE*	0	1078	1077
SPECIFIC GRAVITY	0.001	0.675	0.681

	INDEX 6718 SAMPLE 980	INDEX 6719 SAMPLE 981	INDEX 6720 SAMPLE 982
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	M. C. BURNETT NO. 1	S. B. BURNETT NO. 4	S. B. BURNETT NO. 3
LOCATION	SEC. 90 BLK. 5, I&GN SUR.	SEC. 114, BLK. 5, I&GN SUR.	SEC. 108, BLK. 5, I&GN SUR.
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	08/--/24	09/--/24	06/--/24
SAMPLED	01/25/25	01/20/25	01/19/25
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2535	2760	3031
WELLHEAD PRESSURE,PSIG	448	445	450
OPEN FLOW, MCFD	100	29000	30000
COMPONENT, MOLE PCT			
METHANE	71.0	73.6	71.0
ETHANE	19.9	17.8	19.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.2	7.4	7.7
OXYGEN	0.4	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.5	0.6
HELIUM	0.33	0.36	0.35
HEATING VALUE*	1076	1065	1076
SPECIFIC GRAVITY	0.693	0.679	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6721 SAMPLE 1013		INDEX 6722 SAMPLE 1014		INDEX 6723 SAMPLE 1015	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BURNETT ESTATE NO. 1		S. B. BURNETT NO. 1		S. B. BURNETT NO. 2	
LOCATION	SEC. 91, BLK. 5, I&GN SUR.		SEC. 118, BLK. 5, I&GN SUR.		SEC. 106, BLK. 5	
OWNER	GULF PRODUCTION CO.		GULF PRODUCTION CO.		GULF PRODUCTION CO.	
COMPLETED	09/--/29		--/--/20		--/--/20	
SAMPLED	03/22/25		03/22/25		03/22/25	
FORMATION	PERM-		PERM-		PERM-	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2335		2410		2525	
WELLHEAD PRESSURE,PSIG	450		450		450	
OPEN FLOW, MCFD	15000		80000		20000	
COMPONENT, MOLE PCT						
METHANE	70.3	----------	66.7	----------	69.8	----------
ETHANE	19.7	----------	18.9	----------	19.1	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	9.5		13.1		10.0	
OXYGEN	0.2	----------	0.4	----------	0.4	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2	----------	0.6	----------	0.4	----------
HELIUM	0.29		0.38		0.34	
HEATING VALUE*	1065	----------	1014	----------	1049	----------
SPECIFIC GRAVITY	0.694		0.709		0.695	

	INDEX 6724 SAMPLE 1161		INDEX 6725 SAMPLE 1304		INDEX 6726 SAMPLE 1643	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	NO. 2 MARLAND		BIVINS B-3		S. B. BURNETT B-1	
LOCATION	SEC. --, BLK. 5, I&GN SUR.		SEC. 15, BLK. Y2, GB&CNG SUR		SEC. 101, BLK. 4, I&GN SUR.	
OWNER	MARLAND OIL CO. OF TEXAS		AMARILLO OIL CO.		KAY COUNTY GAS CO.	
COMPLETED	NOT GIVEN		04/26/26		NOT GIVEN	
SAMPLED	11/10/25		09/24/26		05/25/28	
FORMATION	PERM-		PERM-WICHITA-ALBANY		PERM-	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2955		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	400		430		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		30000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	70.5	----------	66.7	----------	73.2	----------
ETHANE	20.8	----------	21.7	----------	19.2	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	7.1		9.7		7.0	
OXYGEN	0.4	----------	1.0	----------	0.2	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.8	----------	0.5	----------	0.2	----------
HELIUM	0.33		0.45		0.27	
HEATING VALUE*	1087	----------	1065	----------	1086	----------
SPECIFIC GRAVITY	0.695		0.711		0.681	

	INDEX 6727 SAMPLE 1644		INDEX 6728 SAMPLE 1645		INDEX 6729 SAMPLE 2079	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	S. B. BURNETT A-5		S. B. BURNETT J-1		S. B. BURNETT B-1	
LOCATION	SEC. 116, BLK. 5, I&GN SUR.		SEC. 121, BLK. 5, I&GN SUR.		SEC. 101, BLK. 4, I&GN SUR.	
OWNER	KAY COUNTY GAS CO.		KAY COUNTY GAS CO.		CONTINENTAL OIL CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		05/25/26	
SAMPLED	05/25/28		05/25/28		06/25/30	
FORMATION	PERM-		PERM-		PERM-	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		2935	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		380	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		14000	
COMPONENT, MOLE PCT						
METHANE	68.5	----------	71.0	----------	71.0	----------
ETHANE	21.5	----------	19.7	----------	19.4	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	9.1		8.5		8.4	
OXYGEN	0.2	----------	0.2	----------	0.5	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3	----------	0.2	----------	0.5	----------
HELIUM	0.37		0.44		0.26	
HEATING VALUE*	1079	----------	1072	----------	1067	----------
SPECIFIC GRAVITY	0.701		0.688		0.692	

	INDEX 6730 SAMPLE 2080		INDEX 6731 SAMPLE 2284		INDEX 6732 SAMPLE 2287	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	S. B. BURNETT C-3		BIVINS A-1		BIVINS A-4	
LOCATION	SEC. 105, BLK. 5, I&GN SUR.		SEC. 42, BLK. M-20, G&M SUR.		SEC. 44, BLK M-20, G&M SUR.	
OWNER	CONTINENTAL OIL CO.		RED RIVER GAS COMPANY		RED RIVER GAS COMPANY	
COMPLETED	11/19/26		04/28/26		09/04/30	
SAMPLED	06/25/30		02/09/31		02/09/31	
FORMATION	PERM-		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2880		2000		2265	
WELLHEAD PRESSURE,PSIG	445		424		424	
OPEN FLOW, MCFD	24000		13680		19000	
COMPONENT, MOLE PCT						
METHANE	69.7	----------	74.0	----------	74.6	----------
ETHANE	22.0	----------	17.1	----------	16.3	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	2.5		8.2		8.4	
OXYGEN	0.2	----------	0.1	----------	0.1	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3	----------	0.1	----------	0.1	----------
HELIUM	1.33		1.48		0.52	
HEATING VALUE*	1100	----------	1056	----------	1048	----------
SPECIFIC GRAVITY	0.697		0.679		0.669	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6733 SAMPLE 2289	INDEX 6734 SAMPLE 3379	INDEX 6735 SAMPLE 3380
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	DEAHL A-1	POLING NO. A-1	BOST NO. D-1
LOCATION	SEC. 5, BLK 5, B&B SUR.	SEC. 23, BLK. S, H&GN SUR.	SEC. 1, BLK. Y-2, TTRR SUR.
OWNER	RED RIVER GAS COMPANY	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/27/26	NOT GIVEN	NOT GIVEN
SAMPLED	02/09/31	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	424	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	15000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.5	70.0	70.6
ETHANE	16.5	19.5	19.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.1	9.4	8.7
OXYGEN	0.2	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.53	0.51	0.49
HEATING VALUE*	1050	1059	1068
SPECIFIC GRAVITY	0.671	0.692	0.689

	INDEX 6736 SAMPLE 3386	INDEX 6737 SAMPLE 3612	INDEX 6738 SAMPLE 3613
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. C-2	MARTIN NO. 1	OSBORNE NO. 1
LOCATION	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 88, BLK. 7, I&GN SUR.	SEC. 68, BLK. 7, I&GN SUR.
OWNER	CANADIAN RIVER GAS CO.	NORTHERN NATURAL GAS CO.	HAGY,HARRINGTON & MARSH
COMPLETED	NOT GIVEN	NOT GIVEN	06/30/39
SAMPLED	NOT GIVEN	03/01/43	03/01/43
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2955
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	385
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	20800
COMPONENT, MOLE PCT			
METHANE	70.4	69.1	60.1
ETHANE	19.1	21.5	19.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.4	8.6	19.9
OXYGEN	0.4	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.52	0.35	0.79
HEATING VALUE*	1055	1085	951
SPECIFIC GRAVITY	0.690	0.697	0.728

	INDEX 6739 SAMPLE 3614	INDEX 6740 SAMPLE 3615	INDEX 6741 SAMPLE 3616
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	YICARS NO. 1	THOMPSON NO. 1	SMOOT NO. 1
LOCATION	SEC. 234, BLK. B-2, H&GN SUR	SEC. 247, BLK. B-2, H&GN SUR	SEC. 87, BLK. 7, I&GN SUR.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/01/43	03/01/43	03/01/43
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.0	69.8	70.6
ETHANE	19.7	19.9	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	9.6	9.6
OXYGEN	0.7	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.32	0.39	0.30
HEATING VALUE*	1062	1064	1059
SPECIFIC GRAVITY	0.693	0.693	0.690

	INDEX 6742 SAMPLE 3617	INDEX 6743 SAMPLE 3619	INDEX 6744 SAMPLE 3621
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	HODGES NO. 1	HODGE NO. 1	URBANCZYK NO. 2
LOCATION	SEC. 67, BLK. 7, I&GN SUR.	SEC. 112, BLK. 7, I&GN SUR.	SEC. 91, BLK. 7, I&GN SUR.
OWNER	NORTHERN NATURAL GAS CO.	HAGY, HARRINGTON & MARSH	HAGY, HARRINGTON & MARSH
COMPLETED	NOT GIVEN	06/07/40	10/02/39
SAMPLED	03/01/43	03/01/43	03/01/43
FORMATION	PERM-WICHITA-ALBANY	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2575	2960
WELLHEAD PRESSURE,PSIG	NOT GIVEN	387	378
OPEN FLOW, MCFD	NOT GIVEN	2650	11400
COMPONENT, MOLE PCT			
METHANE	69.0	61.3	63.5
ETHANE	18.6	17.7	17.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.5	19.8	18.0
OXYGEN	0.3	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.49	1.03	1.01
HEATING VALUE*	1032	938	951
SPECIFIC GRAVITY	0.694	0.721	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6745 SAMPLE 3622		INDEX 6746 SAMPLE 3623		INDEX 6747 SAMPLE 3624	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	HODGES NO. 2		HEAP NO. 1		MARTIN NO. 1	
LOCATION	SEC. 250, BLK. B-2, H&GN SUR		SEC. 231, BLK. B-2, H&GN SUR		SEC. 90, BLK. 7, I&GN SUR.	
OWNER	NORTHERN NATURAL GAS CO.		NORTHERN NATURAL GAS CO.		HAGY, HARRINGTON & MARSH	
COMPLETED	NOT GIVEN		NOT GIVEN		10/02/30	
SAMPLED	03/01/43		03/01/43		03/01/43	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		2775	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		367	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		17200	
COMPONENT, MOLE PCT						
METHANE	74.5	----------	74.5	----------	65.6	----------
ETHANE	18.0		18.9		17.7	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	6.7		6.0		15.8	
OXYGEN	0.4	----------	0.4	----------	0.1	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1	----------	0.0	----------	0.0	----------
HELIUM	0.31		0.23		0.75	
HEATING VALUE*	1077	----------	1093	----------	982	----------
SPECIFIC GRAVITY	0.673		0.674		0.704	

	INDEX 6748 SAMPLE 3625		INDEX 6749 SAMPLE 3974		INDEX 6750 SAMPLE 3975	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	FIELDS NO. 1		MOORE NO. 1-T		BURNETT NO. I-P	
LOCATION	SEC. 89, BLK. 7, I&GN SUR.		SEC. 21, BLK. 7, I&GN SUR.		SEC. 54, BLK. 4, I&GN SUR.	
OWNER	NORTHERN NATURAL GAS CO.		TEXOMA NATURAL GAS CO.		TEXOMA NATURAL GAS CO.	
COMPLETED	NOT GIVEN		08/14/32		02/29/32	
SAMPLED	03/01/43		12/21/44		12/21/44	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		2574		2415	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		283		297	
OPEN FLOW, MCFD	NOT GIVEN		8280		11200	
COMPONENT, MOLE PCT						
METHANE	68.8	----------	74.0	----------	78.0	----------
ETHANE	21.6		14.4		15.0	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	9.5		10.4		5.3	
OXYGEN	0.2	----------	0.0	----------	0.0	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.0	----------	1.0	----------	1.6	----------
HELIUM	0.31		0.22		0.24	
HEATING VALUE*	1080	----------	1008	----------	1059	----------
SPECIFIC GRAVITY	0.700		0.678		0.666	

	INDEX 6751 SAMPLE 4539		INDEX 6752 SAMPLE 4544		INDEX 6753 SAMPLE 5232	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	SIMMS NO. 1		WIGHAM NO. 1		QUIRK NO. 1	
LOCATION	NOT GIVEN		SEC. 1, BLK. 2, TT&RR SUR.		SEC. 10A, BLK. 7, IG&N SUR.	
OWNER	J. M. HUBER CORP.		BURNETT & CORNELIUS		PANOMA CORP.	
COMPLETED	NOT GIVEN		07/14/48		04/25/48	
SAMPLED	08/--/48		08/17/48		06/11/52	
FORMATION	PERM-		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		2735		2970	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		298		257	
OPEN FLOW, MCFD	NOT GIVEN		16000		4200	
COMPONENT, MOLE PCT						
METHANE	62.6	----------	67.9	----------	68.1	----------
ETHANE	26.0		19.9		4.2	
PROPANE	---	----------	---	----------	2.9	----------
N-BUTANE	---		---		0.9	
ISOBUTANE	---	----------	---	----------	0.5	----------
N-PENTANE	---		---		0.1	
ISOPENTANE	---	----------	---	----------	0.2	----------
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---	----------	---	----------	0.1	----------
NITROGEN	10.2		11.2		21.7	
OXYGEN	0.2	----------	0.4	----------	TRACE	----------
ARGON	---		---		0.1	
HYDROGEN	---	----------	---	----------	TRACE	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.5	----------	0.3	----------	0.1	----------
HELIUM	0.48		0.31		1.07	
HEATING VALUE*	1100	----------	1044	----------	976	----------
SPECIFIC GRAVITY	0.729		0.703		0.721	

	INDEX 6754 SAMPLE 5235 *		INDEX 6755 SAMPLE 5383		INDEX 6756 SAMPLE 5393	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CARSON		CARSON		CARSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	HODGES NO. 1		BURNETT NO. 7		ANNAWAG NO. 1	
LOCATION	SEC. 112, BLK. 7, IG&N SUR.		SEC. 127, BLK. 5, H&GN SUR.		SEC. 227, BLK. 82, H&GN SUR.	
OWNER	PANOMA CORP.		J. GORDON BURCH		PHILLIPS PETROLEUM CO.	
COMPLETED	09/21/39		11/01/52		01/15/51	
SAMPLED	06/21/52		02/05/53		02/05/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-GRANITE WASH		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2885		NOT GIVEN		2810	
WELLHEAD PRESSURE,PSIG	335		169		330	
OPEN FLOW, MCFD	1750		2000		3320	
COMPONENT, MOLE PCT						
METHANE	43.9	----------	77.1	----------	67.7	----------
ETHANE	4.2		6.3		4.2	
PROPANE	2.8	----------	4.2	----------	3.2	----------
N-BUTANE	0.7		1.4		1.0	
ISOBUTANE	0.3	----------	0.7	----------	0.4	----------
N-PENTANE	0.2		0.4		0.3	
ISOPENTANE	0.1	----------	0.2	----------	0.1	----------
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1	----------	0.2	----------	0.2	----------
NITROGEN	22.1		8.4		21.9	
OXYGEN	TRACE	----------	TRACE	----------	TRACE	----------
ARGON	0.1		TRACE		0.1	
HYDROGEN	TRACE	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	1.2	----------	0.4	----------	0.9	----------
HELIUM	1.03		0.87		0.77	
HEATING VALUE*	901	----------	1113	----------	922	----------
SPECIFIC GRAVITY	0.713		0.714		0.711	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6757 SAMPLE 6143	INDEX 6758 SAMPLE 6151	INDEX 6759 SAMPLE 6152
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	PEACOCK ESTATE NO. 1	MONTGOMERY NO. 1	ROBBINS NO. 1
LOCATION	SEC. 93, BLK. 7, I&GN SUR.	SEC. 113, BLK. 7, I&GN SUR.	SEC. 130, BLK. 7, I&GN SUR.
OWNER	J. F. SMITH & J. W. COLLINS	CABOT CARBON CO.	CABOT CARBON CO.
COMPLETED	07/-/56	--/--/49	01/11/53
SAMPLED	09/19/56	09/28/56	09/28/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2920	2852	2825
WELLHEAD PRESSURE,PSIG	382	289	338
OPEN FLOW, MCFD	1000	1243	1123
COMPONENT, MOLE PCT			
METHANE	59.6	65.9	64.9
ETHANE	4.6	4.2	3.8
PROPANE	3.2	2.7	2.5
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	28.7	23.0	25.3
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.72	1.27	1.24
HEATING VALUE*	841	915	863
SPECIFIC GRAVITY	0.756	0.740	0.732

	INDEX 6760 SAMPLE 6153	INDEX 6761 SAMPLE 6157	INDEX 6762 SAMPLE 6158
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	NEIGHBORS NO. 1	RAMMING	LAURIE NO. 1
LOCATION	SEC. 92, BLK. 7, I&GN SUR.	SEC. 253, BLK. B-2, H&NG SUR	SEC. 228, BLK. B-2, H&GN SUR
OWNER	CABOT CARBON CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	04/19/50	06/19/45	05/28/45
SAMPLED	09/28/56	10/08/56	10/08/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2880	2769	2807
WELLHEAD PRESSURE,PSIG	280	281	259
OPEN FLOW, MCFD	141	1393	2301
COMPONENT, MOLE PCT			
METHANE	63.9	69.7	73.9
ETHANE	4.3	4.6	5.2
PROPANE	3.0	3.5	0.9
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.5	0.5	1.1
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.1	0.7
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	25.0	10.1	15.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.7
HELIUM	1.26	0.78	0.57
HEATING VALUE*	891	961	976
SPECIFIC GRAVITY	0.746	0.639	0.709

	INDEX 6763 SAMPLE 6183	INDEX 6764 SAMPLE 6241	INDEX 6765 SAMPLE 6242
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	J. W. KNORPP NO. 1	BURNETT NO. 97-A	BURNETT NO. 96-A
LOCATION	SEC. 135, BLK. 7, I&GN SUR.	SEC. 5, BLK. 5, I&GN SUR.	SEC. 16, BLK. 5, I&GN SUR.
OWNER	TEXAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
COMPLETED	09/01/51	09/21/56	10/25/56
SAMPLED	11/16/56	01/14/57	01/14/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2869	2614	2791
WELLHEAD PRESSURE,PSIG	417	225	222
OPEN FLOW, MCFD	2379	5364	20000
COMPONENT, MOLE PCT			
METHANE	60.7	78.6	77.7
ETHANE	3.9	5.8	5.8
PROPANE	1.6	3.1	2.9
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.0	0.6	0.6
N-PENTANE	0.7	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	29.1	9.6	10.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	1.37	0.41	0.56
HEATING VALUE*	819	1070	1051
SPECIFIC GRAVITY	0.750	0.693	0.694

	INDEX 6766 SAMPLE 6467	INDEX 6767 SAMPLE 6548	INDEX 6768 SAMPLE 6549
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CRUMPACKER NO. 1	BURGIN NO. 1	MCBRAYER NO. 1
LOCATION	SEC. 84, BLK. 7, I&GN SUR.	SEC. 132, BLK. 7, I&GN SUR.	SEC. 69, BLK. 7, I&GN SUR.
OWNER	SMITH & COLLINS	DORCHESTER CORP.	DORCHESTER CORP.
COMPLETED	NOT GIVEN	07/11/48	11/10/45
SAMPLED	02/03/58	04/08/58	04/08/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3000	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	252	274
OPEN FLOW, MCFD	19700	785	1620
COMPONENT, MOLE PCT			
METHANE	61.8	72.4	69.8
ETHANE	4.0	4.8	4.5
PROPANE	2.9	3.1	2.9
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	27.7	16.4	19.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	1.40	0.70	0.80
HEATING VALUE*	846	990	941
SPECIFIC GRAVITY	0.747	0.715	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6769 SAMPLE 6569	INDEX 6770 SAMPLE 6570	INDEX 6771 SAMPLE 6578
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BRITTEN A NO. 1	JOHNSON V NO. 1	GILL MORROW NO. 1
LOCATION	SEC. 254, BLK. B-2, H&GN SUR	SEC. 133, BLK. 7, I&GN SUR.	SEC. 153, BLK. 7, I&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	ADA OIL CO.
COMPLETED	10/02/52	03/31/52	01/14/53
SAMPLED	04/25/58	04/25/58	05/12/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2773	2860	2860
WELLHEAD PRESSURE,PSIG	252	270	325
OPEN FLOW, MCFD	1296	1195	705
COMPONENT, MOLE PCT			
METHANE	64.5	66.2	60.9
ETHANE	4.0	4.2	3.9
PROPANE	2.8	2.8	2.6
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.6	1.0	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	25.3	23.7	29.2
OXYGEN	TRACE	TRACE	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.90	1.30
HEATING VALUE*	779	805	816
SPECIFIC GRAVITY	0.741	0.740	0.746

	INDEX 6772 SAMPLE 6579	INDEX 6773 SAMPLE 6580	INDEX 6774 SAMPLE 6581
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	FARLEY NO. 1	TUCKER NO. 1	JIM WALL NO. 1
LOCATION	SEC. 134, BLK. 7, I&GN SUR.	SEC. 166, BLK. 7, I&GN SUR.	SEC. 226, BLK. B-2, I&GN SUR
OWNER	ADA OIL CO.	ADA OIL CO.	ADA OIL CO.
COMPLETED	02/03/53	01/21/53	01/21/53
SAMPLED	05/12/58	05/12/58	05/12/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2799	2805	2765
WELLHEAD PRESSURE,PSIG	308	530	320
OPEN FLOW, MCFD	1522	908	941
COMPONENT, MOLE PCT			
METHANE	64.6	61.1	63.8
ETHANE	4.0	3.5	3.9
PROPANE	2.7	2.6	2.9
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.3	29.6	26.4
OXYGEN	0.3	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	1.00	1.00	0.90
HEATING VALUE*	862	822	861
SPECIFIC GRAVITY	0.733	0.751	0.740

	INDEX 6775 SAMPLE 6582	INDEX 6776 SAMPLE 6604	INDEX 6777 SAMPLE 6631
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	JACKSON-MCCASLAND NO. 1	MCCRAY NO. 6, RRC NO. 9	CAVIN NO. 1
LOCATION	SEC. 154, BLK. 7, I&GN SUR.	SEC. 2, BLK. 2, TYLER RR SUR	SEC. 86, BLK. 7, I&GN SUR,
OWNER	ADA OIL CO.	CONSOLIDATED GAS & EQUIP. CO	NORTHERN NAT. GAS PROD. CO.
COMPLETED	01/19/53	06/15/56	04/26/44
SAMPLED	05/12/58	05/20/58	06/13/58
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2825	3348	2785
WELLHEAD PRESSURE,PSIG	248	NOT GIVEN	3945
OPEN FLOW, MCFD	634	876	12088
COMPONENT, MOLE PCT			
METHANE	61.3	77.7	73.2
ETHANE	3.5	5.4	5.0
PROPANE	2.6	3.3	3.0
N-BUTANE	0.9	1.3	1.1
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	29.0	10.2	15.6
OXYGEN	0.4	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	1.00	0.30	0.70
HEATING VALUE*	828	1081	1002
SPECIFIC GRAVITY	0.751	0.707	0.714

	INDEX 6778 SAMPLE 6707	INDEX 6779 SAMPLE 6861	INDEX 6780 SAMPLE 6875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CRUMPACKER NO. 2	NAVAJO MAUDIE NO. 1	H. C. MCDOWELL NO. 1
LOCATION	SEC. 15	SEC. 30, BLK. 2, TTRR SUR.	SEC. 72, BLK. 7, I&GN SUR.
OWNER	CITIES SERVICE OIL CO.	POWER PETROLEUM CO.	HARVEST QUEEN MILL&ELEVATOR
COMPLETED	03/03/58	01/03/59	10/24/58
SAMPLED	07/11/58	11/14/58	11/21/58
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3102	3103	3075
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	420
OPEN FLOW, MCFD	NOT GIVEN	50	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.8	79.0	61.5
ETHANE	5.8	6.0	4.8
PROPANE	2.8	5.3	3.6
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.4	0.6	0.8
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	7.5	6.4	25.4
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.30	0.32	1.30
HEATING VALUE*	1076	1096	898
SPECIFIC GRAVITY	0.675	0.697	0.768

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6781 SAMPLE 6937	INDEX 6782 SAMPLE 6938	INDEX 6783 SAMPLE 6979
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOONE WELL NO. 1	SEVERTSON NO. 1	LLOYD RIGGINS NO. 1
LOCATION	SEC. 115, BLK. 7, I&GN SUR.	SEC. 137, BLK. 7, I&GN SUR.	SEC. 115, BLK. 7, I&GN SUR.
OWNER	SMITH & COLLINS	SMITH & COLLINS	CABOT CARBON CO.
COMPLETED	02/19/59	02/09/59	10/06/57
SAMPLED	02/13/59	02/13/59	02/21/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2846	2892	2782
WELLHEAD PRESSURE,PSIG	371	402	NOT GIVEN
OPEN FLOW, MCFD	10100	3400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.1	68.4	62.6
ETHANE	3.1	1.3	3.7
PROPANE	2.4	1.0	2.4
N-BUTANE	0.9	0.4	0.6
ISOBUTANE	0.5	0.2	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	31.1	26.9	27.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.2
HELIUM	1.90	1.40	1.59
HEATING VALUE*	791	771	818
SPECIFIC GRAVITY	0.747	0.689	0.731

	INDEX 6784 SAMPLE 7048	INDEX 6785 SAMPLE 7135	INDEX 6786 SAMPLE 7136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CLARK NO. 1	WITTER NO. 1	MCILROY NO. 1
LOCATION	NOT GIVEN	SEC. 1, BLK. 7, I&GN SUR.	SEC. 18, BLK. 7, I&GN SUR.
OWNER	NORTHERN NAT. GAS PROD. CO.	DORCHESTER CORP.	DORCHESTER CORP.
COMPLETED	12/-/39	02/26/43	09/09/38
SAMPLED	05/01/59	06/26/59	06/26/59
FORMATION	-DOLOMITE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2685	2468	2610
WELLHEAD PRESSURE,PSIG	363	134	160
OPEN FLOW, MCFD	12027	6810	2706
COMPONENT, MOLE PCT			
METHANE	80.2	80.1	80.4
ETHANE	6.5	6.4	6.2
PROPANE	3.5	3.3	3.1
N-BUTANE	1.2	1.2	0.0
ISOBUTANE	0.6	0.5	1.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	6.7	7.0	7.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.90	0.20	0.20
HEATING VALUE*	1120	1109	1080
SPECIFIC GRAVITY	0.695	0.692	0.681

	INDEX 6787 SAMPLE 7258	INDEX 6788 SAMPLE 7259	INDEX 6789 SAMPLE 7299
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SIMMONS NO. 1	HAIDUK NO. 1	VICARS A NO. 2
LOCATION	SEC. 70, BLK. 7, I&GN SUR.	SEC. 85, BLK. 7, I&GN RR SUR	SEC. 234, B-2, H&GN SUR.
OWNER	SMITH & COLLINS ET AL.	SMITH & COLLINS	NORTHERN NATURAL GAS CO.
COMPLETED	10/-/59	10/-/59	09/25/59
SAMPLED	10/22/59	10/22/59	12/08/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR.WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2930	2900	2720
WELLHEAD PRESSURE,PSIG	320	330	235
OPEN FLOW, MCFD	6000	9000	3290
COMPONENT, MOLE PCT			
METHANE	68.6	62.9	79.4
ETHANE	4.4	3.8	5.6
PROPANE	2.9	3.0	3.6
N-BUTANE	0.8	0.7	1.3
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	21.4	27.0	8.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.90	1.30	0.30
HEATING VALUE*	916	842	1098
SPECIFIC GRAVITY	0.722	0.738	0.697

	INDEX 6790 SAMPLE 7498	INDEX 6791 SAMPLE 7499	INDEX 6792 SAMPLE 7630
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CRAWFORD NO. 1	URBANCZYK NO. 1	CAREY NO. 1
LOCATION	SEC. 73, BLK. 7, I&GN SUR.	SEC. 75, BLK. 7, I&GN SUR.	SEC. 46, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	SMITH & COLLINS
COMPLETED	04/10/60	04/07/60	01/30/60
SAMPLED	04/16/60	04/16/60	08/01/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3008	2982	2852
WELLHEAD PRESSURE,PSIG	411	406	273
OPEN FLOW, MCFD	1800	10200	2650
COMPONENT, MOLE PCT			
METHANE	63.7	64.1	72.6
ETHANE	2.3	1.5	6.1
PROPANE	1.9	0.3	3.9
N-BUTANE	0.6	0.1	1.2
ISOBUTANE	0.4	TRACE	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	28.5	32.2	14.3
OXYGEN	0.2	0.2	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.6	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	1.50	1.40	0.60
HEATING VALUE*	780	687	1023
SPECIFIC GRAVITY	0.717	0.696	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6793 SAMPLE 7631	INDEX 6794 SAMPLE 7632	INDEX 6795 SAMPLE 7651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BURNS NO. 1-A	BROADWAY NO. 1	BIGGS HORN B NO. 1
LOCATION	SEC. 106, BLK. 7, I&GN SUR.	SEC. 94, BLK. 7, I&GN SUR.	SEC. 136, BLK. 7, I&GN SUR.
OWNER	SMITH & COLLINS	SMITH & COLLINS	TEXACO INC.
COMPLETED	04/06/60	04/23/60	04/07/60
SAMPLED	08/01/60	08/01/60	08/23/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2900	2859	2813
WELLHEAD PRESSURE,PSIG	372	352	393
OPEN FLOW, MCFD	3100	9400	20000
COMPONENT, MOLE PCT			
METHANE	56.9	61.9	61.5
ETHANE	4.0	3.4	2.9
PROPANE	2.9	3.1	2.2
N-BUTANE	0.7	1.0	0.6
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	32.5	28.0	30.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.2	0.1	0.1
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	2.10	1.50	1.50
HEATING VALUE*	770	1131	800
SPECIFIC GRAVITY	0.752	0.739	0.741

	INDEX 6796 SAMPLE 7652	INDEX 6797 SAMPLE 7655	INDEX 6798 SAMPLE 7658
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	J. B. RICE GAS UNIT NO. 1	BIGGS HORN UNIT NO. 1	DEAHL NO. B-3
LOCATION	SEC. 152, BLK. 7, I&GN SUR.	SEC. 129, BLK. 7, I&GN SUR.	SEC. 5, BLK. 5, B&B SUR.
OWNER	TEXACO INC.	TEXACO INC.	AMARILLO OIL CO.
COMPLETED	06/16/60	04/06/60	NOT GIVEN
SAMPLED	08/23/60	08/25/60	08/30/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-TUBB
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2881	2830	1437
WELLHEAD PRESSURE,PSIG	379	368	530
OPEN FLOW, MCFD	3700	14200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.8	59.6	10.2
ETHANE	3.7	2.8	1.9
PROPANE	2.6	1.9	2.0
N-BUTANE	0.7	0.6	0.9
ISOBUTANE	0.4	0.4	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	29.9	32.3	83.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	1.40	1.50	0.30
HEATING VALUE*	800	751	246
SPECIFIC GRAVITY	0.737	0.736	0.956

	INDEX 6799 SAMPLE 7743	INDEX 6800 SAMPLE 7839	INDEX 6801 SAMPLE 8205
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	DEAHL B-3-R	MERRITT NO. 1	MCBRAYER
LOCATION	SEC. 5, B&B SUR.	SEC. 12, BLK. Y-2, AB&M SUR.	SEC. 63, BLK. 7, I&GN SUR.
OWNER	AMARILLO OIL CO.	H. N. BURNETT	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	09/06/60	02/03/61	NOT GIVEN
SAMPLED	10/27/60	02/03/61	09/22/61
FORMATION	PERM-TUBB	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1430	2450	NOT GIVEN
WELLHEAD PRESSURE,PSIG	539	176	NOT GIVEN
OPEN FLOW, MCFD	2950	9300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	11.0	76.6	57.4
ETHANE	1.9	6.5	6.4
PROPANE	1.8	3.8	4.7
N-BUTANE	0.7	1.3	1.4
ISOBUTANE	0.3	0.7	0.8
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	83.2	9.4	26.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.30	0.50	1.36
HEATING VALUE*	250	1094	936
SPECIFIC GRAVITY	0.952	0.709	0.794

	INDEX 6802 SAMPLE 8247	INDEX 6803 SAMPLE 8258	INDEX 6804 SAMPLE 8352
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CRUMPACKER NO. 1	SAILOR NO. 2	ORLANDO MEAKER C NO. 1
LOCATION	SEC. 80, BLK. 7, I&GN SUR.	SEC. 64, BLK. 7, I&GN SUR.	SEC. 62, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	J. F. SMITH & J. W. COLLINS	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	NOT GIVEN	09/26/61	12/20/61
SAMPLED	10/19/61	10/24/61	12/23/61
FORMATION	PERM-	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2910	2980
WELLHEAD PRESSURE,PSIG	NOT GIVEN	307	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	51.1	62.0	49.5
ETHANE	1.7	3.7	2.2
PROPANE	1.1	2.7	0.6
N-BUTANE	0.5	0.9	TRACE
ISOBUTANE	0.6	0.5	TRACE
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	43.0	28.1	45.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	1.49	1.30	2.20
HEATING VALUE*	632	868	556
SPECIFIC GRAVITY	0.771	0.745	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6805 SAMPLE 8393	INDEX 6806 SAMPLE 8463	INDEX 6807 SAMPLE 8468
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOONE NO. 6	TRAYLER NO. 2	MCBRAYER NO. 1
LOCATION	SEC. 63, BLK. 7, I&GNRR SUR.	SEC. 74, BLK. 7, I&GN SUR.	SEC. 63, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	NOT GIVEN	10/24/61	NOT GIVEN
SAMPLED	02/07/62	04/04/62	04/05/62
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6100	2986	3068
WELLHEAD PRESSURE,PSIG	NOT GIVEN	392	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	35.2	65.4	56.1
ETHANE	0.8	1.6	5.7
PROPANE	0.1	0.4	4.7
N-BUTANE	0.1	0.1	1.6
ISOBUTANE	TRACE	TRACE	0.8
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	TRACE	TRACE	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.3
NITROGEN	56.4	31.1	27.7
OXYGEN	2.1	TRACE	TRACE
ARGON	0.6	0.1	0.5
HYDROGEN	2.7	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	1.73	1.32	1.42
HEATING VALUE*	391	705	931
SPECIFIC GRAVITY	0.791	0.692	0.804

	INDEX 6808 SAMPLE 8475	INDEX 6809 SAMPLE 8476	INDEX 6810 SAMPLE 10753
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	NICHOLSON NO. 2	MEAKER C NO. 1	BOST NO. C-4
LOCATION	SEC. 62, BLK. 7, I&GN SUR.	SEC. 62, BLK. 7, I&GN SUR.	SEC. 10, BLK. Y-2, TTRR SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/11/66
SAMPLED	04/06/62	04/06/62	10/13/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3098	2964	2352
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	146
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	73000
COMPONENT, MOLE PCT			
METHANE	62.4	64.7	74.7
ETHANE	6.4	9.0	6.3
PROPANE	4.6	7.0	4.1
N-BUTANE	1.3	2.0	1.4
ISOBUTANE	0.7	1.1	0.6
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	22.5	14.2	10.8
OXYGEN	TRACE	TRACE	0.3
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	1.12	0.64	0.49
HEATING VALUE*	969	1156	1083
SPECIFIC GRAVITY	0.768	0.796	0.722

	INDEX 6811 SAMPLE 10755	INDEX 6812 SAMPLE 11809	INDEX 6813 SAMPLE 1537
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
WELL NAME	POLING NO. A-2	WARRICK A-7	LANE NO. 1
LOCATION	SEC. 12, BLK. Y-2, TTRR SUR.	SEC. 12, BLK. Y-2, B&B SUR.	SEC. 72, BLK. 4, I&GN SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	EMPIRE GAS & FUEL CO.
COMPLETED	10/11/66	02/03/69	11/--/26
SAMPLED	10/13/66	04/10/69	11/01/27
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2398	2368	2300
WELLHEAD PRESSURE,PSIG	140	126	425
OPEN FLOW, MCFD	22500	118000	19000
COMPONENT, MOLE PCT			
METHANE	75.3	76.4	72.5
ETHANE	6.5	6.2	20.1
PROPANE	4.5	4.2	---
N-BUTANE	1.4	1.3	---
ISOBUTANE	0.7	0.6	---
N-PENTANE	0.5	0.4	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	9.7	9.3	6.6
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.45	0.47	0.22
HEATING VALUE*	1116	1111	1095
SPECIFIC GRAVITY	0.726	0.719	0.685

	INDEX 6814 SAMPLE 1538	INDEX 6815 SAMPLE 1539	INDEX 6816 SAMPLE 1540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BURNETT NO. 2	BURNETT NO. 3	BURNETT NO. 7
LOCATION	SEC. 23, BLK. 5, I&GN SUR.	SEC. 44, BLK. 5, I&GN SUR.	SEC. 49, BLK. 5, I&GN SUR.
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	09/--/27	09/--/27	09/--/27
SAMPLED	11/01/27	11/01/27	11/02/27
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	2200	2200
WELLHEAD PRESSURE,PSIG	435	435	435
OPEN FLOW, MCFD	19000	18000	40000
COMPONENT, MOLE PCT			
METHANE	71.3	68.7	70.4
ETHANE	21.5	22.8	21.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.6	7.9	7.2
OXYGEN	0.2	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.23	0.19	0.29
HEATING VALUE*	1108	1105	1104
SPECIFIC GRAVITY	0.690	0.702	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6817 SAMPLE 1541	INDEX 6818 SAMPLE 5277	INDEX 6819 SAMPLE 5283
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BURNETT NO. 9	S. B. BURNETT NO. 81-A	S. B. BURNETT NO. 80-A
LOCATION	SEC. 50, BLK. 5, I&GN SUR.	SEC. 87, BLK. 5, IGAN SUR.	SEC. 97, BLK. 5, I&GN SUR.
OWNER	EMPIRE GAS & FUEL CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
COMPLETED	09/--/27	03/07/52	04/10/52
SAMPLED	11/02/27	09/15/52	09/15/52
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	2347	2145
WELLHEAD PRESSURE,PSIG	435	169	146
OPEN FLOW, MCFD	27000	3102	3933
COMPONENT, MOLE PCT			
METHANE	69.0	79.6	78.9
ETHANE	21.6	6.5	6.6
PROPANE	---	3.6	3.8
N-BUTANE	---	1.1	1.2
ISOBUTANE	---	0.8	0.9
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	8.8	7.3	7.3
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.30	0.23	0.23
HEATING VALUE*	1086	1116	1127
SPECIFIC GRAVITY	0.700	0.698	0.707

	INDEX 6820 SAMPLE 7837	INDEX 6821 SAMPLE 7917	INDEX 6822 SAMPLE 8198
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	POLING R NO. 1	G. W. DEAHL NO. 2-R	POLING 1R
LOCATION	SEC. 22, BLK. Y-2, AB&M SUR.	SEC. 25, BLK. Y-8, AB&M SUR.	SEC. 12, BLK. Y-2, TT&RR SUR
OWNER	H. N. BURNETT	CITIES SERVICE GAS PROD. CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	01/17/61	NOT GIVEN
SAMPLED	02/03/61	03/30/61	09/13/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	1752	1715
WELLHEAD PRESSURE,PSIG	260	301	336
OPEN FLOW, MCFD	NOT GIVEN	825	2650
COMPONENT, MOLE PCT			
METHANE	80.7	80.9	81.5
ETHANE	7.1	7.3	6.5
PROPANE	2.9	2.9	2.5
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.5	7.4	7.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.20	0.20	0.15
HEATING VALUE*	1071	1073	1051
SPECIFIC GRAVITY	0.672	0.671	0.664

	INDEX 6823 SAMPLE 8425	INDEX 6824 SAMPLE 7375	INDEX 6825 SAMPLE 12821
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CASS
FIELD	PANHANDLE W/RED CAVE	WILDCAT	BRYANS MILL
WELL NAME	POLING NO. 1R	BOBBITT NO. 1	B. M. U. NO. 7
LOCATION	SEC. 12, Y-2, TTRR SUR.	SEC. 95, TTRR SUR.	NOT GIVEN
OWNER	COLORADO INTERSTATE GAS CO.	TEXAS-GULF PRODUCING CO.	PURE OIL CO.
COMPLETED	10/23/61	02/06/60	05/25/62
SAMPLED	03/02/62	02/06/60	05/18/71
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	440	440	260
DEPTH, FEET	1715	3306	10142
WELLHEAD PRESSURE,PSIG	336	250	1600
OPEN FLOW, MCFD	2650	450	1133
COMPONENT, MOLE PCT			
METHANE	80.8	57.4	60.8
ETHANE	6.8	2.0	7.2
PROPANE	2.9	0.7	3.1
N-BUTANE	0.8	0.1	1.0
ISOBUTANE	0.3	TRACE	0.9
N-PENTANE	0.1	0.0	0.4
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	7.7	34.1	9.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	10.4
CARBON DIOXIDE	TRACE	3.4	5.8
HELIUM	0.15	2.00	0.03
HEATING VALUE*	1071	639	1005
SPECIFIC GRAVITY	0.672	0.738	0.833

	INDEX 6826 SAMPLE 16085	INDEX 6827 SAMPLE 9593	INDEX 6828 SAMPLE 14800
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASS	CASS	CASS
FIELD	KILGORE	MCKINNEY	RAMRO N
WELL NAME	G. R. JOHNSON NO. 1	MARY O. AHERN NO. 1	RAMRO NO. 1
LOCATION	JOHN M. WATSON SUR. A-1075	D&SERR SUR. A-1204	JESSE DINSON SUR. A-305
OWNER	HILLIARD OIL & GAS, INC.	SHELL OIL CO.	SOUTHLAND ROYALTY CO.
COMPLETED	NOT GIVEN	04/16/64	06/01/75
SAMPLED	10/01/80	10/07/64	10/08/76
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10661	9102	10300
WELLHEAD PRESSURE,PSIG	5200	3200	4500
OPEN FLOW, MCFD	2392	1075	3800
COMPONENT, MOLE PCT			
METHANE	68.8	35.4	79.9
ETHANE	4.1	5.2	3.4
PROPANE	1.9	4.6	1.2
N-BUTANE	0.8	1.1	0.6
ISOBUTANE	1.0	0.7	0.5
N-PENTANE	0.6	0.4	0.2
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.9	0.2	0.2
NITROGEN	24.7	47.6	12.2
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	2.0	0.0	0.0
CARBON DIOXIDE	0.9	4.6	1.5
HELIUM	0.03	0.29	0.04
HEATING VALUE*	914	699	966
SPECIFIC GRAVITY	0.767	0.968	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6829 SAMPLE 3803	INDEX 6830 SAMPLE 12317	INDEX 6831 SAMPLE 12318
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASS	CHAMBERS	CHAMBERS
FIELD	WILDCAT	ANAHUAC	ANAHUAC
WELL NAME	ADDIE S. BALDWIN NO. 1	J. E. BROUSSARD NO. 20-H	J. E. BROUSSARD NO. 4
LOCATION	JAMES TAYLOR SUR.	NOT GIVEN	NOT GIVEN
OWNER	SKELLY OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	03/08/44	10/06/69	09/25/57
SAMPLED	04/19/44	07/08/70	07/08/70
FORMATION	NOT GIVEN	TERT-MIOCENE 10	TERT-MIOCENE 21
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	5850	3090	4957
WELLHEAD PRESSURE,PSIG	2210	1323	1883
OPEN FLOW, MCFD	1400	10600	88000
COMPONENT, MOLE PCT			
METHANE	80.7	99.2	98.3
ETHANE	8.2	0.1	0.8
PROPANE	---	TRACE	0.2
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	10.3	0.6	0.5
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.2
HELIUM	0.00	0.01	0.01
HEATING VALUE*	964	1007	1015
SPECIFIC GRAVITY	0.644	0.557	0.564

	INDEX 6832 SAMPLE 12319	INDEX 6833 SAMPLE 12320	INDEX 6834 SAMPLE 12321
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	ANAHUAC	ANAHUAC	ANAHUAC
WELL NAME	J. E. BROUSSARD NO. 20-F	J. E. BROUSSARD NO. 17	J. E. BROUSSARD NO. 14-F
LOCATION	NOT GIVEN	SEC.63, H&TC RR CO SUR.A-136	SEC.63, H&TC RR CO SUR.A-136
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	04/23/69	03/27/69	11/26/69
SAMPLED	07/08/70	07/08/70	07/08/70
FORMATION	TERT-MIOCENE 20	TERT-MIOCENE 19	TERT-MIOCENE 13
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4911	4764	3460
WELLHEAD PRESSURE,PSIG	1330	2151	1545
OPEN FLOW, MCFD	40592	851000	8544
COMPONENT, MOLE PCT			
METHANE	98.6	96.5	99.2
ETHANE	0.6	0.3	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	2.6	0.5
OXYGEN	0.0	0.5	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1010	983	1007
SPECIFIC GRAVITY	0.561	0.570	0.557

	INDEX 6835 SAMPLE 12322	INDEX 6836 SAMPLE 3867	INDEX 6837 SAMPLE 12355
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	ANAHUAC	ANAHUAC B	ANGELINA
WELL NAME	ANAHUAC GU5 NO. 1-C	STATE NO. 1	OWEN H. ACOM NO. 2
LOCATION	SEC. 50, H&TC RR CO SUR.	TRACT 21-D, GALVESTON BAY	J. W. ACOM SUR., A-612
OWNER	HUMBLE OIL & REFINING CO.	STANDARD OIL CO. OF TEXAS	BELCO PETROLEUM CORP.
COMPLETED	11/05/58	05/--/44	06/08/69
SAMPLED	07/08/70	09/01/44	08/11/70
FORMATION	OLIG-DISCORBIS-1	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5980	7565	12061
WELLHEAD PRESSURE,PSIG	2141	NOT GIVEN	3600
OPEN FLOW, MCFD	130000	41	550
COMPONENT, MOLE PCT			
METHANE	93.6	90.9	89.0
ETHANE	3.3	7.3	4.2
PROPANE	1.2	---	2.0
N-BUTANE	0.3	---	0.6
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	0.5	1.6	1.8
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1081	1052	1093
SPECIFIC GRAVITY	0.606	0.599	0.643

	INDEX 6838 SAMPLE 14891	INDEX 6839 SAMPLE 13805	INDEX 6840 SAMPLE 10625
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	DEVILLIER	FIG RIDGE	FIG RIDGE NW
WELL NAME	EARL COOPER NO. 2	DOORNBOS NO. 1	C. DOORNBOS NO. 2
LOCATION	WILLIAM GODFREY SUR., A-511	T&NO RR CO. SUR.	SEC. 83, T&NORR SUR.A-252
OWNER	GULF ENERGY & MINERALS CO.	TEXAS CRUDE, INC.	SUN OIL CO.
COMPLETED	12/05/75	09/29/72	10/30/64
SAMPLED	01/24/77	11/10/73	06/21/66
FORMATION	OLIG-VICKSBURG	OLIG-MARGINULINA	OLIG-FRIO F-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10782	7870	8112
WELLHEAD PRESSURE,PSIG	7440	NOT GIVEN	2200
OPEN FLOW, MCFD	50000	17000	17000
COMPONENT, MOLE PCT			
METHANE	91.5	92.2	94.3
ETHANE	3.9	3.9	2.9
PROPANE	1.1	1.5	1.0
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.5	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.4	0.7	0.5
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1060	1093	1077
SPECIFIC GRAVITY	0.615	0.615	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6841 SAMPLE 4925	INDEX 6842 SAMPLE 3736	INDEX 6843 SAMPLE 3743
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	FISHERS REEF N	JACKSON PASTURE	JACKSON PASTURE
WELL NAME	GALVESTON BAY STATE NO. 1	J. E. JACKSON NO. 1	MAYES NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	ROBERT OLIVER SUR.
OWNER	HUMBLE OIL & REFINING CO.	WYNN CROSBY DRILLING CO.	WYNN CROSBY DRILLING CO.
COMPLETED	05/27/50	07/02/43	12/23/43
SAMPLED	09/13/50	03/29/44	03/29/44
FORMATION	OLIG-FRIO	OLIG-MARGINULINA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8790	8090	8075
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	2950
OPEN FLOW, MCFD	NOT GIVEN	25000	25000
COMPONENT, MOLE PCT			
METHANE	90.8	70.2	73.8
ETHANE	3.9	28.9	25.2
PROPANE	2.1	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.6	0.5	0.7
OXYGEN	0.2	0.4	0.2
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1120	1229	1195
SPECIFIC GRAVITY	0.636	0.702	0.684

	INDEX 6844 SAMPLE 4830	INDEX 6845 SAMPLE 7995	INDEX 6846 SAMPLE 4924
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	JACKSON PASTURE	LAKE STEPHENSON	OYSTER BAYOU
WELL NAME	J. E. JACKSON NO. 4	ROY DAWSON NO. 1	FELIX JACKSON NO. 31
LOCATION	NOT GIVEN	J. T. WHITE A-415 SUR.	SEC. 124, T&ND SUR. NO. 419
OWNER	MCCARTHY OIL & GAS CORP.	TEXAS NATIONAL PETROLEUM CO.	SUN OIL CO.
COMPLETED	11/08/46	03/09/61	07/18/50
SAMPLED	01/28/50	05/25/61	09/13/50
FORMATION	OLIG-FRIO	OLIG-FRIO MASSIVE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8088	9430	8402
WELLHEAD PRESSURE, PSIG	1945	3000	3906
OPEN FLOW, MCFD	41000	19000	35000
COMPONENT, MOLE PCT			
METHANE	71.8	90.6	93.2
ETHANE	7.5	4.9	3.4
PROPANE	6.7	2.1	1.3
N-BUTANE	3.1	0.4	0.4
ISOBUTANE	3.5	0.7	0.5
N-PENTANE	1.8	0.1	0.2
ISOPENTANE	0.5	0.1	0.0
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	2.5	0.2	0.3
NITROGEN	1.2	0.7	0.4
OXYGEN	0.1	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.2	0.1	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1488	1116	1088
SPECIFIC GRAVITY	0.883	0.628	0.614

	INDEX 6847 SAMPLE 10072	INDEX 6848 SAMPLE 10246	INDEX 6849 SAMPLE 14198
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	OYSTER BAYOU	OYSTER BAYOU	RED FISH REEF N
WELL NAME	FELIX JACKSON NO. 51	FELIX JACKSON NO. 51	STATE TRACT 131 NO. 2
LOCATION	ANASTACIO YBARRO A-30	ANASTACIA YBARBRO SUR. A-30	GALVESTON BAY
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	02/07/64	02/12/64	02/27/73
SAMPLED	08/19/65	10/25/65	10/31/74
FORMATION	OLIG-HACKBERRY A	OLIG-HACKBERRY	OLIG-FRIO F-7
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9264	9264	8379
WELLHEAD PRESSURE, PSIG	4940	4200	2985
OPEN FLOW, MCFD	100	100000	29056
COMPONENT, MOLE PCT			
METHANE	93.8	93.9	92.3
ETHANE	3.2	3.2	3.9
PROPANE	0.9	1.0	1.6
N-BUTANE	0.3	0.3	0.4
ISOBUTANE	0.2	0.2	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.8	0.7	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.25	TRACE	TRACE
HEATING VALUE*	1061	10700	1095
SPECIFIC GRAVITY	0.599	0.602	0.615

	INDEX 6850 SAMPLE 9587	INDEX 6851 SAMPLE 3996	INDEX 6852 SAMPLE 11964
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	REDFISH REEF SW	SEABREEZE	STOWELL
WELL NAME	NO. A	F. G. THOMPSON NO. 1	BETTIE C. GREEN NO. 2
LOCATION	STATE TRACT 307	T&NO. 133	FRANCISCO VALMORE LEAGUEA-26
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	01/17/63	05/12/44	06/18/68
SAMPLED	10/07/64	NOT GIVEN	07/15/69
FORMATION	OLIG-FRIO F-17	OLIG-FRIO	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11188	9454	7332
WELLHEAD PRESSURE, PSIG	2150	3815	2775
OPEN FLOW, MCFD	3800	20000	90639
COMPONENT, MOLE PCT			
METHANE	91.7	89.0	91.5
ETHANE	3.7	10.5	3.7
PROPANE	1.6	---	1.7
N-BUTANE	0.6	---	0.4
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.2	---	0.2
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	0.1	---	0.2
HEXANES PLUS	0.5	---	0.5
NITROGEN	0.2	0.0	0.7
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.0	0.3	0.2
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1105	1096	1117
SPECIFIC GRAVITY	0.630	0.619	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6853 SAMPLE 13730	INDEX 6854 SAMPLE 3995	INDEX 6855 SAMPLE 10610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	UMBRELLA POINT	WINNIE N	WINNIE N
WELL NAME	TEXAS TRACT 87 NO. 3	ROSA ARENS NO. 1	JONES GAS UNIT NO. 1
LOCATION	GALVESTON BAY	LOT 12, VALMORE LEAGUE	J.M.DURAN SUR. LOT 2, BLK.69
OWNER	GETTY OIL CO.	SUN OIL CO.	SUNSET INTERNATL. PET. CORP.
COMPLETED	12/20/71	12/11/44	04/25/65
SAMPLED	09/27/73	03/20/45	06/14/66
FORMATION	OLIG-FRIO F-24	OLIG-NODOSARIA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10679	9840	6603
WELLHEAD PRESSURE,PSIG	6815	3750	2100
OPEN FLOW, MCFD	134326	51000	26670
COMPONENT, MOLE PCT			
METHANE	94.6	92.4	92.8
ETHANE	2.6	7.1	3.3
PROPANE	0.9	---	1.3
N-BUTANE	0.1	---	0.4
ISOBUTANE	0.2	---	0.5
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.5
NITROGEN	0.4	0.0	0.7
OXYGEN	0.1	0.1	0.0
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	0.4	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1051	1063	1101
SPECIFIC GRAVITY	0.596	0.594	0.619

	INDEX 6856 SAMPLE 10611	INDEX 6857 SAMPLE 4605	INDEX 6858 SAMPLE 10052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHEROKEE	CHEROKEE
FIELD	WINNIE N	NOT GIVEN	REKLAW
WELL NAME	JONES GAS UNIT NO. 1	NEW BIRMINGHAM NO. 1	REKLAW G. U. NO. 2, 1-C
LOCATION	J.M.DURAN SUR. LOT 2, BLK.69	S. E. LOONEY SUR. ABST. 509	THOMAS STANDFORD SUR.
OWNER	SUNSET INTERNATL. PET. CORP.	STANDARD OIL CO. OF TEXAS	HUMBLE OIL & REFINING CO.
COMPLETED	04/25/66	04/06/47	06/20/55
SAMPLED	06/14/66	10/17/48	08/05/65
FORMATION	MIOC-	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	220	260	260
DEPTH, FEET	6743	8608	8486
WELLHEAD PRESSURE,PSIG	2650	3350	1925
OPEN FLOW, MCFD	148000	147000	315
COMPONENT, MOLE PCT			
METHANE	93.4	94.4	94.6
ETHANE	3.3	3.7	0.9
PROPANE	1.0	---	0.5
N-BUTANE	0.3	---	0.2
ISOBUTANE	0.5	---	0.1
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.3
NITROGEN	0.7	0.0	2.1
OXYGEN	0.0	0.3	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	1.6	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1090	1023	1021
SPECIFIC GRAVITY	0.612	0.590	0.598

	INDEX 6859 SAMPLE 10053	INDEX 6860 SAMPLE 12542	INDEX 6861 SAMPLE 12548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHEROKEE	CHEROKEE	CHEROKEE
FIELD	REKLAW	REKLAW	REKLAW
WELL NAME	REKLAW G. U. NO. 2, 1-T	REKLAW GAS UNIT 2 NO. 1	REKLAW GAS UNIT 2 NO. 1
LOCATION	THOMAS STANDFORD SUR.	RAYMOND SALES SUR.	RAYMOND SALES SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/22/64	06/20/55	09/22/64
SAMPLED	08/05/65	11/10/70	11/10/70
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7813	8486	7814
WELLHEAD PRESSURE,PSIG	3400	3603	3403
OPEN FLOW, MCFD	9050	11800	9050
COMPONENT, MOLE PCT			
METHANE	92.7	83.3	93.1
ETHANE	0.7	0.6	0.7
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.8	12.2	4.3
OXYGEN	0.0	1.7	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.7	1.5
HELIUM	0.04	0.03	0.04
HEATING VALUE*	9590	860	964
SPECIFIC GRAVITY	0.595	0.635	0.593

	INDEX 6862 SAMPLE 15377	INDEX 6863 SAMPLE 15378	INDEX 6864 SAMPLE 11953
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHEROKEE	CHEROKEE	CHEROKEE
FIELD	WHITE OAK CREEK	WHITE OAK CREEK	WILLIAM WISE AREA
WELL NAME	ALVIE F. JONES NO. 1	ALVIE F. JONES NO. 1	SALLIE D. WHITEMAN NO. 1
LOCATION	G. RUDDELL SUR., A-67	G. RUDDELL SUR., A-67	J. H. ARMSTRONG SUR. A-69
OWNER	DAVIS OIL CO.	DAVIS OIL CO.	STANDARD OIL CO. OF TEXAS
COMPLETED	02/05/77	02/05/77	04/05/69
SAMPLED	09/19/78	09/19/78	07/02/69
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8522	9502	10650
WELLHEAD PRESSURE,PSIG	2550	2600	3417
OPEN FLOW, MCFD	14495	20384	2330
COMPONENT, MOLE PCT			
METHANE	94.7	95.1	97.5
ETHANE	1.7	1.4	0.3
PROPANE	0.7	0.5	0.1
N-BUTANE	0.3	0.2	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.6	0.8	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.4	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1048	1034	997
SPECIFIC GRAVITY	0.602	0.598	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6865 SAMPLE 8339		INDEX 6866 SAMPLE 3704		INDEX 6867 SAMPLE 882	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CHILDRESS		CLAY		CLAY	
FIELD	KIRKLAND		ANTELOPE		CLAY COUNTY	
WELL NAME	COATS B NO. 1		H. HENDERSON NO. 11		C. M. WORSHAM NO. 1	
LOCATION	SEC. 389		SEC. 2605, BLK. A-464, TE&L		SEC. 3, TANO SUR.	
OWNER	BRITISH-AMERICAN OIL PROD CO		SHELL OIL CO.		GULF PRODUCTION CO.	
COMPLETED	10/21/61		05/20/41		NOT GIVEN	
SAMPLED	12/14/61		12/15/43		06/08/24	
FORMATION	PENN-CANYON		-M-1		-TOP LIME	
GEOLOGIC PROVINCE CODE	435		420		420	
DEPTH, FEET	NOT GIVEN		3165		3386	
WELLHEAD PRESSURE,PSIG	200		920		150	
OPEN FLOW, MCFD	NOT GIVEN		15		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	55.3	----------	17.3	----------	3.9	----------
ETHANE	11.1		74.0		87.0	
PROPANE	9.2	----------	---	----------	---	----------
N-BUTANE	5.0		---		---	
ISOBUTANE	3.3	----------	---	----------	---	----------
N-PENTANE	1.5		---		---	
ISOPENTANE	2.6	----------	---	----------	---	----------
CYCLOPENTANE	1.3		---		---	
HEXANES PLUS	1.9	----------	---	----------	---	----------
NITROGEN	7.4		8.2		8.2	
OXYGEN	0.2	----------	0.2	----------	0.5	----------
ARGON	0.0		---		---	
HYDROGEN	0.2	----------	---	----------	---	----------
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	1.0	----------	0.2	----------	0.2	----------
HELIUM	0.08		0.06		0.06	
HEATING VALUE*	1600	----------	1501	----------	1599	----------
SPECIFIC GRAVITY	1.018		0.957		1.022	

	INDEX 6868 SAMPLE 4778		INDEX 6869 SAMPLE 11947		INDEX 6870 SAMPLE 3710	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CLAY		CLAY		CLAY	
FIELD	CLAY COUNTY		OILLARD SW		NEW YORK CITY	
WELL NAME	EDRINGTON NO. 1-A		HARVILL NO. 1		E. D. COLEMAN NO. A-3	
LOCATION	NOT GIVEN		SEC. 76, WOOD CSL SUR. A705		BLK. 24, T. W. TYREE SUR.	
OWNER	BRIDWELL OIL CO.		LONGHORN PRODUCTION CO.		SHELL OIL CO.	
COMPLETED	03/--/48		06/24/68		12/17/41	
SAMPLED	10/17/49		07/03/67		12/22/43	
FORMATION	PENN-CISCO		PENN-MARBLE FALLS		MISS-CHAPPEL	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	1291		5782		6216	
WELLHEAD PRESSURE,PSIG	550		800		2100	
OPEN FLOW, MCFD	NOT GIVEN		1200		200	
COMPONENT, MOLE PCT						
METHANE	56.8	----------	67.4	----------	43.1	----------
ETHANE	1.7		12.8		54.8	
PROPANE	0.5	----------	9.6	----------	---	----------
N-BUTANE	0.2		2.5		---	
ISOBUTANE	TRACE	----------	1.0	----------	---	----------
N-PENTANE	0.1		0.6		---	
ISOPENTANE	0.0	----------	0.4	----------	---	----------
CYCLOPENTANE	0.0		0.2		---	
HEXANES PLUS	0.2	----------	0.5	----------	---	----------
NITROGEN	38.9		4.8		1.2	
OXYGEN	TRACE	----------	TRACE	----------	0.2	----------
ARGON	0.1		0.0		---	
HYDROGEN	0.0	----------	0.1	----------	---	----------
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.7	----------
HELIUM	1.48		0.09		0.04	
HEATING VALUE*	436	----------	1355	----------	1419	----------
SPECIFIC GRAVITY	0.734		0.823		0.839	

	INDEX 6871 SAMPLE 90		INDEX 6872 SAMPLE 386		INDEX 6873 SAMPLE 752	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CLAY		CLAY		CLAY	
FIELD	PETROLIA		PETROLIA		PETROLIA	
WELL NAME	SKELLEY NO. 8		MARTIN NO. 11		MILLER NO. 8	
LOCATION	BLK 48, PARKER CO. SCL. LAND		BLK. 13, BOSQUE CO.SCL.LAND		BLK.59, PARKER CO. SCH. LAND	
OWNER	LONE STAR GAS CO.		TEXAS CO.		LONE STAR GAS CO.	
COMPLETED	NOT GIVEN		02/--/20		10/15/22	
SAMPLED	02/27/20		07/30/20		10/--/22	
FORMATION	PENN-CISCO		NOT GIVEN		PENN-CISCO	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	NOT GIVEN		1683		1399	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		300		450	
OPEN FLOW, MCFD	NOT GIVEN		4000		620	
COMPONENT, MOLE PCT						
METHANE	56.8	----------	71.0	----------	49.8	----------
ETHANE	10.3		0.0		9.1	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	31.1		26.6		39.4	
OXYGEN	0.5	----------	1.1	----------	0.4	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3	----------	0.0	----------	0.1	----------
HELIUM	0.90		1.24		1.11	
HEATING VALUE*	760	----------	719	----------	668	----------
SPECIFIC GRAVITY	0.735		0.665		0.760	

	INDEX 6874 SAMPLE 1157		INDEX 6875 SAMPLE 1159		INDEX 6876 SAMPLE 12841	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CLAY		CLAY		COCHRAN	
FIELD	PETROLIA		PETROLIA		LEVELLAND	
WELL NAME	MILLER NO. 11		PANHANDLE NO. 3		D. S. WRIGHT G NO. 2	
LOCATION	NOT GIVEN		NOT GIVEN		LABOR 26, LEAGUE 95, CSL SUR	
OWNER	LONE STAR GAS CO.		LONE STAR GAS CO.		ARD DRILLING CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		05/16/5A	
SAMPLED	09/24/25		09/25/25		06/01/71	
FORMATION	PENN-CISCO		PENN-CISCO		PERM-SAN ANDRES	
GEOLOGIC PROVINCE CODE	420		420		430	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		4838	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		60	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		54	
COMPONENT, MOLE PCT						
METHANE	39.6	----------	32.0	----------	74.2	----------
ETHANE	13.3		40.0		7.1	
PROPANE	---	----------	---	----------	3.1	----------
N-BUTANE	---		---		0.5	
ISOBUTANE	---	----------	---	----------	0.4	----------
N-PENTANE	---		---		0.1	
ISOPENTANE	---	----------	---	----------	0.0	----------
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---	----------	---	----------	0.1	----------
NITROGEN	43.7		26.1		11.5	
OXYGEN	2.1	----------	0.9	----------	0.0	----------
ARGON	---		---		TRACE	
HYDROGEN	---	----------	---	----------	0.0	----------
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.4	----------	0.4	----------	3.0	----------
HELIUM	0.85		0.62		0.02	
HEATING VALUE*	639	----------	1041	----------	999	----------
SPECIFIC GRAVITY	0.812		0.667		0.715	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6877 SAMPLE 11611	INDEX 6878 SAMPLE 4106	INDEX 6879 SAMPLE 12657
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COCHRAN	COCHRAN	COKE
FIELD	MONCRIEF-MASTEN	SLAUGHTER	BRONTE
WELL NAME	F.O. MASTEN NO. 1	IGOE SMITH NO. 34	BRONTE GARDNER UNIT NO. 5
LOCATION	ARMSTRONG CSL SUR.	OLDHAM CO. SCHOOL LAND	SEC. 453, BLK. 1A, H&TC SUR.
OWNER	W. A. MONCRIEF, JR.	HONOLULU OIL CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	12/10/66	02/19/42	12/20/67
SAMPLED	08/02/68	06/--/46	02/05/71
FORMATION	DEVO-	PERM-SAN ANDRES	CRET-GARDNER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10067	4931	5102
WELLHEAD PRESSURE,PSIG	2106	375	1970
OPEN FLOW, MCFD	6500	504	18100
COMPONENT, MOLE PCT			
METHANE	72.0	61.1	70.1
ETHANE	9.7	16.9	9.2
PROPANE	4.8	---	7.3
N-BUTANE	1.8	---	2.3
ISOBUTANE	0.5	---	0.8
N-PENTANE	0.5	---	0.4
ISOPENTANE	0.2	---	0.4
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.3
NITROGEN	7.1	14.9	8.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.9	6.9	0.6
HELIUM	0.01	0.11	0.25
HEATING VALUE*	1154	922	1222
SPECIFIC GRAVITY	0.765	0.767	0.783

	INDEX 6880 SAMPLE 12266	INDEX 6881 SAMPLE 4961	INDEX 6882 SAMPLE 4962
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COKE	COKE	COKE
FIELD	FRANK PEARSON	JAMESON	JAMESON
WELL NAME	CAMP NO. 2	J. B. WALKER NO. 4	R. W. WALKER NO. 3
LOCATION	SEC. 126, BLK. 2, H+TC SUR.	CARL BRODKHUYSEN SUR.NO.A-31	SNYDER&VON ROSENBERG,JR. SUR
OWNER	PEARSON-SIBERT OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	08/18/69	10/26/50	10/27/50
SAMPLED	05/15/70	11/13/50	11/09/50
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6068	5770	5730
WELLHEAD PRESSURE,PSIG	1225	1275	1700
OPEN FLOW, MCFD	24000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.5	71.9	72.5
ETHANE	10.3	13.9	13.1
PROPANE	6.0	6.6	5.8
N-BUTANE	1.3	1.6	1.2
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.3	3.9	5.4
OXYGEN	0.0	0.1	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.6	0.8
HELIUM	0.13	0.11	0.11
HEATING VALUE*	1185	1253	1194
SPECIFIC GRAVITY	0.743	0.757	0.740

	INDEX 6883 SAMPLE 12805	INDEX 6884 SAMPLE 12807	INDEX 6885 SAMPLE 7053
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COKE	COKE	COLEMAN
FIELD	JAMESON	MILLICAN	CAMP COLORADO
WELL NAME	J. S. S. U. NO. 6-35	M. R. U. NO. 3-E	O. H. TERRY NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	H. KIGAN SUR. NO. 498
OWNER	SUN OIL CO.	SUN OIL CO.	CHAPMAN OIL CO.
COMPLETED	10/13/53	11/21/53	12/31/58
SAMPLED	04/27/71	04/27/71	04/29/59
FORMATION	PERM-JAMESON	PENN-STRAWN	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	5840	5850	2628
WELLHEAD PRESSURE,PSIG	600	220	983
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5400
COMPONENT, MOLE PCT			
METHANE	63.1	58.2	72.2
ETHANE	16.0	17.6	0.1
PROPANE	9.0	11.9	0.0
N-BUTANE	2.5	3.2	0.1
ISOBUTANE	1.2	1.8	0.0
N-PENTANE	0.7	0.6	0.1
ISOPENTANE	0.3	1.2	0.0
CYCLOPENTANE	0.2	0.5	0.1
HEXANES PLUS	0.5	0.8	0.2
NITROGEN	6.1	3.7	26.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.08	0.05	1.00
HEATING VALUE*	1360	1519	755
SPECIFIC GRAVITY	0.843	0.920	0.670

	INDEX 6886 SAMPLE 10893	INDEX 6887 SAMPLE 10890	INDEX 6888 SAMPLE 11031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	CAMP COLORADO	CAMP COLORADO N	CAMP COLORADO N
WELL NAME	DELLA TERRY NO. A-1	NELLE BAILEY NO. 1	NELLE BAILEY NO. 1
LOCATION	DAVID MOSES SUR. NO. 499	SEC. 15, BLK. 3, H&TB SUR.	SEC. 15, BLK. 3, HT&B SUR.
OWNER	CHAPMAN OIL CO.	DAVIS & DAVIS, INC.	DAVIS & DAVIS, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	08/01/66
SAMPLED	02/21/67	02/21/67	07/15/67
FORMATION	PENN-MARBLE FALLS	CRET-GARDNER	CRET-GARDNER
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2579	2134	2150
WELLHEAD PRESSURE,PSIG	903	872	825
OPEN FLOW, MCFD	NOT GIVEN	16000	15980
COMPONENT, MOLE PCT			
METHANE	71.2	72.4	72.0
ETHANE	10.2	6.9	6.9
PROPANE	5.7	4.2	3.9
N-BUTANE	1.5	1.2	1.2
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.2	13.5	13.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.28	0.45	0.44
HEATING VALUE*	1170	1055	1051
SPECIFIC GRAVITY	0.754	0.726	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6889 SAMPLE 1817	INDEX 6890 SAMPLE 8563	INDEX 6891 SAMPLE 8564
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	COLEMAN COUNTY REGULAR	COLEMAN COUNTY REGULAR	COLEMAN COUNTY REGULAR
WELL NAME	VANCE NO. 1	T. M. HAYES NO. 2	T. M. HAYES NO. 3
LOCATION	E.T.R.R. SUR.	BOND & SANDERS SUR. NO. 92	BOND & SANDERS SUR. NO. 92
OWNER	TEXAS CO.	BIG D DRILLING CO.	BIG D DRILLING CO.
COMPLETED	06/01/28	--/--/56	--/--/58
SAMPLED	07/16/29	05/22/62	05/22/62
FORMATION	NOT GIVEN	-BOENICKE	PENN-BRENEKE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2010	1114	1096
WELLHEAD PRESSURE,PSIG	800	46	54
OPEN FLOW, MCFD	1500	1560	1800
COMPONENT, MOLE PCT			
METHANE	80.0	80.0	81.0
ETHANE	5.3	3.6	4.0
PROPANE	---	5.1	5.5
N-BUTANE	---	3.1	2.9
ISOBUTANE	---	1.7	1.7
N-PENTANE	---	1.2	0.8
ISOPENTANE	---	0.9	0.6
CYCLOPENTANE	---	0.4	0.3
HEXANES PLUS	---	1.0	0.7
NITROGEN	13.7	2.6	2.4
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.57	0.15	0.13
HEATING VALUE*	905	1322	1297
SPECIFIC GRAVITY	0.639	0.779	0.760

	INDEX 6892 SAMPLE 7403	INDEX 6893 SAMPLE 7404	INDEX 6894 SAMPLE 7405
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	FISK	FISK	FISK
WELL NAME	STORAUGH NO. 1	A. C. SPARKS NO. 1	G. W. SCOTT B NO. 1
LOCATION	SEC. 95, BLK. 1, GH&HRR SUR.	SEC. 88, BLK. 1, GH&RR SUR.	SEC. 91, BLK. 1, GH&HRR SUR.
OWNER	EDLO-TEXAS CORP.	EDLO-TEXAS CORP.	KATZ OIL CO.
COMPLETED	NOT GIVEN	03/--/59	02/07/58
SAMPLED	02/22/60	02/22/60	02/22/60
FORMATION	EOCE-JENNINGS	EOCE-JENNINGS	EOCE-JENNINGS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2455	2381	2496
WELLHEAD PRESSURE,PSIG	990	1033	940
OPEN FLOW, MCFD	25400	11400	1300
COMPONENT, MOLE PCT			
METHANE	74.5	74.3	73.1
ETHANE	8.0	8.2	7.8
PROPANE	4.0	4.2	3.9
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	10.8	10.5	12.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.40	0.50
HEATING VALUE*	1070	1089	1059
SPECIFIC GRAVITY	0.707	0.716	0.720

	INDEX 6895 SAMPLE 7406	INDEX 6896 SAMPLE 7407	INDEX 6897 SAMPLE 11071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	FISK	FISK	FISK
WELL NAME	STORAUGH NO. 1	R. C. ADRIAN NO. 1	A. C. SPARKS
LOCATION	SEC. 70, BLK. 1, GH&HRR SUR.	SEC.88, BLK.1, GH&HRR SUR.	FISK, TEXAS
OWNER	KATZ OIL CO.	EDLO-TEXAS CORP.	BRADY MUNICIPAL GAS CORP.
COMPLETED	03/10/58	NOT GIVEN	NOT GIVEN
SAMPLED	02/22/60	02/22/60	08/18/67
FORMATION	EOCE-JENNINGS	EOCE-JENNINGS	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2466	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	940	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.0	74.6	73.5
ETHANE	7.9	7.8	8.6
PROPANE	3.9	4.2	4.5
N-BUTANE	0.9	1.0	1.3
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.5	10.9	9.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.50	0.40	0.42
HEATING VALUE*	1060	1082	1115
SPECIFIC GRAVITY	0.718	0.715	0.727

	INDEX 6898 SAMPLE 3763	INDEX 6899 SAMPLE 8162	INDEX 6900 SAMPLE 8163
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	GRAVES	HUDSON	HUDSON
WELL NAME	MOSE THOMPSON NO. 1	HUDSON A-1	HUDSON NO. 1
LOCATION	SEC. 2, BLK. 1, HT&B SUR.	SEC. 74, BLK. 2, GH&RR SUR.	SEC. 74, BLK. 2, GH&RR SUR.
OWNER	WOODLEY PETROLEUM CO.	LONE STAR GAS CO.	LOUIS FRANKLIN & SON
COMPLETED	07/05/62	09/16/57	12/05/58
SAMPLED	03/30/64	08/12/61	08/12/61
FORMATION	NOT GIVEN	PENN-MORRIS	PENN-GRAY
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2807	3251	3597
WELLHEAD PRESSURE,PSIG	1000	815	705
OPEN FLOW, MCFD	2950	798	2605
COMPONENT, MOLE PCT			
METHANE	66.0	70.9	70.7
ETHANE	22.4	10.1	11.3
PROPANE	---	5.2	5.5
N-BUTANE	---	1.3	1.4
ISOBUTANE	---	0.6	0.8
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.2	0.4
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	10.7	10.9	9.0
OXYGEN	0.6	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.41	0.35	0.20
HEATING VALUE*	1070	1124	1171
SPECIFIC GRAVITY	0.711	0.742	0.751

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6901 SAMPLE 1442	INDEX 6902 SAMPLE 2075	INDEX 6903 SAMPLE 8164
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	NOT GIVEN	NOT GIVEN	SANTA ANNA
WELL NAME	NOT GIVEN	HUTCHINS NO. 1	LUCAS NO. 2
LOCATION	SEC. 19, 2 MI. N OF VALERA	SEC. 59, BLK. 1, GH&H SUR.	SEC. 13, M. MARTINEZ NO. 751
OWNER	ROTH & FAUROT	SUNRAY OIL CORP.	LONE STAR GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	05/04/51
SAMPLED	08/24/27	06/20/30	08/12/61
FORMATION	PENN-	NOT GIVEN	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2580	NOT GIVEN	2112
WELLHEAD PRESSURE,PSIG	700	NOT GIVEN	520
OPEN FLOW, MCFD	10000	NOT GIVEN	1784
COMPONENT, MOLE PCT			
METHANE	56.3	60.7	80.8
ETHANE	30.1	25.0	5.9
PROPANE	---	---	1.2
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	TRACE
NITROGEN	12.4	13.3	10.9
OXYGEN	0.3	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.6	0.1
HELIUM	0.31	0.34	0.38
HEATING VALUE*	1110	1063	980
SPECIFIC GRAVITY	0.761	0.738	0.651

	INDEX 6904 SAMPLE 11037	INDEX 6905 SAMPLE 5615	INDEX 6906 SAMPLE 6285
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLLINGSWORTH	COLLINGSWORTH
FIELD		PANHANDLE E	PANHANDLE E
WELL NAME	CHARLES PRICE NO. 2	D. J. BETENBOUGH NO. A-1	WATTENBARGER NO. 4-A
LOCATION	SEC. 67, BBB&C SUR.	SEC. 100, BLK. 16, H&GN SUR.	SEC. 92, BLK. 12, H&GN SUR.
OWNER	G. W. STRAKE	PANOMA CORP.	EL PASO NATURAL GAS CO.
COMPLETED	02/04/67	04/07/54	02/25/57
SAMPLED	07/24/67	04/30/54	03/22/57
FORMATION	PENN-SERRATT	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	425	435	435
DEPTH, FEET	2116	1898	1741
WELLHEAD PRESSURE,PSIG	775	412	414
OPEN FLOW, MCFD	4200	NOT GIVEN	6500
COMPONENT, MOLE PCT			
METHANE	68.5	88.4	90.3
ETHANE	5.3	3.1	3.0
PROPANE	3.7	1.5	1.4
N-BUTANE	1.0	0.4	0.4
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	19.3	5.6	4.2
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.53	0.17	0.15
HEATING VALUE*	970	1023	1042
SPECIFIC GRAVITY	0.737	0.622	0.617

	INDEX 6907 SAMPLE 7306	INDEX 6908 SAMPLE 5429	INDEX 6909 SAMPLE 4911
STATE	TEXAS	TEXAS	COLORADO
COUNTY	COLLINGSWORTH	COLLINGSWORTH	BUCK SNAG
FIELD	PANHANDLE E	WILDCAT	C. R. SCHIURRING NO. 1
WELL NAME	LAYCOCK 6-A	COLEMAN NO. 1	SEC. 6
LOCATION	SEC. 96, BLK. 12, H&GN SUR.	SEC. 87, BLK. 16, H&GN SUR.	CLAUD B. HAMILL
OWNER	EL PASO NATURAL GAS CO.	PANOMA CORP.	05/15/49
COMPLETED	09/20/59	03/--/53	05/18/50
SAMPLED	12/11/59	03/27/53	EOCE-YEGUA
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	220
GEOLOGIC PROVINCE CODE	435	435	6134
DEPTH, FEET	1942	1895	2570
WELLHEAD PRESSURE,PSIG	395	399	3600
OPEN FLOW, MCFD	2275	1100	
COMPONENT, MOLE PCT			
METHANE	91.8	86.4	89.7
ETHANE	3.1	3.5	5.5
PROPANE	1.3	1.6	2.4
N-BUTANE	0.3	0.4	0.7
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.8	7.0	0.4
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.10	0.21	0.01
HEATING VALUE*	1049	1028	1128
SPECIFIC GRAVITY	0.607	0.640	0.636

	INDEX 6910 SAMPLE 4914	INDEX 6911 SAMPLE 14890	INDEX 6912 SAMPLE 10098
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	BUCK SNAG	CECIL NOBLE	COLUMBUS
WELL NAME	CLAUD B. HAMILL NO. 1-A	FORD WEGENHOFT NO. 1	COLUMBUS FIELD UNIT 10-15-UT
LOCATION	SEC. 6	SEC. E. TUMLINSON SUR. A-44	J. TUMLINSON SUR. A-46
OWNER	CLAUD B. HAMILL	PRAIRIE PRODUCING CO.	CITIES SERVICE OIL CO.
COMPLETED	07/07/49	07/28/75	11/24/63
SAMPLED	05/18/50	01/20/77	09/02/65
FORMATION	EOCE-YEGUA	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6652	8842	9160
WELLHEAD PRESSURE,PSIG	2133	1749	1136
OPEN FLOW, MCFD	12500	4600	4249
COMPONENT, MOLE PCT			
METHANE	86.2	86.6	85.8
ETHANE	6.2	5.5	5.7
PROPANE	4.2	3.0	3.1
N-BUTANE	1.0	0.8	0.7
ISOBUTANE	0.9	0.5	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.2	0.5	0.6
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	2.4	2.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1182	1137	1139
SPECIFIC GRAVITY	0.675	0.676	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6913 SAMPLE 10099		INDEX 6914 SAMPLE 10100		INDEX 6915 SAMPLE 11669	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	COLUMBUS		COLUMBUS		COLUMBUS	
WELL NAME	COLUMBUS FIELD UNIT 10-15-MT		COLUMBUS FIELD UNIT 10-15-LT		UNIT NO. 10-14	
LOCATION	J. TUMLINSON SUR. A-46		J. TUMLINSON SUR. A-46		J. TUMLINSON SUR. A-46	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	12/27/63		11/26/63		03/07/68	
SAMPLED	09/02/65		09/02/65		10/14/68	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9428		10110		7252	
WELLHEAD PRESSURE,PSIG	1964		2371		3175	
OPEN FLOW, MCFD	890		22630		64000	
COMPONENT, MOLE PCT						
METHANE	83.4		86.1		82.6	
ETHANE	5.7		5.6		4.9	
PROPANE	3.1		3.0		2.8	
N-BUTANE	1.2		0.8		0.7	
ISOBUTANE	0.8		0.4		0.6	
N-PENTANE	0.3		0.3		0.2	
ISOPENTANE	0.6		0.3		0.3	
CYCLOPENTANE	0.2		0.2		0.1	
HEXANES PLUS	0.6		0.4		0.2	
NITROGEN	0.5		0.4		5.2	
OXYGEN	0.0		0.0		1.1	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.6		2.5		1.3	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1197		1144		1077	
SPECIFIC GRAVITY	0.717		0.681		0.683	

	INDEX 6916 SAMPLE 15374		INDEX 6917 SAMPLE 12122		INDEX 6918 SAMPLE 14200	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	DUBINA S		ENGLEHART		ENGLEHART	
WELL NAME	SCHOENEBERG A NO. 1		W. F. ZOELLNER NO. 2		HAROLD JOHNSON NO. B-1	
LOCATION	JESSE BURNHAM SUR. A-9		JOHNSON&STAFFORD SUR. A-729		SA&MG SUR. 17, A-539	
OWNER	CITIES SERVICE CO.		ROBERT MOSBACHER		TEXAS OIL & GAS CORP.	
COMPLETED	06/04/77		04/14/68		07/20/73	
SAMPLED	09/12/78		11/20/69		10/30/74	
FORMATION	EOCE-WILCOX		EOCE-YEGUA		EOCE-WILCOX C	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9165		6230		8818	
WELLHEAD PRESSURE,PSIG	2220		2238		2440	
OPEN FLOW, MCFD	3300		5300		750	
COMPONENT, MOLE PCT						
METHANE	81.9		89.7		89.4	
ETHANE	6.5		4.0		4.6	
PROPANE	5.1		1.7		2.1	
N-BUTANE	1.2		0.5		0.5	
ISOBUTANE	0.8		0.2		0.5	
N-PENTANE	0.2		0.4		TRACE	
ISOPENTANE	0.3		0.2		0.3	
CYCLOPENTANE	0.1		0.2		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.8		0.5		0.2	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.8		2.4		2.2	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1176		1087		1094	
SPECIFIC GRAVITY	0.712		0.645		0.643	

	INDEX 6919 SAMPLE 3876		INDEX 6920 SAMPLE 5301		INDEX 6921 SAMPLE 9098	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	FRELSBURG		FRELSBURG		GARWOOD 3600	
WELL NAME	THOMPSON NO. 1		R. A. JOHNSON NO. 1		C. F. KALLINA	
LOCATION	CHAS. FRIDSHE SUR. A-199		ED. RUHMAN SUR. NO. A-479		I&N RR SUR. NO. 44, A-295	
OWNER	SINCLAIR PRAIRIE OIL CO.		ANDERSON-PRICHARD OIL CORP.		CRESCENT OIL & GAS CORP.	
COMPLETED	06/15/44		06/20/52		12/02/60	
SAMPLED	08/29/44		10/17/52		09/20/63	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6800		9652		3942	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		2904		1625	
OPEN FLOW, MCFD	26100		2725		8600	
COMPONENT, MOLE PCT						
METHANE	78.9		73.8		98.9	
ETHANE	18.8		6.4		0.2	
PROPANE	---		6.7		TRACE	
N-BUTANE	---		3.3		0.0	
ISOBUTANE	---		2.0		0.0	
N-PENTANE	---		1.1		0.0	
ISOPENTANE	---		1.5		0.0	
CYCLOPENTANE	---		0.2		0.0	
HEXANES PLUS	---		0.8		0.0	
NITROGEN	0.0		0.9		0.5	
OXYGEN	0.2		0.1		0.1	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.1		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	2.1		3.0		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1136		1375		1005	
SPECIFIC GRAVITY	0.669		0.840		0.559	

	INDEX 6922 SAMPLE 14965		INDEX 6923 SAMPLE 14195		INDEX 6924 SAMPLE 13458	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	GARWOOD SE		GLIDDEN		HAMEL E	
WELL NAME	MCLANE TRUST "B" NO. 1C		J. T. JOHNSON NO.1		CLARA HOYO RODGERS NO. 1	
LOCATION	BLK. 42, I&GNRR SURV. A-293		DANIEL GILLELAND SUR. A-26		RICHARD DOWDY SUR. A-163	
OWNER	SOLOKING PRODUCTION CO.		SUPERIOR OIL CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	01/15/75		04/23/73		06/02/71	
SAMPLED	08/13/77		10/25/74		10/20/72	
FORMATION	OLIG-FRIO		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3202		10297		9607	
WELLHEAD PRESSURE,PSIG	1465		4680		2984	
OPEN FLOW, MCFD	5000		12950		5800	
COMPONENT, MOLE PCT						
METHANE	98.6		87.8		78.6	
ETHANE	0.2		4.6		6.4	
PROPANE	TRACE		2.2		6.0	
N-BUTANE	0.1		0.5		1.9	
ISOBUTANE	0.1		0.6		1.7	
N-PENTANE	0.0		0.1		0.6	
ISOPENTANE	0.0		0.4		0.4	
CYCLOPENTANE	0.0		0.1		0.2	
HEXANES PLUS	0.0		0.3		0.6	
NITROGEN	0.3		0.2		0.9	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		3.1		2.7	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1002		1176		1279	
SPECIFIC GRAVITY	0.564		0.668		0.749	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6925 SAMPLE 13822	INDEX 6926 SAMPLE 13823	INDEX 6927 SAMPLE 15000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	HAMEL E	HAMEL E	KAINER
WELL NAME	G.J. MILLER II B NO. 10	G.J. MILLER IIB NO. 1L	KAINER & JOHNSON NO. 1
LOCATION	RICHARD DOWDY SUR. A-163	RICHARD DOWDY SUR. A-163	B. RATCLIFF SUR. A-894
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	PETRO LEWIS CORP.
COMPLETED	09/22/72	10/13/72	01/31/74
SAMPLED	09/27/73	11/27/73	05/10/77
FORMATION	EOCE-WILCOX & HAMEL	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9900	10000	6165
WELLHEAD PRESSURE,PSIG	2715	3110	2310
OPEN FLOW, MCFD	460	460	6600
COMPONENT, MOLE PCT			
METHANE	68.4	71.3	88.7
ETHANE	7.9	6.9	6.0
PROPANE	10.4	7.3	2.4
N-BUTANE	4.0	3.3	0.6
ISOBUTANE	3.0	2.7	0.5
N-PENTANE	1.2	1.3	0.2
ISOPENTANE	1.6	1.9	0.3
CYCLOPENTANE	0.4	0.5	0.1
HEXANES PLUS	1.0	1.5	0.2
NITROGEN	0.4	0.4	0.5
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.9	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1526	1470	1141
SPECIFIC GRAVITY	0.911	0.890	0.647

	INDEX 6928 SAMPLE 10862	INDEX 6929 SAMPLE 10863	INDEX 6930 SAMPLE 12250
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	MARMADUKE BATON	MARMADUKE BATON	MOHAT
WELL NAME	M. E. BINGAMAN NO. 1	M. E. BINGAMAN NO. 1	O. WINTERMANN NO. 1A
LOCATION	MARMADUKE BATON SUR. A-105	MARMADUKE BATON SUR. A-105	THOMAS CLARK SUR. A-682
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	CICO OIL & GAS CO.
COMPLETED	01/17/66	01/17/66	02/12/69
SAMPLED	NOT GIVEN	NOT GIVEN	04/30/70
FORMATION	EOCE-YEGUA	OLIG-FRIO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4949	2854	8564
WELLHEAD PRESSURE,PSIG	1829	1201	2976
OPEN FLOW, MCFD	10200	3700	12000
COMPONENT, MOLE PCT			
METHANE	93.4	96.7	62.1
ETHANE	3.9	0.0	11.9
PROPANE	0.5	TRACE	10.4
N-BUTANE	0.1	0.0	3.7
ISOBUTANE	0.4	0.0	2.8
N-PENTANE	TRACE	0.0	0.4
ISOPENTANE	0.1	0.0	3.3
CYCLOPENTANE	TRACE	0.0	0.5
HEXANES PLUS	0.1	0.0	1.2
NITROGEN	1.2	2.5	1.8
OXYGEN	0.2	0.4	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	2.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1055	980	1569
SPECIFIC GRAVITY	0.599	0.571	0.954

	INDEX 6931 SAMPLE 15018	INDEX 6932 SAMPLE 15019	INDEX 6933 SAMPLE 15065
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	MUSTANG CREEK	MUSTANG CREEK	MUSTANG CREEK
WELL NAME	LEHRER NO. 1	LEHRER NO. A-1	ALTON ALLEN NO. 2
LOCATION	I&GNRR SUR. 27, A-275	I&GNRR SUR. 27, A-274	SA&MG SUR., A-876
OWNER	TEAL PETROLEUM CO.	TEAL PETROLEUM CO.	DUER WAGNER & CO.
COMPLETED	12/30/74	03/26/75	02/04/75
SAMPLED	05/30/77	05/30/77	07/29/77
FORMATION	EOCE-YEGUA	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5570	3344	2019
WELLHEAD PRESSURE,PSIG	1225	325	990
OPEN FLOW, MCFD	6000	9000	350
COMPONENT, MOLE PCT			
METHANE	95.0	95.5	99.3
ETHANE	2.8	2.7	0.1
PROPANE	0.7	0.6	TRACE
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.8	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1042	1042	1008
SPECIFIC GRAVITY	0.587	0.583	0.556

	INDEX 6934 SAMPLE 11792	INDEX 6935 SAMPLE 12323	INDEX 6936 SAMPLE 10543
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	MUSTANG CREEK W	NADA	NADA SE
WELL NAME	LEHRER A NO. 1	MCDERMOTT NO. 1	GUY STOVALL NO. 1
LOCATION	F. G. MAHON SUR. A-747	JOHNSON & STAFFORD SUR.A-270	SEC.3, SA&MGRRCO.,SUR.A-531
OWNER	ANADARKO PRODUCTION CO.	WADSWORTH OIL CO.	SHELL OIL CO.
COMPLETED	11/13/67	10/20/69	01/14/66
SAMPLED	03/18/69	07/12/70	04/28/66
FORMATION	EOCE-YEGUA	MIOC-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5838	2010	15695
WELLHEAD PRESSURE,PSIG	2192	1050	11779
OPEN FLOW, MCFD	74000	12000	13500
COMPONENT, MOLE PCT			
METHANE	91.2	96.2	89.1
ETHANE	4.1	0.1	0.1
PROPANE	1.8	0.1	0.0
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	0.3	2.9	0.5
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	10.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1133	979	904
SPECIFIC GRAVITY	0.639	0.572	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6937 SAMPLE 13884	INDEX 6938 SAMPLE 13885	INDEX 6939 SAMPLE 13887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	NEW ULM SW	NEW ULM SW	NEW ULM SW
WELL NAME	ARCO-FEE NO. 1-C	ARCO-FEE NO. 2UT	JOHN M. GAY NO. 1
LOCATION	JAMES NELSON SUR. A-434	JAMES NELSON SUR. A-434	JAMES TYLEE SUR. A-550
OWNER	PRAIRIE PRODUCING CO.	PRAIRIE PRODUCING CO.	PRAIRIE PRODUCING CO.
COMPLETED	12/16/71	08/31/72	08/12/72
SAMPLED	11/12/73	11/12/73	11/12/73
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9414	9156	9382
WELLHEAD PRESSURE,PSIG	3107	2300	3007
OPEN FLOW, MCFD	5200	2500	5900
COMPONENT, MOLE PCT			
METHANE	58.8	41.6	74.4
ETHANE	13.0	12.0	5.9
PROPANE	13.9	27.0	4.3
N-BUTANE	4.0	7.1	1.0
ISOBUTANE	3.4	6.5	1.0
N-PENTANE	0.7	1.4	0.2
ISOPENTANE	1.8	0.7	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.4	0.2
NITROGEN	0.4	0.2	7.7
OXYGEN	TRACE	TRACE	1.7
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.2	2.9	2.9
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1584	1909	1082
SPECIFIC GRAVITY	0.970	1.171	0.748

	INDEX 6940 SAMPLE 2542	INDEX 6941 SAMPLE 14263	INDEX 6942 SAMPLE 13824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	NOT GIVEN	PRAIRIE BELL	RABEL
WELL NAME	NELSON NO. 1	JOHN HASTEDT NO. 1	HATTIE RABEL NO. 1
LOCATION	I&GN R.R. SUR. 43	BENJAMIN PARKER SUR. A-450	JOHN H. DABNEY SUR. A-17
OWNER	COYLE-CONCORD OIL CO.	PRAIRIE PRODUCING CO.	EXXON CO., U.S.A.
COMPLETED	NOT GIVEN	03/09/73	06/19/72
SAMPLED	08/25/32	02/--/75	11/27/73
FORMATION	NOT GIVEN	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	11012	7650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4320	2634
OPEN FLOW, MCFD	NOT GIVEN	8700	25000
COMPONENT, MOLE PCT			
METHANE	99.4	82.2	80.8
ETHANE	0.0	7.8	5.6
PROPANE	---	3.7	4.5
N-BUTANE	---	0.8	1.7
ISOBUTANE	---	0.7	1.7
N-PENTANE	---	0.2	0.8
ISOPENTANE	---	0.3	1.1
CYCLOPENTANE	---	TRACE	0.4
HEXANES PLUS	---	0.1	1.1
NITROGEN	0.0	0.5	0.8
OXYGEN	0.3	TRACE	0.1
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	3.7	1.4
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1007	1145	1303
SPECIFIC GRAVITY	0.559	0.703	0.767

	INDEX 6943 SAMPLE 12450	INDEX 6944 SAMPLE 12451	INDEX 6945 SAMPLE 12452
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	RAMSEY E	RAMSEY E	RAMSEY E
WELL NAME	ADA M. WINTERMANN NO. 1	METTIE POOL ET AL. NO. 1	LOREASE PRESMEYER NO. 1
LOCATION	PETER K. BARTLESON SUR. A-84	PETER K. BARTLESON SUR. A-84	PETER K. BARTLESON SUR. A-84
OWNER	NATURAL RESOURCES CORP.	NATURAL RESOURCES CORP.	NATURAL RESOURCES CORP.
COMPLETED	11/30/69	08/22/69	09/17/69
SAMPLED	10/13/70	10/13/70	10/13/70
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10692	9334	8919
WELLHEAD PRESSURE,PSIG	3614	3131	2950
OPEN FLOW, MCFD	10400	10300	9000
COMPONENT, MOLE PCT			
METHANE	88.1	86.2	84.1
ETHANE	5.6	5.7	5.7
PROPANE	2.0	3.4	4.0
N-BUTANE	0.4	0.7	1.0
ISOBUTANE	0.5	0.7	0.9
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.1	0.1	0.6
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	0.6	0.8	1.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	1.8	1.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1094	1134	1198
SPECIFIC GRAVITY	0.650	0.669	0.705

	INDEX 6946 SAMPLE 12453	INDEX 6947 SAMPLE 12454	INDEX 6948 SAMPLE 15239
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	RAMSEY E	RAMSEY E	RHINEHART
WELL NAME	METTIE POOL ET AL. NO. 1	LOREASE PRESMEYER NO. 1	HUNN NO. 1
LOCATION	PETER K. BARTLESON SUR. A-84	PETER K. BARTLESON SUR. A-28	I&GN RR SUR. 11, A-297
OWNER	NATURAL RESOURCES CORP.	NATURAL RESOURCES CORP.	GUEST & WOLFSON CO.
COMPLETED	08/22/69	09/17/69	02/27/76
SAMPLED	10/13/70	10/13/70	03/--/78
FORMATION	EOCE-WILCOX	EOCE-WILCOX	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8906	9113	3357
WELLHEAD PRESSURE,PSIG	2945	2973	1344
OPEN FLOW, MCFD	15600	11900	7000
COMPONENT, MOLE PCT			
METHANE	86.8	87.2	99.0
ETHANE	5.5	5.6	0.1
PROPANE	3.2	2.8	TRACE
N-BUTANE	0.7	0.4	0.0
ISOBUTANE	0.7	0.6	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.7	0.9	0.7
OXYGEN	0.2	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.8	0.2
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1135	1111	1005
SPECIFIC GRAVITY	0.645	0.655	0.560

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6949 SAMPLE 4085	INDEX 6950 SAMPLE 5248	INDEX 6951 SAMPLE 14748
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	ROCK ISLAND	ROCK ISLAND N	ROSS-BENNER
WELL NAME	FELIX FEHRENKAMP NO. 1	H. R. HOUCK WELL NO. 1	ROSS-BENNER NO. 1-T
LOCATION	NOT GIVEN	SEC. 53, TRACT A, IG&N SUR.	SA&MG SUR. 15, A-877
OWNER	SINCLAIR PRAIRIE OIL CO.	SINCLAIR OIL & GAS CO.	PETRO-LEWIS CORP.
COMPLETED	04/18/45	03/13/52	02/19/73
SAMPLED	06/18/45	06/20/52	05/24/76
FORMATION	EOCE-WILCOX	MIOC-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9681	2573	3180
WELLHEAD PRESSURE,PSIG	3350	1038	860
OPEN FLOW, MCFD	6000	50000	18000
COMPONENT, MOLE PCT			
METHANE	79.9	98.7	98.8
ETHANE	16.5	0.1	0.1
PROPANE	---	0.1	TRACE
N-BUTANE	---	TRACE	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	TRACE	0.0
NITROGEN	0.7	0.9	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.9	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1105	1008	1003
SPECIFIC GRAVITY	0.667	0.563	0.560

	INDEX 6952 SAMPLE 14749	INDEX 6953 SAMPLE 14750	INDEX 6954 SAMPLE 3695
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	ROSS-BENNER	ROSS-BENNER	SHERIDAN
WELL NAME	ROSS BENNER NO. 1-C	ROSS BENNER NO. 5	PLOW REALTY NO. 3
LOCATION	SA&MG SUR. 15, A-877	SA&MG SUR.15, A-877	O. K. WINN SUR.
OWNER	PETRO-LEWIS CORP.	PETRO-LEWIS CORP.	SHELL OIL CO.
COMPLETED	02/19/73	06/25/74	04/25/41
SAMPLED	05/24/76	05/24/76	10/28/43
FORMATION	MIOC-	MIOC-CATAHOULA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2100	2100	8740
WELLHEAD PRESSURE,PSIG	801	801	3840
OPEN FLOW, MCFD	3800	3800	9300
COMPONENT, MOLE PCT			
METHANE	99.0	98.3	74.1
ETHANE	0.1	0.1	23.2
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.8	1.3	0.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	2.0
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1005	998	1166
SPECIFIC GRAVITY	0.559	0.563	0.692

	INDEX 6955 SAMPLE 4734	INDEX 6956 SAMPLE 11998	INDEX 6957 SAMPLE 13821
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	SHERIDAN	SHERIDAN	SKULL CREEK
WELL NAME	HILL BANK & TRUST NO. 2	SHERIDAN GAS UNIT NO. 60	CARRIE STAFFORD NO. 1
LOCATION	CHEETHAM SUR. TRACT NO. 6	FRANCIS MATHAR SUR. A-400	CHARLES WINFREE SUR., A-585
OWNER	SHELL OIL CO.	SHELL OIL CO.	TERRA RESOURCES, INC.
COMPLETED	01/07/49	01/07/68	08/26/72
SAMPLED	05/02/49	08/14/69	11/20/73
FORMATION	EOCE-WILCOX	EOCE-YEGUA Q	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9386	5290	1740
WELLHEAD PRESSURE,PSIG	2646	1990	842
OPEN FLOW, MCFD	7600	16500	5358
COMPONENT, MOLE PCT			
METHANE	81.8	92.5	97.4
ETHANE	6.8	4.1	0.1
PROPANE	4.8	1.6	0.2
N-BUTANE	1.2	0.3	TRACE
ISOBUTANE	1.0	0.3	0.2
N-PENTANE	0.4	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.1	0.3
NITROGEN	0.9	0.6	1.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	0.2	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1197	1090	1028
SPECIFIC GRAVITY	0.719	0.613	0.580

	INDEX 6958 SAMPLE 3967	INDEX 6959 SAMPLE 5223	INDEX 6960 SAMPLE 13550
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	SUBLIME	TAIT	THIRD CREEK
WELL NAME	D. L. UNDERWOOD NO. 1	TAIT NO. D-1	BOX ELDER "C" NO. 1
LOCATION	MULDOON SUR. NO. 30	NOT GIVEN	SEC. 11, T2S, R65W
OWNER	TIDEWATER ASSOCIATED OIL CO.	SUPERIOR OIL CO.	KOCH EXPLORATION CO.
COMPLETED	11/28/44	04/15/51	05/18/72
SAMPLED	01/29/45	02/03/52	02/21/73
FORMATION	EOCE-WILCOX	EOCE-WILCOX L	CRET-J SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9448	10715	8179
WELLHEAD PRESSURE,PSIG	940	4800	1400
OPEN FLOW, MCFD	1440	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	80.6	87.3	66.7
ETHANE	14.7	6.2	12.5
PROPANE	---	2.0	8.5
N-BUTANE	---	0.4	4.3
ISOBUTANE	---	0.4	1.8
N-PENTANE	---	0.1	1.5
ISOPENTANE	---	0.3	1.4
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	0.1	0.6	1.0
OXYGEN	0.0	0.1	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	4.6	2.5	1.6
HELIUM	0.00	TRACE	0.03
HEATING VALUE*	1080	1096	1479
SPECIFIC GRAVITY	0.672	0.655	0.885

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6961 SAMPLE 15163	INDEX 6962 SAMPLE 15164	INDEX 6963 SAMPLE 15165
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	THOMAS	THOMAS	THOMAS
WELL NAME	GARDNER DUNCAN NO. 1C	GARDNER DUNCAN NO. 2	GARDNER DUNCAN NO. 1T
LOCATION	JAMES ROSS SUR., A-39	JAMES ROSS SUR., A-39	JAMES ROSS SUR., A-39
OWNER	GAS PRODUCING ENTERPRISES	GAS PRODUCING ENTERPRISES	GAS PRODUCING ENTERPRISES
COMPLETED	02/26/76	03/28/76	02/26/76
SAMPLED	12/03/77	12/03/77	12/03/77
FORMATION	MIOC-THOMAS	MIOC-THOMAS	MIOC-THOMAS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2170	2296	2303
WELLHEAD PRESSURE,PSIG	750	850	966
OPEN FLOW, MCFD	1000	1000	31000
COMPONENT, MOLE PCT			
METHANE	97.8	88.1	98.3
ETHANE	0.2	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.9	9.3	1.5
OXYGEN	0.0	2.3	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	995	894	998
SPECIFIC GRAVITY	0.568	0.608	0.567

	INDEX 6964 SAMPLE 3989	INDEX 6965 SAMPLE 8141	INDEX 6966 SAMPLE 9962
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COMANCHE	COMANCHE
FIELD	WILDCAT	ENERGY	MITTIE
WELL NAME	C. G. GLASSCOCK NO. 2	C. T. RUDD NO. 2	B. L. BARNES NO. 1
LOCATION	J. COLLIER SUR., A-148	BENJAMIN JOHNSON SUR.	SEC. 18, BLK 2, HATCRR SUR.
OWNER	SINCLAIR PRAIRIE OIL CO.	TERRELL PETROLEUM CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	11/29/44	08/--/57	01/14/64
SAMPLED	03/11/75	08/09/61	06/26/65
FORMATION	EOCE-WILCOX	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	9177	2635	2629
WELLHEAD PRESSURE,PSIG	A75	1146	836
OPEN FLOW, MCFD	4900	39000	1509
COMPONENT, MOLE PCT			
METHANE	73.7	87.6	77.2
ETHANE	23.6	5.1	9.3
PROPANE	---	1.3	4.5
N-BUTANE	---	0.3	0.9
ISOBUTANE	---	0.4	0.8
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	0.0	4.8	6.2
OXYGEN	0.0	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.7	0.1	0.3
HELIUM	0.00	0.20	0.12
HEATING VALUE*	1169	1053	1150
SPECIFIC GRAVITY	0.698	0.632	0.711

	INDEX 6967 SAMPLE 12626	INDEX 6968 SAMPLE 4804	INDEX 6969 SAMPLE 8881
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COMANCHE	COMANCHE	CONCHO
FIELD	SIPE SPRINGS	SYDNEY	NOT GIVEN
WELL NAME	F. B. WHITLOCK NO. 1	W. D. CHAPMAN NO. 1	CARTER NO. A-1
LOCATION	5 MI. NW SIPE SPRING	SEC. 43, ETRR CO. SUR.	SUR. 276, A279
OWNER	COASTAL STATES GAS PROD. CO.	SOHIO PETROLEUM CO.	SUNRAY D-X OIL CO.
COMPLETED	--/--/59	07/11/49	NOT GIVEN
SAMPLED	11/13/75	11/14/49	02/27/63
FORMATION	PENN-MARBLE FALLS	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	410
DEPTH, FEET	2720	2159	NOT GIVEN
WELLHEAD PRESSURE,PSIG	160	922	NOT GIVEN
OPEN FLOW, MCFD	250	6600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.8	77.4	66.3
ETHANE	15.5	6.6	11.1
PROPANE	10.0	2.6	7.9
N-BUTANE	2.9	0.6	3.1
ISOBUTANE	1.6	0.1	1.2
N-PENTANE	0.7	0.2	0.7
ISOPENTANE	0.6	0.1	0.6
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.6	0.2	0.2
NITROGEN	4.6	11.6	7.1
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.4	0.2	1.1
HELIUM	0.07	0.32	0.30
HEATING VALUE*	1423	1018	1306
SPECIFIC GRAVITY	0.869	0.684	0.833

	INDEX 6970 SAMPLE 8880	INDEX 6971 SAMPLE 9989	INDEX 6972 SAMPLE 8879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CONCHO
FIELD	PAINT ROCK S	PAINT ROCK W	SPECK N
WELL NAME	W. F. MEIXNER	C. E. NORMAN NO. 3	R. L. CARTER A-1
LOCATION	SEC. 8, H.C. MCGLASSON SUR.	SEC. 260, EIKEL SUR.	SUR. 276, A-279
OWNER	SUNRAY DX OIL CO.	SUN OIL CO.	SUNRAY DX OIL CO.
COMPLETED	12/08/61	02/28/64	07/31/61
SAMPLED	02/27/63	07/21/65	02/27/63
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	3146	3551	3573
WELLHEAD PRESSURE,PSIG	1420	1325	NOT GIVEN
OPEN FLOW, MCFD	4950	6260	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	74.1	51.6
ETHANE	7.4	7.4	15.8
PROPANE	3.5	3.9	14.4
N-BUTANE	1.0	1.1	6.4
ISOBUTANE	0.5	0.8	2.3
N-PENTANE	0.2	0.3	1.1
ISOPENTANE	0.1	0.3	1.7
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.3	0.8
NITROGEN	11.8	11.0	3.8
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	2.2	0.0	0.0
CARBON DIOXIDE	0.2	0.4	1.7
HELIUM	0.43	0.35	0.10
HEATING VALUE*	1055	1089	1645
SPECIFIC GRAVITY	0.709	0.727	1.020

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6973 SAMPLE 8877		INDEX 6974 SAMPLE 12827		INDEX 6975 SAMPLE 4846	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CONCHO		COOKE		COOKE	
FIELD	SPECK S		DELAWARE BEND		GATEWOOD	
WELL NAME	FLORENCE HALL NO. 1		YOUNG-WILLIAMS NO. 1		THOMASON NO. 1	
LOCATION	LOUISA ROBBINS SUR. NO. 1		NOT GIVEN		T. D. BELL SUR. NO. A-052	
OWNER	SUNRAY DX OIL CO.		MAGNA OIL CORP.		R. B. HOLLANDSWORTH, ET AL.	
COMPLETED	02/22/62		--/--/62		09/23/49	
SAMPLED	02/27/63		05/17/71		02/20/50	
FORMATION	PENN-STRAWN C-1		ORDO-OIL CREEK		NOT GIVEN	
GEOLOGIC PROVINCE CODE	410		350		350	
DEPTH, FEET	3812		14300		2142	
WELLHEAD PRESSURE,PSIG	1500		1200		750	
OPEN FLOW, MCFD	39000		NOT GIVEN		1000	
COMPONENT, MOLE PCT						
METHANE	74.9		87.2		59.7	
ETHANE	6.7		5.4		2.7	
PROPANE	4.0		2.8		1.2	
N-BUTANE	1.3		1.0		0.3	
ISOBUTANE	0.8		0.4		0.2	
N-PENTANE	0.4		0.4		TRACE	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.3		0.0	
NITROGEN	10.5		0.9		34.6	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		0.3		0.5	
HELIUM	0.33		0.02		0.31	
HEATING VALUE*	1098		1165		711	
SPECIFIC GRAVITY	0.724		0.663		0.741	

	INDEX 6976 SAMPLE 4900		INDEX 6977 SAMPLE 4944		INDEX 6978 SAMPLE 5493	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COOKE		COOKE		CORYELL	
FIELD	MEADORS		NOT GIVEN		WILDCAT	
WELL NAME	S. D. MEADORS NO. 3		S. D. MEADORS NO. 3		C. E. GOTCHER	
LOCATION	C. W. LONG SUR. NO. 570		NOT GIVEN		J. J. ALBRITTON SUR. 160 AC.	
OWNER	MIDLAND OIL CO.		MIDLAND OIL CO.		T. S. WHITIS	
COMPLETED	03/20/50		03/29/50		--/--/51	
SAMPLED	04/02/50		10/05/50		05/19/53	
FORMATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	350		350		415	
DEPTH, FEET	1464		1500		1450	
WELLHEAD PRESSURE,PSIG	340		340		280	
OPEN FLOW, MCFD	2190		2190		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.6		49.6		88.0	
ETHANE	4.1		3.6		0.1	
PROPANE	3.3		3.2		0.0	
N-BUTANE	0.9		0.9		0.1	
ISOBUTANE	0.3		0.3		0.0	
N-PENTANE	0.2		0.3		0.0	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	---		0.1		0.0	
HEXANES PLUS	0.3		0.2		0.0	
NITROGEN	---		40.9		10.3	
OXYGEN	0.2		0.1		0.6	
ARGON	---		0.1		0.1	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.1		0.2		0.4	
HELIUM	0.72		0.70		0.42	
HEATING VALUE*	701		711		897	
SPECIFIC GRAVITY	0.637		0.805		0.605	

	INDEX 6979 SAMPLE 15847		INDEX 6980 SAMPLE 14029		INDEX 6981 SAMPLE 14030	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COTTLE		COTTLE		COTTLE	
FIELD	PIPPEN SE		PROVIDENCE		PROVIDENCE	
WELL NAME	GILBREATH NO. 1R		J.J. GIBSON NO. 4		J.J. GIBSON NO. 3	
LOCATION	MARY A. COOK SUR. A-65		SEC. 38, F.P.KNOTT SUR.		SEC. 34, F.P.KNOTT SUR.	
OWNER	HARKEN OIL & GAS CORP.		GUS EDWARDS		GUS EDWARDS	
COMPLETED	10/03/78		06/21/74		06/18/74	
SAMPLED	11/28/78		06/21/74		06/18/74	
FORMATION	PENN-CONGLOMERATE		PENN-ATOKA		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	6922		6146		6158	
WELLHEAD PRESSURE,PSIG	2200		1900		2059	
OPEN FLOW, MCFD	4074		4600		8500	
COMPONENT, MOLE PCT						
METHANE	82.2		79.3		80.8	
ETHANE	10.0		9.6		9.8	
PROPANE	3.8		4.4		4.5	
N-BUTANE	0.9		1.2		1.0	
ISOBUTANE	0.4		0.8		0.6	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.3		0.6		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.3		0.1	
NITROGEN	1.7		3.1		2.6	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.2	
HELIUM	0.12		0.10		0.10	
HEATING VALUE*	1176		1210		1183	
SPECIFIC GRAVITY	0.681		0.715		0.693	

	INDEX 6982 SAMPLE 14667		INDEX 6983 SAMPLE 14876		INDEX 6984 SAMPLE 9919	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COTTLE		COTTLE		COTTLE	
FIELD	PROVIDENCE		STESCOTT		TIPPEN	
WELL NAME	B. J. BROWNING NO. 1		T. B. HAVINS NO. 1		PERKINS	
LOCATION	SEC. 2, P.B. BROTHERS SUR.		G. W. HUFF SUR.		A. G. LANE SUR. NO. A-1567	
OWNER	JACK GRIMM		BASS ENTERPRISES PROD. CO.		ROBINSON BROTHERS OIL PROD.	
COMPLETED	NOT GIVEN		02/28/76		07/10/64	
SAMPLED	05/06/76		12/21/76		05/21/65	
FORMATION	NOT GIVEN		PENN-ATOKA		PENN-MORROW	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	NOT GIVEN		6188		6732	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1775		2300	
OPEN FLOW, MCFD	NOT GIVEN		5000		22500	
COMPONENT, MOLE PCT						
METHANE	80.7		74.2		84.8	
ETHANE	10.2		10.0		8.3	
PROPANE	4.4		6.2		2.8	
N-BUTANE	1.0		2.0		0.7	
ISOBUTANE	0.6		0.9		0.5	
N-PENTANE	0.1		0.4		0.1	
ISOPENTANE	0.3		0.6		0.4	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	2.2		5.3		1.7	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	0.09		0.13		0.07	
HEATING VALUE*	1191		1246		1156	
SPECIFIC GRAVITY	0.693		0.759		0.668	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6985 SAMPLE 9923	INDEX 6986 SAMPLE 8673	INDEX 6987 SAMPLE 8674
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	ABELL	ARMER	ARMER
WELL NAME	MOBIL GLENN NO. 7	M. R. MCKNIGHT NO. 56	M. R. MCKNIGHT NO. 83
LOCATION	SEC. 20, BLK. 1, H&TC SUR.	SEC. 15, BLK. B-17, PSL SUR.	SEC. 20, BLK. B-17, PSL SUR.
OWNER	BELL PETROLEUM CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	02/02/62	11/26/61	08/11/62
SAMPLED	06/14/65	09/15/62	09/15/62
FORMATION	ORDO-MONTOYA	PERM-	ORDO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5135	6090	6243
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	1180
OPEN FLOW, MCFD	14000	120	170
COMPONENT, MOLE PCT			
METHANE	89.5	73.4	84.8
ETHANE	4.9	11.3	7.3
PROPANE	1.9	7.3	3.3
N-BUTANE	0.7	3.0	0.9
ISOBUTANE	0.2	1.1	0.4
N-PENTANE	0.1	0.7	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	1.8	1.4	2.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.5
HELIUM	TRACE	0.02	0.05
HEATING VALUE*	1093	1146	1146
SPECIFIC GRAVITY	0.632	0.792	0.669

	INDEX 6988 SAMPLE 12796	INDEX 6989 SAMPLE 14161	INDEX 6990 SAMPLE 2053
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	BLOCK 27	BLOCK 27	CRIER-MCELROY NO. 1
WELL NAME	W. N. WADDELL ET AL. NO. 889	ELL LONG NO. 13	SEC. 198, CCSDRGNG SUR.
LOCATION	SEC. 25, BLK. B-21, PSL SUR.	SEC. 25, BLK. 27, PSL SUR.	GULF PRODUCTION CO.
OWNER	GULF OIL CO.-U.S.	AMOCO PRODUCTION CO.	10/25/26
COMPLETED	03?--/65	03/08/73	06/17/30
SAMPLED	04/27/71	10/03/74	NOT GIVEN
FORMATION	ORDO-MCKEE	PERM-TUBB	430
GEOLOGIC PROVINCE CODE	430	430	2700
DEPTH, FEET	5800	4200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	200	
COMPONENT, MOLE PCT			
METHANE	93.5	53.8	60.2
ETHANE	2.9	27.8	26.7
PROPANE	1.2	0.0	---
N-BUTANE	0.6	4.1	---
ISOBUTANE	0.1	3.2	---
N-PENTANE	0.2	2.6	---
ISOPENTANE	0.1	3.5	---
CYCLOPENTANE	0.1	0.4	---
HEXANES PLUS	0.2	1.5	---
NITROGEN	1.0	0.0	7.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.6	---
CARBON DIOXIDE	0.1	2.4	5.8
HELIUM	0.04	0.03	0.05
HEATING VALUE*	1041	1646	1088
SPECIFIC GRAVITY	0.609	0.993	0.775

	INDEX 6991 SAMPLE 12795	INDEX 6992 SAMPLE 12743	INDEX 6993 SAMPLE 12798
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	CRAWAR	SAND HILLS	SAND HILLS
WELL NAME	J. R. TUBB N NO. 1	P. J. LEA NO. 30	W. N. WADDELL ET AL.NO.846-J
LOCATION	SEC. 9, BLK. B-20, PSL SUR.	SEC. 4, BLK. 32, PSL SUR.	SEC. 27, BLK. B-26, PSL SUR.
OWNER	GULF OIL CO.-U.S.	MOBIL OIL CORP.	GULF OIL CO.-U.S.
COMPLETED	10?--/60	01/21/57	01/07/63
SAMPLED	04/28/71	03/31/71	04/27/71
FORMATION	DEVO-	-MCKNIGHT	PERM-JUNKINS
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6450	3332	2700
WELLHEAD PRESSURE,PSIG	1151	900	900
OPEN FLOW, MCFD	32000	NOT GIVEN	115000
COMPONENT, MOLE PCT			
METHANE	90.0	84.9	84.6
ETHANE	4.5	6.7	7.0
PROPANE	1.6	2.0	2.9
N-BUTANE	0.6	1.7	0.7
ISOBUTANE	0.2	0.0	0.4
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	0.8	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.0	1.3	1.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.6	0.3
CARBON DIOXIDE	1.5	1.7	1.7
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1048	1136	1115
SPECIFIC GRAVITY	0.636	0.679	0.668

	INDEX 6994 SAMPLE 14446	INDEX 6995 SAMPLE 1831	INDEX 6996 SAMPLE 12783
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	T. E. BARR	W. N. WADDELL	WADDELL
WELL NAME	REED BUTLER NO. 1	W. N. WADDELL NO. 7	W. N. WADDELL NO. 899
LOCATION	SEC. 10, BLK. 4, H&TC SUR.	SEC. 10, BLK. B-23	SEC. 9, BLK. B-23, PSL SUR.
OWNER	TEXAS OIL & GAS CORP.	GULF PRODUCTION CO.	GULF OIL CO.-U.S.
COMPLETED	04/21/74	07/18/29	11/05/64
SAMPLED	08/29/75	08/05/29	04/23/71
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-GRAYBERG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5454	2972	3022
WELLHEAD PRESSURE,PSIG	2168	1150	357
OPEN FLOW, MCFD	4250	5000	2147
COMPONENT, MOLE PCT			
METHANE	95.6	77.2	80.5
ETHANE	2.4	19.2	9.4
PROPANE	0.6	---	4.2
N-BUTANE	0.1	---	1.0
ISOBUTANE	0.1	---	0.6
N-PENTANE	0.1	---	0.3
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.8	3.0	1.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.01	0.05	0.04
HEATING VALUE*	1041	1126	1174
SPECIFIC GRAVITY	0.588	0.666	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6997 SAMPLE 2098	INDEX 6998 SAMPLE 4876	INDEX 6999 SAMPLE 2505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CROCKETT	CROCKETT
FIELD	WEST TEXAS	CLARA COUCH	DONHAM
WELL NAME	J. B. TUBB NO. 1	OWENS C NO. 1	ROBERT MASSIE NO. 1
LOCATION	SEC. 8, BLK. B-27, PS LAND	SEC. 18, BLK. GG	SEC. 47, BLK. UV
OWNER	GULF PRODUCTION CO.	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO. ETAL
COMPLETED	DRILL STEM TEST	10/22/49	05/30/32
SAMPLED	08/21/30	04/19/50	06/15/32
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	5825	1269
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2718	450
OPEN FLOW, MCFD	NOT GIVEN	35000	18
COMPONENT, MOLE PCT			
METHANE	83.3	79.2	71.8
ETHANE	12.7	9.8	15.8
PROPANE	---	4.7	---
N-BUTANE	---	1.5	---
ISOBUTANE	---	0.8	---
N-PENTANE	---	0.6	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.5	---
NITROGEN	2.6	1.9	10.5
OXYGEN	0.2	0.1	0.7
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.8	0.9
HELIUM	0.10	0.06	0.32
HEATING VALUE*	1071	1232	1010
SPECIFIC GRAVITY	0.639	0.727	0.687

	INDEX 7000 SAMPLE 8600	INDEX 7001 SAMPLE 9641	INDEX 7002 SAMPLE 5619
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	ANGUS	BAGGETT	BLOCK 56
WELL NAME	T. E. GLASSCOCK	E. G. BAGGETT NO. 1	UNIV. CROCKETT 127 NO. 1
LOCATION	SEC. 4, BLK. H, GC&S SUR.	SEC. 29, BLK. F, GC&SF SUR.	SEC. 7, BLK. 56
OWNER	SUNRAY DX OIL CO.	SIGNAL OIL & JON L. CRAWFORD	SINCLAIR OIL & GAS CO.
COMPLETED	03/15/62	04/02/64	04/01/54
SAMPLED	07/02/62	11/23/64	05/09/54
FORMATION	PENN-STRAWN	PENN-CANYON	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8680	7570	8236
WELLHEAD PRESSURE,PSIG	3110	3850	3000
OPEN FLOW, MCFD	4450	1600	2500
COMPONENT, MOLE PCT			
METHANE	91.9	91.8	77.4
ETHANE	5.1	5.0	11.2
PROPANE	0.8	1.2	5.2
N-BUTANE	0.2	0.2	1.3
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.7	0.4	3.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.8	0.4
HELIUM	0.05	0.02	0.09
HEATING VALUE*	1057	1074	1216
SPECIFIC GRAVITY	0.608	0.611	0.722

	INDEX 7003 SAMPLE 12226	INDEX 7004 SAMPLE 5046	INDEX 7005 SAMPLE 1278
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	BROWN BASSETT	CLARA COUCH	CROCKETT COUNTY
WELL NAME	MITCHELL NO. 1-111	OWENS D NO. 1	NOT GIVEN
LOCATION	SEC. 111, BLK. 1, I&GN SUR.	SEC. 17, BLK. 17, GS&SF SUR.	SEC. 50, BLK. YZ, GC&SF SUR.
OWNER	SHELL OIL CO.	CITIES SERVICE OIL CO.	TEXAS CO.
COMPLETED	11/28/67	01/25/51	01/--/26
SAMPLED	03/16/70	04/07/51	04/20/26
FORMATION	ORDO-BROMIDE	PENN-CISCO	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12700	5920	1699
WELLHEAD PRESSURE,PSIG	1413	2731	180
OPEN FLOW, MCFD	11000	40000	1000
COMPONENT, MOLE PCT			
METHANE	96.3	79.1	67.3
ETHANE	0.6	9.6	18.0
PROPANE	TRACE	4.5	---
N-BUTANE	0.0	1.5	---
ISOBUTANE	0.0	0.5	---
N-PENTANE	0.0	0.5	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.4	---
NITROGEN	0.5	2.0	13.4
OXYGEN	0.1	TRACE	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.3	1.6	0.7
HELIUM	0.02	0.05	0.25
HEATING VALUE*	987	1203	1004
SPECIFIC GRAVITY	0.581	0.722	0.707

	INDEX 7006 SAMPLE 13274	INDEX 7007 SAMPLE 10586	INDEX 7008 SAMPLE 11235
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	DENISON	DEPAUL	DEPAUL
WELL NAME	L. M. HUDSPETH NO. 1	MCMULLAN NO. 1	MEYBIN NO. 1
LOCATION	SEC. 6, J. W. ODEM SUR.	SEC. 3, BLK. F, GC&SF SUR.	SEC. 15, BLK.KL, GC&SF SUR.
OWNER	TEXACO INC.	DELTA DRILLING CO.	DELTA DRILLING CO.
COMPLETED	07/06/71	12/14/65	12/01/65
SAMPLED	06/21/72	06/03/66	12/02/67
FORMATION	NOT GIVEN	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7655	10001	7844
WELLHEAD PRESSURE,PSIG	2100	NOT GIVEN	2379
OPEN FLOW, MCFD	331	6400	5300
COMPONENT, MOLE PCT			
METHANE	91.2	90.3	84.2
ETHANE	5.1	6.1	8.9
PROPANE	1.2	1.5	2.7
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	TRACE	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	0.7	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.9
HELIUM	0.07	0.03	0.04
HEATING VALUE*	1066	1082	1146
SPECIFIC GRAVITY	0.609	0.619	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7009 SAMPLE 15380		INDEX 7010 SAMPLE 11490		INDEX 7011 SAMPLE 12741	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CROCKETT		CROCKETT		CROCKETT	
FIELD	ELKHORN		HOWARD DRAW		HUNT-BAGGETT	
WELL NAME	J. M. SHANNON A NO. 18		TODD RANCH NO. 1-A		BAGGETT NO. A-1	
LOCATION	SEC. 21, BLK. U, VGC&SP SUR.		NOT GIVEN		SEC. 24, BLK. F	
OWNER	CONTINENTAL OIL CO.		MCGRATH & SMITH INC., ET AL.		AMERICAN PETROFINA CO.OF TEx	
COMPLETED	12/06/76		--/--/67		05/18/60	
SAMPLED	09/19/78		05/10/68		03/24/71	
FORMATION	PERM-QUEEN		PERM-SAN ANDRES		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	1110		1165		9040	
WELLHEAD PRESSURE,PSIG	326		409		1200	
OPEN FLOW, MCFD	4900		26500		1500	
COMPONENT, MOLE PCT						
METHANE	71.8		77.6		95.9	
ETHANE	11.5		12.4		1.4	
PROPANE	2.3		0.6		0.1	
N-BUTANE	0.4		TRACE		0.0	
ISOBUTANE	0.5		0.4		TRACE	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.2		0.4		0.0	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	9.8		6.9		1.0	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	3.0		0.5		0.0	
CARBON DIOXIDE	0.1		0.6		1.3	
HELIUM	0.16		0.18		0.03	
HEATING VALUE*	1061		1063		1004	
SPECIFIC GRAVITY	0.716		0.674		0.582	

	INDEX 7012 SAMPLE 12955		INDEX 7013 SAMPLE 10476		INDEX 7014 SAMPLE 9642	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CROCKETT		CROCKETT		CROCKETT	
FIELD	INGHAM		J M		JOE T	
WELL NAME	INGHAM NO. 1-A		MITCHELL NO. 1		E. G. BAGGETT NO. 1-T	
LOCATION	SEC. 1, BLK. 3F, T&CRR SUR.		SEC. 3, BLK. A-6, TCRR SUR.		SEC. 29, BLK. F, GC&SF SUR.	
OWNER	SOHIO PETROLEUM CO.		SHELL OIL CO.		SIGNAL OIL & JON L. CRAWFORD	
COMPLETED	11/--/60		10/18/65		04/14/64	
SAMPLED	08/18/71		03/24/66		11/23/64	
FORMATION	DEVO-		ORDO-ELLENBURGER		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	7501		13700		9188	
WELLHEAD PRESSURE,PSIG	646		4800		2672	
OPEN FLOW, MCFD	21500		130000		11000	
COMPONENT, MOLE PCT						
METHANE	90.1		77.9		95.6	
ETHANE	5.1		0.3		1.9	
PROPANE	1.7		0.0		0.3	
N-BUTANE	0.5		0.0		0.0	
ISOBUTANE	0.2		0.0		0.0	
N-PENTANE	0.1		0.0		0.0	
ISOPENTANE	0.2		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	0.1		0.0		0.0	
NITROGEN	1.0		1.2		0.7	
OXYGEN	0.0		0.2		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		20.3		1.4	
HELIUM	0.04		0.02		0.04	
HEATING VALUE*	1090		795		1010	
SPECIFIC GRAVITY	0.626		0.759		0.584	

	INDEX 7015 SAMPLE 12714		INDEX 7016 SAMPLE 12715		INDEX 7017 SAMPLE 12664	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CROCKETT		CROCKETT		CROCKETT	
FIELD	JOE T		JOE T		LANCASTER HILL	
WELL NAME	SIGNAL-BAGGETT NO. 1-T		SIGNAL-BAGGETT NO. 1-C		UNIVERSITY LANDS E NO. 2	
LOCATION	SEC. 29, BLK. F, GC&SF SUR.		SEC. 29, BLK. F, GC&SF SUR.		SEC. 11,BLK. 29,UNIV.LD.SUR.	
OWNER	TEXAM OIL CORP.		TEXAM OIL CORP.		PHILLIPS PETROLEUM CO.	
COMPLETED	04/--/64		06/--/64		NOT GIVEN	
SAMPLED	03/16/71		03/16/71		02/10/71	
FORMATION	PENN-STRAWN		PENN-CANYON		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	9246		7973		6869	
WELLHEAD PRESSURE,PSIG	1150		856		1770	
OPEN FLOW, MCFD	3050		387		19500	
COMPONENT, MOLE PCT						
METHANE	90.4		91.7		85.4	
ETHANE	2.0		4.5		6.4	
PROPANE	0.2		1.1		2.6	
N-BUTANE	0.0		0.1		0.7	
ISOBUTANE	0.0		0.2		0.4	
N-PENTANE	0.0		TRACE		0.4	
ISOPENTANE	0.0		0.1		0.1	
CYCLOPENTANE	0.0		TRACE		0.1	
HEXANES PLUS	0.0		0.1		0.3	
NITROGEN	4.9		1.0		2.0	
OXYGEN	0.1		0.1		0.0	
ARGON	0.1		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		1.0		1.6	
HELIUM	0.03		0.02		0.05	
HEATING VALUE*	957		1058		1125	
SPECIFIC GRAVITY	0.607		0.610		0.671	

	INDEX 7018 SAMPLE 15638		INDEX 7019 SAMPLE 12166		INDEX 7020 SAMPLE 10807	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CROCKETT		CROCKETT		CROCKETT	
FIELD	LAURA HOOVER ESTATE		M.P.I.		MIDWAY LANE	
WELL NAME	LAURA HOOVER NO. 1-2		CONOCO-ENCO NO. 1		CHAMBERS CSL NO. 1	
LOCATION	SEC. 2, BLK. WNN, HOOVER SUR		SEC. 2, N. A. MILLER SUR.		LEAGUE 4, CHAMBERS CLS SUR.	
OWNER	THE CANYON CO.		MALLARD PETROLEUM, INC.		ASHMUN & HILLIARD	
COMPLETED	04/--/79		11/23/68		NOT GIVEN	
SAMPLED	06/06/79		12/31/69		12/03/66	
FORMATION	PENN-CANYON		ORDO-ELLENBURGER		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	6469		8000		7384	
WELLHEAD PRESSURE,PSIG	2400		1800		NOT GIVEN	
OPEN FLOW, MCFD	4200		3800		15000	
COMPONENT, MOLE PCT						
METHANE	75.0		37.9		74.4	
ETHANE	11.7		29.7		10.6	
PROPANE	4.2		21.6		5.5	
N-BUTANE	1.8		4.3		1.4	
ISOBUTANE	1.1		1.5		0.5	
N-PENTANE	0.8		0.5		0.3	
ISOPENTANE	1.2		0.9		0.4	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.6		0.1		0.1	
NITROGEN	1.3		2.8		4.4	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.0		0.3		2.2	
HELIUM	0.09		0.21		0.06	
HEATING VALUE*	1351		1751		1165	
SPECIFIC GRAVITY	0.776		1.056		0.747	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7021 SAMPLE 10074	INDEX 7022 SAMPLE 13574	INDEX 7023 SAMPLE 12687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	MILLER	MILLER RANCH	NOELKE NE
WELL NAME	MILLER RANCH GAS UNIT NO. 1	MILLER RANCH NO. 1-10	SHANNON ESTATE C NO. 1
LOCATION	SEC.6,BLK.O, W. E. JONESSUR.	SEC. 10, BLK 000, GC+F SUR.	SHANNON ESTATE
OWNER	PAN AMERICAN PETROLEUM CORP.	HNG OIL CO.	SUN OIL CO.
COMPLETED	03/23/64	10/13/72	NOT GIVEN
SAMPLED	08/16/65	04/01/73	02/18/71
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11330	11744	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4073	4000	NOT GIVEN
OPEN FLOW, MCFD	20000	455000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.1	84.3	73.3
ETHANE	0.7	0.7	10.8
PROPANE	0.1	0.0	6.1
N-BUTANE	0.0	0.1	2.3
ISOBUTANE	0.0	0.0	1.1
N-PENTANE	0.0	0.0	0.6
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.4
NITROGEN	2.4	7.6	4.2
OXYGEN	0.0	1.2	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.5	5.9	0.1
HELIUM	0.09	0.08	0.04
HEATING VALUE*	9280	870	1297
SPECIFIC GRAVITY	0.631	0.655	0.779

	INDEX 7024 SAMPLE 8666	INDEX 7025 SAMPLE 12770	INDEX 7026 SAMPLE 12771
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA	OZONA	OZONA
WELL NAME	KINCAID NO. 1	VADA BEAN NO. 1	MONTGOMERY NO. 14-1
LOCATION	SEC. 6, BLK. MN, GC&SFRR SUR	10 MI. SW OF OZONA	18 MI. SW OF OZONA
OWNER	DELTA DRILLING CO., ET AL.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	05/--/62	--/--/65	--/--/67
SAMPLED	09/16/62	04/20/71	04/20/71
FORMATION	ORDO-ELLENBURGER	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8300	6229	6416
WELLHEAD PRESSURE,PSIG	2600	1075	NOT GIVEN
OPEN FLOW, MCFD	4500	244	317
COMPONENT, MOLE PCT			
METHANE	85.5	78.8	80.9
ETHANE	5.6	11.1	10.1
PROPANE	2.0	5.6	4.7
N-BUTANE	0.4	1.2	1.1
ISOBUTANE	0.2	0.6	0.7
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.1	1.6	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	0.4	0.4
HELIUM	0.09	0.04	0.05
HEATING VALUE*	1053	1230	1210
SPECIFIC GRAVITY	0.657	0.715	0.700

	INDEX 7027 SAMPLE 12772	INDEX 7028 SAMPLE 12774	INDEX 7029 SAMPLE 12775
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA	OZONA	OZONA
WELL NAME	J. R. BAILEY NO. 1	MONTGOMERY NO. 15-1	ADDIE CLAYTON NO. 1
LOCATION	20 MI. NE OF OZONA	18 MI. SW OF OZONA	20 MI. NE OF OZONA
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/66	NOT GIVEN	--/--/66
SAMPLED	04/20/71	04/20/71	04/20/71
FORMATION	PENN-CANYON	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7698	6438	7455
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	150
OPEN FLOW, MCFD	25	289	495
COMPONENT, MOLE PCT			
METHANE	71.9	81.3	78.0
ETHANE	14.5	9.7	10.8
PROPANE	6.8	4.5	5.3
N-BUTANE	2.2	1.0	0.9
ISOBUTANE	1.0	0.8	0.9
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.3	1.5	2.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.6
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1304	1202	1218
SPECIFIC GRAVITY	0.774	0.696	0.722

	INDEX 7030 SAMPLE 12696	INDEX 7031 SAMPLE 9608	INDEX 7032 SAMPLE 11716
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA NE	OZONA SW	PERNER RANCH
WELL NAME	SINCLAIR CLAYTON NO. 1-11	HELBING NO. 1	PERNER RANCH NO. 1
LOCATION	NOT GIVEN	SEC. 28, BLK. OR, EL&RR SUR.	SEC. 40, BL.2, I&GNRR SUR.
OWNER	TOM BROWN DRILLING CO.	O. H. COBB & TEXAS AMER. OIL	CHAMBERS & KENNEDY
COMPLETED	NOT GIVEN	12/28/62	01/--/68
SAMPLED	02/27/71	10/10/64	12/21/68
FORMATION	PENN-CANYON	PENN-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7370	6372	9414
WELLHEAD PRESSURE,PSIG	800	2000	3500
OPEN FLOW, MCFD	350	3600	13500
COMPONENT, MOLE PCT			
METHANE	76.8	79.1	92.9
ETHANE	10.7	9.3	2.1
PROPANE	5.1	4.3	0.6
N-BUTANE	1.3	0.9	0.2
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.6	0.2	0.0
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	3.5	2.4	2.5
OXYGEN	0.2	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	1.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.9	0.8
HELIUM	0.07	0.04	0.11
HEATING VALUE*	1229	1154	1036
SPECIFIC GRAVITY	0.739	0.699	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7033 SAMPLE 4372	INDEX 7034 SAMPLE 11614	INDEX 7035 SAMPLE 11615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	SHANNON	TIPPETT W	TIPPETT W
WELL NAME	SHANNON ESTATE B NO. 9	TIPPETT NO. 36-1	TIPPETT NO. 36-1
LOCATION	SEC. 22, BLK. 1, GC&SFRR SUR	SEC. 36	SEC. 36
OWNER	SUN OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/04/47	08/08/68	08/08/67
SAMPLED	10/06/47	08/05/68	08/05/68
FORMATION	PERM-	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1690	5050	5050
WELLHEAD PRESSURE,PSIG	700	2034	2034
OPEN FLOW, MCFD	NOT GIVEN	9400	9400
COMPONENT, MOLE PCT			
METHANE	0.9	79.0	79.1
ETHANE	6.3	9.3	9.6
PROPANE	---	4.6	4.7
N-BUTANE	---	1.5	1.4
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.5	0.4
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	89.7	3.7	3.5
OXYGEN	2.6	0.1	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.27	0.08	0.09
HEATING VALUE*	122	1203	1207
SPECIFIC GRAVITY	0.971	0.716	0.714

	INDEX 7036 SAMPLE 14727	INDEX 7037 SAMPLE 13553	INDEX 7038 SAMPLE 15079
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	UNIVERSITY 30-32	VIP	WHITEHEAD
WELL NAME	UNIVERSITY 31-5 NO. 1	V.I. PIERCE-STATE "A" NO. 1	JAKE BEASLEY NO. 1
LOCATION	SEC.5,BLK.31,UNIV.LANDS SUR.	SEC 106 BLK WC, W AGULAR SUR	SEC. 6, BLK. G, GC&SFRR SUR.
OWNER	MCMORAN EXPLORATION CO.	GULF OIL CO.-U.S.	AMOCO PRODUCTION CO.
COMPLETED	05/05/75	10/23/72	03/16/76
SAMPLED	07/01/76	03/01/73	08/24/77
FORMATION	SILU-FUSSELMAN	PERM-CLEARFORK	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8179	2116	9401
WELLHEAD PRESSURE,PSIG	1190	788	2755
OPEN FLOW, MCFD	125	4400	7525
COMPONENT, MOLE PCT			
METHANE	90.6	81.8	95.7
ETHANE	4.8	11.0	1.9
PROPANE	1.4	4.4	0.3
N-BUTANE	0.4	0.8	0.1
ISOBUTANE	0.2	0.6	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	0.6	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.8
HELIUM	0.06	0.04	0.03
HEATING VALUE*	1078	1205	1025
SPECIFIC GRAVITY	0.623	0.686	0.583

	INDEX 7039 SAMPLE 4899	INDEX 7040 SAMPLE 5422	INDEX 7041 SAMPLE 15198
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CULBERSON
FIELD	WILDCAT	WILDCAT	KING EDWARD
WELL NAME	V. I. PIERCE NO. 1	M. MITCHELL NO. 1	BATEMAN STATE NO. 1-29
LOCATION	SEC. 5, BLK. O,CW BROWN SUR.	BLK. 1, I&GN RR SUR.	SEC. 29, BLK. 45, PSL SUR.
OWNER	TEXAS CO.	SUN OIL CO.	AMERICAN QUASAR PET. CO.
COMPLETED	07/25/49	04/03/53	12/20/77
SAMPLED	02/23/50	02/24/53	01/25/78
FORMATION	NOT GIVEN	DEVO-	SILU-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11775	13750	15397
WELLHEAD PRESSURE,PSIG	3000	3675	5150
OPEN FLOW, MCFD	20000	11400	5000
COMPONENT, MOLE PCT			
METHANE	89.8	58.4	94.5
ETHANE	0.7	0.3	0.4
PROPANE	0.2	0.0	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	3.1	0.4	2.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.1
CARBON DIOXIDE	5.8	40.9	2.6
HELIUM	0.10	0.02	0.04
HEATING VALUE*	933	597	965
SPECIFIC GRAVITY	0.631	0.956	0.591

	INDEX 7042 SAMPLE 15199	INDEX 7043 SAMPLE 7609	INDEX 7044 SAMPLE 5514
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CULBERSON	CULBERSON	CULBERSON
FIELD	KING EDWARD	SIGNAL PEAK	WILDCAT
WELL NAME	BATEMAN NO. 1-28	STATE BARRETT NO. 1	M. A. GRISHAM FEE NO. 1
LOCATION	SEC. 28, BLK. 45, PSL SUR.	SEC. 18, BLK. 2, T&P SUR.	SEC. 10, BLK. 60, T&P SUR.
OWNER	AMERICAN QUASAR PET. CO.	SOCONY MOBIL OIL CO., INC.	GRISHAM-HUNTER CORP.
COMPLETED	05/08/77	07/18/60	03/26/52
SAMPLED	01/25/78	07/18/60	07/08/53
FORMATION	SILU-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15818	5798	9040
WELLHEAD PRESSURE,PSIG	5113	2012	1280
OPEN FLOW, MCFD	4000	13500	9900
COMPONENT, MOLE PCT			
METHANE	96.2	95.5	97.6
ETHANE	0.5	2.0	1.2
PROPANE	TRACE	0.2	0.0
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.3	1.4	0.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	2.6	0.3	0.6
HELIUM	0.24	0.02	0.02
HEATING VALUE*	975	967	1014
SPECIFIC GRAVITY	0.588	0.581	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7045 SAMPLE 5730	INDEX 7046 SAMPLE 5870	INDEX 7047 SAMPLE 6017
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	KERRICK GAS UNIT NO. 1	FOXWORTH-SKAER NO. 1	PRICE A NO. 1
LOCATION	SEC. 16, BLK. 50, H&TCRR SUR	SEC. 29, BLK. 1-T, T&NO SUR.	SEC. 122, BLK. 47, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.	HARRINGTON, MARSH, & WAGNER
COMPLETED	09/19/54	05/20/55	01/31/56
SAMPLED	11/16/54	06/30/55	02/18/56
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3564	3460	3500
WELLHEAD PRESSURE,PSIG	471	476	464
OPEN FLOW, MCFD	7500	4250	6550
COMPONENT, MOLE PCT			
METHANE	71.6	71.2	70.6
ETHANE	5.1	4.8	4.8
PROPANE	3.1	3.4	3.2
N-BUTANE	1.1	1.3	3.0
ISOBUTANE	0.5	0.5	0.0
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	16.9	17.1	16.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.86	0.87	0.88
HEATING VALUE*	973	992	1028
SPECIFIC GRAVITY	0.712	0.726	0.739

	INDEX 7048 SAMPLE 6299	INDEX 7049 SAMPLE 6456	INDEX 7050 SAMPLE 6563
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	HELEN P. BELO NO. 3	DAVID P. MCBRYDE NO. 1	H. P. BELO NO. 2
LOCATION	SEC. 17, BLK. 1, I&GN SUR.	SEC. 52, BLK. 1-T, T&NO SUR.	SEC. 20, BLK. 1, I&GN SUR.
OWNER	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	09/13/56	10/08/57	11/16/54
SAMPLED	04/10/57	12/26/57	04/21/58
FORMATION	PENN-CISCO	PENN-VIRGIL	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3473	3519	3510
WELLHEAD PRESSURE,PSIG	444	480	455
OPEN FLOW, MCFD	1300	2000	3000
COMPONENT, MOLE PCT			
METHANE	72.5	71.6	71.1
ETHANE	5.1	5.0	5.0
PROPANE	3.2	3.2	3.1
N-BUTANE	1.2	1.2	1.2
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.5	1.6	17.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.86	0.90	0.90
HEATING VALUE*	1006	994	978
SPECIFIC GRAVITY	0.717	0.577	0.720

	INDEX 7051 SAMPLE 6564	INDEX 7052 SAMPLE 7080	INDEX 7053 SAMPLE 7222
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	H. P. BELO NO. 4	FOXWORTH NO. 1	BELO NO. 1
LOCATION	SEC. 19, BLK. 1, I&GN SUR.	SEC. 54, BLK. 1-T, T&NO SUR.	SEC. 18, BLK. 1, I&GN SUR.
OWNER	HUMBLE OIL & REFINING CO.	KERR-MCGEE OIL IND., INC.	RIP C. UNDERWOOD
COMPLETED	08/07/57	NOT GIVEN	NOT GIVEN
SAMPLED	04/21/58	05/25/59	09/29/59
FORMATION	PENN-CISCO	PENN-MASSIVE LIMESTONE	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3554	NOT GIVEN	3455
WELLHEAD PRESSURE,PSIG	462	NOT GIVEN	479
OPEN FLOW, MCFD	2100	NOT GIVEN	700
COMPONENT, MOLE PCT			
METHANE	72.5	75.1	67.3
ETHANE	5.2	5.4	4.8
PROPANE	3.2	3.1	3.2
N-BUTANE	1.2	1.1	1.2
ISOBUTANE	0.5	0.8	0.5
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.8	12.9	20.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.80	0.60	1.30
HEATING VALUE*	998	831	940
SPECIFIC GRAVITY	0.716	0.707	0.732

	INDEX 7054 SAMPLE 7223	INDEX 7055 SAMPLE 7224	INDEX 7056 SAMPLE 7225
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	MOON NO. 1	SCHRATER NO. 1	PEELER NO. 1
LOCATION	SEC. 87, BLK. 1-T,T&NORR SUR	SEC. 84, BLK. 1-T,T&NORR SUR	SEC. 49, BLK. 1-T,T&NORR SUR
OWNER	RIP C. UNDERWOOD	RIP C. UNDERWOOD	RIP C. UNDERWOOD
COMPLETED	11/25/57	01/29/58	11/25/57
SAMPLED	09/29/59	09/29/59	09/29/59
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3442	3609	2400
WELLHEAD PRESSURE,PSIG	480	461	477
OPEN FLOW, MCFD	6800	1350	27500
COMPONENT, MOLE PCT			
METHANE	69.5	72.5	73.0
ETHANE	5.0	5.2	5.3
PROPANE	3.0	3.2	3.2
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.7	0.5	0.7
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	18.5	15.7	14.7
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.10	0.70	0.60
HEATING VALUE*	973	1008	1028
SPECIFIC GRAVITY	0.728	0.720	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7057 SAMPLE 7291		INDEX 7058 SAMPLE 7335		INDEX 7059 SAMPLE 6551	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DALLAM		DALLAM		DALLAM	
FIELD	KERRICK		KERRICK		KERRICK-MALLETT	
WELL NAME	DAVID MCBRYDE A NO. 1		MURDOCK NO. 1		O. P. MCBRYDE B NO. 1	
LOCATION	SEC. 15, BLK. 50, H&TC SUR.		SEC. 2, F. H. DAVIS SUR.		SEC. 55, BLK. 1-T, T&NO SUR.	
OWNER	SHAMROCK OIL & GAS CORP.		SHAMROCK OIL & GAS CORP.		GULF OIL CORP.	
COMPLETED	08/04/59		11/04/59		NOT GIVEN	
SAMPLED	11/20/59		01/12/60		05/05/5A	
FORMATION	PENN-CISCO		PENN-CISCO		NOT GIVEN	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	3517		3472		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	270		240		NOT GIVEN	
OPEN FLOW, MCFD	900		275		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	68.2		70.6		62.9	
ETHANE	5.0		5.2		4.5	
PROPANE	3.8		3.1		2.6	
N-BUTANE	1.3		1.1		0.9	
ISOBUTANE	0.8		0.5		0.5	
N-PENTANE	0.3		0.3		0.1	
ISOPENTANE	0.3		0.3		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.1	
NITROGEN	19.8		17.6		24.0	
OXYGEN	TRACE		0.0		3.2	
ARGON	TRACE		TRACE		0.2	
HYDROGEN	0.1		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.60		0.90		0.52	
HEATING VALUE*	971		983		854	
SPECIFIC GRAVITY	0.739		0.724		0.751	

	INDEX 7060 SAMPLE 6753		INDEX 7061 SAMPLE 6754		INDEX 7062 SAMPLE 14284	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DALLAM		DALLAM		DE WITT	
FIELD	KERRICK-MALLETT		KERRICK-MALLETT		ARNECKEVILLE	
WELL NAME	D. P. MCBRYDE B NO. 1		O. GAMBLE A NO. 1		FLORA PURCELL NO. 1-T	
LOCATION	SEC. 55, BLK. 1-T, T&NO SUR.		SEC. 56, BLK. 1-T, T&NO SUR.		MUMFORD SUR. A-226	
OWNER	GULF OIL CORP.		GULF OIL CORP.		LONE STAR PRODUCING CO.	
COMPLETED	03/11/58		05/08/58		01/02/73	
SAMPLED	08/18/58		07/18/58		03/05/75	
FORMATION	PENN-CISCO		PENN-CISCO		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	435		435		220	
DEPTH, FEET	3398		3372		5353	
WELLHEAD PRESSURE,PSIG	450		NOT GIVEN		1647	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		435	
COMPONENT, MOLE PCT						
METHANE	75.4		74.6		90.4	
ETHANE	5.5		5.4		5.0	
PROPANE	3.2		5.3		2.2	
N-BUTANE	1.1		1.3		0.5	
ISOBUTANE	0.6		0.5		0.6	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.3		0.5		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		TRACE		0.1	
NITROGEN	12.7		13.3		0.7	
OXYGEN	0.7		TRACE		0.0	
ARGON	0.1		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.60		0.60		0.01	
HEATING VALUE*	1029		1032		1125	
SPECIFIC GRAVITY	0.703		0.710		0.636	

	INDEX 7063 SAMPLE 14285		INDEX 7064 SAMPLE 13610		INDEX 7065 SAMPLE 13611	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DE WITT		DE WITT		DE WITT	
FIELD	ARNECKEVILLE		BALFOUR		BALFOUR	
WELL NAME	FLORA PURCELL NO. 1-C		MUSSELMAN CATTLE CO. NO. 1		MUSSELMAN CATTLE CO. NO. 1	
LOCATION	MUMFORD SUR. A-226		A.J.HOUSE SUR. A-743		A.J.HOUSE SUR. A-743	
OWNER	LONE STAR PRODUCING CO.		B.D.K. PRODUCTION CO.		B.D.K. PRODUCTION CO.	
COMPLETED	01/02/73		11/08/70		11/08/70	
SAMPLED	03/05/75		05/24/73		05/24/73	
FORMATION	EOCE-YEGUA		EOCE-YEGUA		OLIG-VICKSBURG	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	4867		5392		3320	
WELLHEAD PRESSURE,PSIG	1407		1325		940	
OPEN FLOW, MCFD	5600		2477		7799	
COMPONENT, MOLE PCT						
METHANE	90.7		88.5		99.2	
ETHANE	5.0		5.5		0.1	
PROPANE	2.2		5.0		TRACE	
N-BUTANE	0.4		0.7		0.0	
ISOBUTANE	0.6		0.7		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.3		0.4		0.0	
CYCLOPENTANE	0.1		TRACE		0.0	
HEXANES PLUS	0.2		0.1		0.0	
NITROGEN	0.3		0.7		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1130		1146		1007	
SPECIFIC GRAVITY	0.635		0.651		0.558	

	INDEX 7066 SAMPLE 10202		INDEX 7067 SAMPLE 12007		INDEX 7068 SAMPLE 8580	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DE WITT		DE WITT		DE WITT	
FIELD	DANIELS RANCH		GO WITT		HENZE	
WELL NAME	SIDNEY DANIELS, NO. 1		M&C. GIPS NO. 1		JIMMIE SPEED NO. 1	
LOCATION	WM. S. TOWNSEND SUR. A-457		CYRUS DONNELLY SUR. A-166		JOSE SANTOS LEAGUE, A-420	
OWNER	APACHE CORP.		LONE STAR PRODUCING CO.		SKELLY OIL CO.	
COMPLETED	04/12/64		03/14/68		03/22/61	
SAMPLED	10/08/69		08/22/69		06/14/62	
FORMATION	-FRIAR		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	10117		13071		11291	
WELLHEAD PRESSURE,PSIG	3130		9344		7326	
OPEN FLOW, MCFD	1460		13000		2600	
COMPONENT, MOLE PCT						
METHANE	84.9		87.8		84.7	
ETHANE	6.8		4.7		7.2	
PROPANE	3.1		1.6		2.7	
N-BUTANE	0.6		0.4		0.6	
ISOBUTANE	0.5		0.2		0.6	
N-PENTANE	0.1		TRACE		0.1	
ISOPENTANE	0.3		0.3		0.4	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.8		0.5		1.2	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	1.2		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		4.0		2.4	
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1130		1057		1124	
SPECIFIC GRAVITY	0.681		0.652		0.677	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7069 SAMPLE 10909	INDEX 7070 SAMPLE 5675	INDEX 7071 SAMPLE 11188
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	PRIDGEN	SALLY	SLICK N
WELL NAME	ADA B. PRIDGEN NO. 1	AMELIA BOLDT NO. 1	SINAST NO. 1
LOCATION	T & NO SURVEY A-570	F. RAGSDALE SUR. NO. 414	BRETON ODEM SUR. A-376
OWNER	VIKING DRILLING CO.	F. WILLIAM CARR	SAMEDAN OIL CORP.
COMPLETED	11/14/66	02/24/54	08/11/66
SAMPLED	04/03/67	08/19/54	10/17/67
FORMATION	EOCE-YEGUA	EOCE-YEGUA	EOCE-LULING
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5586	4445	7545
WELLHEAD PRESSURE,PSIG	2150	NOT GIVEN	2440
OPEN FLOW, MCFD	22500	15000	27000
COMPONENT, MOLE PCT			
METHANE	90.2	90.4	80.6
ETHANE	4.1	4.8	6.3
PROPANE	2.3	1.9	4.6
N-BUTANE	0.7	0.5	1.6
ISOBUTANE	0.6	0.6	1.6
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.4	0.3	1.2
CYCLOPENTANE	0.2	0.1	0.3
HEXANES PLUS	0.4	0.3	0.7
NITROGEN	0.7	0.7	1.0
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	1.6
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1140	1125	1273
SPECIFIC GRAVITY	0.643	0.633	0.753

	INDEX 7072 SAMPLE 9162	INDEX 7073 SAMPLE 12333	INDEX 7074 SAMPLE 12334
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	TERRYVILLE SW	TERRYVILLE W	TERRYVILLE W
WELL NAME	SW TERRYVILLE GAS UNIT NO. 1	JOHN GARRETT NO. 1	JOHN GARRETT NO. 1
LOCATION	J. G. SWISHER SUR. A-421	JOHN R. FOSTER SUR. A-189	JOHN R. FOSTER SUR. A-189
OWNER	HUMBLE OIL & REFINING CO.	KILROY CO. OF TEXAS	KILROY CO. OF TEXAS
COMPLETED	02/15/63	07/08/69	07/08/69
SAMPLED	11/08/63	07/24/70	07/24/70
FORMATION	EOCE-WILCOX	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11910	4889	4517
WELLHEAD PRESSURE,PSIG	5810	1862	1797
OPEN FLOW, MCFD	700	6700	35000
COMPONENT, MOLE PCT			
METHANE	85.2	89.6	89.6
ETHANE	6.7	4.8	4.8
PROPANE	3.3	2.6	2.6
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.0	0.8	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	0.1	0.1
HELIUM	0.04	0.01	0.01
HEATING VALUE*	1120	1137	1141
SPECIFIC GRAVITY	0.676	0.643	0.645

	INDEX 7075 SAMPLE 4041	INDEX 7076 SAMPLE 4698	INDEX 7077 SAMPLE 10680
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	THOMASTON	WILDCAT	YOAKUM
WELL NAME	PEARL CONWELL NO. 1	ED ZINGERLE ET AL NO. 1	ZULA E. BOYD NO. 1
LOCATION	LOCKHART	JAMES QUINN SUR. A-395	JOHN MAY SUR. A-329
OWNER	ATLANTIC REFINING CO.	WESTERN NATURAL GAS CO.	INDUSTRIAL GAS SUPPLY CORP.
COMPLETED	03/15/40	10/24/48	09/19/63
SAMPLED	05/29/45	03/12/49	07/25/66
FORMATION	EOCE-WILCOX	NOT GIVEN	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7855	8158	14124
WELLHEAD PRESSURE,PSIG	2900	3437	4800
OPEN FLOW, MCFD	33	16500	3300
COMPONENT, MOLE PCT			
METHANE	82.6	89.1	89.2
ETHANE	15.2	5.5	1.4
PROPANE	---	2.3	0.4
N-BUTANE	---	0.6	0.2
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.0	0.7	0.2
OXYGEN	0.1	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.1	0.9	8.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1109	1117	967
SPECIFIC GRAVITY	0.651	0.644	0.660

	INDEX 7078 SAMPLE 12009	INDEX 7079 SAMPLE 12032	INDEX 7080 SAMPLE 12156
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	YORKTOWN	YORKTOWN	YORKTOWN S
WELL NAME	WALTER FELLER NO. 2	E. N. BROUGHTON G. U. NO. 1	OSCAR D. JOCHEN NO. 1
LOCATION	L. W. CRISWELL SUR. A-116	J. A. TINSLEY SUR. A-455	G. H. WOOD SUR. 45, A482
OWNER	MONSANTO CO.	TEXACO INC.	QUINTANA PETROLEUM CORP.
COMPLETED	10/25/68	01/13/69	09/25/68
SAMPLED	08/26/69	09/10/69	12/18/69
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10310	9613	9930
WELLHEAD PRESSURE,PSIG	6679	3384	2863
OPEN FLOW, MCFD	18000	2345	3250
COMPONENT, MOLE PCT			
METHANE	86.5	59.3	85.5
ETHANE	6.4	16.8	6.2
PROPANE	2.2	10.9	2.4
N-BUTANE	0.5	2.8	0.5
ISOBUTANE	0.4	1.9	0.4
N-PENTANE	0.2	0.9	0.1
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.6	0.1
NITROGEN	0.9	2.0	1.1
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	3.8	3.1
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	1110	1445	1088
SPECIFIC GRAVITY	0.663	0.910	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7081 SAMPLE 11189	INDEX 7082 SAMPLE 4901	INDEX 7083 SAMPLE 4943
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DENTON	DENTON	DENTON
FIELD	BOLIVAR	BOLIVAR S	NOT GIVEN
WELL NAME	HARBERSON	FORESTER NO. 5	FORESTER NO. 1
LOCATION	NOT GIVEN	W. WILSON SUR. NO. 1381	W. WILSON SUR. A-1381
OWNER	BURK ROYALTY CO.	J. M. HICKEY & SONS	J. M. HICKEY & SONS
COMPLETED	NOT GIVEN	02/24/50	NOT GIVEN
SAMPLED	10/26/67	02/24/50	10/01/50
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	1300	1570	NOT GIVEN
WELLHEAD PRESSURE,PSIG	560	630	NOT GIVEN
OPEN FLOW, MCFD	750	3400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	42.9	43.3
ETHANE	1.2	1.6	1.6
PROPANE	0.3	0.7	1.1
N-BUTANE	0.1	0.6	0.3
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	53.4	52.8	52.2
OXYGEN	0.1	0.2	0.1
ARGON	0.1	---	0.1
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.75	0.77	0.77
HEATING VALUE*	489	498	520
SPECIFIC GRAVITY	0.789	0.803	0.801

	INDEX 7084 SAMPLE 15742	INDEX 7085 SAMPLE 14258	INDEX 7086 SAMPLE 14896
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DEWITT	DEWITT	DEWITT
FIELD	CHRISTMAS S	FRIAR RANCH W	HOLLY
WELL NAME	GREEN NO. 1	STILES CATTLE CO. NO. 1	E. BOMBA NO. 1-A
LOCATION	DELORES ALDRETTE SUR., A-52	JOHN DALEY SUR., A-11	JAMES DUFF SUR., A-153
OWNER	HILLIARD OIL & GAS, INC.	COASTAL STATES GAS PROD. CO.	HARKINS & CO.
COMPLETED	12/13/77	02/05/73	08/08/74
SAMPLED	09/--/79	02/10/75	02/07/77
FORMATION	EOCE-WILCOX	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10860	9890	NOT GIVEN
WELLHEAD PRESSURE,PSIG	7129	2394	NOT GIVEN
OPEN FLOW, MCFD	7000	13100	2000
COMPONENT, MOLE PCT			
METHANE	87.2	79.2	89.6
ETHANE	4.8	6.8	5.3
PROPANE	1.5	6.0	2.2
N-BUTANE	0.4	1.5	0.6
ISOBUTANE	0.5	1.2	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.5	0.5	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.2	0.5	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.2	3.8	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1088	1206	1146
SPECIFIC GRAVITY	0.671	0.743	0.647

	INDEX 7087 SAMPLE 14898	INDEX 7088 SAMPLE 15025	INDEX 7089 SAMPLE 13881
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DEWITT	DEWITT	DEWITT
FIELD	HOLLY	REIFFERT	YORKTOWN S
WELL NAME	E. BOMBA NO. 1-A	REIFFERT-FRAIR NO. 1	CLIFFORD F. SPIES NO. 1
LOCATION	JAMES DUFF SUR., A-153	SA&MGRR SUR. 9, A-442	J.T. TINSLEY SUR. A-455
OWNER	HARKINS & CO.	BDK PRODUCTION CO., INC.	ROBERT MOSBACHER
COMPLETED	08/08/74	12/24/74	01/17/72
SAMPLED	02/07/77	06/13/77	01/27/74
FORMATION	EOCE-YEGUA	EOCE-YEGUA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9802	9333	11100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1365	6850
OPEN FLOW, MCFD	2000	3764	12500
COMPONENT, MOLE PCT			
METHANE	88.1	94.2	62.8
ETHANE	5.3	2.6	13.7
PROPANE	2.5	1.3	5.9
N-BUTANE	1.0	0.4	1.1
ISOBUTANE	0.8	0.3	1.7
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.7	0.1	0.9
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.5
NITROGEN	0.5	0.6	5.0
OXYGEN	0.0	0.0	1.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	6.7
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1188	1076	1205
SPECIFIC GRAVITY	0.674	0.604	0.852

	INDEX 7090 SAMPLE 7205	INDEX 7091 SAMPLE 10896	INDEX 7092 SAMPLE 13914
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DIMMIT	DIMMIT	DIMMIT
FIELD	CELESTE-FAY	NELSON	PENA CREEK
WELL NAME	SWSW NO. 4	STRAUCER G. NELSON NO. 1	L.L. STEWART NO. 1
LOCATION	SEC. 29, I&GN RR, A903 SUR.	I. J. WEBB SUR. NO.4,A-1460	SAM L. WILSON SUR.654,A-1452
OWNER	MICHEL T. HALBOUTY ET AL.	GULF OIL CORP.	HUGHES & HUGHES OIL & GAS
COMPLETED	06/28/59	09/24/66	10/13/72
SAMPLED	09/01/59	03/07/67	02/07/74
FORMATION	EOCE-OLMOS	EOCE-OLMOS	EOCE-OLMOS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2987	3300	2341
WELLHEAD PRESSURE,PSIG	920	1500	775
OPEN FLOW, MCFD	1500	7350	3400
COMPONENT, MOLE PCT			
METHANE	98.1	82.9	94.3
ETHANE	1.7	8.9	3.8
PROPANE	0.1	4.9	0.1
N-BUTANE	0.1	1.1	TRACE
ISOBUTANE	0.2	0.7	0.2
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	TRACE
NITROGEN	1.2	1.5	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.7
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1056	1226	1037
SPECIFIC GRAVITY	0.593	0.692	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7093 SAMPLE 15788	INDEX 7094 SAMPLE 7206	INDEX 7095 SAMPLE 4867
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DIMMIT	DIMMIT	DIMMIT
FIELD	STRAIT	WILDCAT	WINTER GARDEN
WELL NAME	STRAIT GAS UNIT NO. 1	SHOOK NO. 7	E. MCKNIGHT NO. 2
LOCATION	SEC. 47, BLK. 1, HGN RR CO.	SEC. 6, I&GN RR. A-830 SUR.	R. S. RIDDLE SUR. NO. A-1317
OWNER	IKE LOVELADY INC.	MICHEL T. HALBOUTY ET AL.	CONTINENTAL OIL CO.
COMPLETED	08/12/79	07/29/59	02/01/50
SAMPLED	09/25/79	09/01/59	04/05/50
FORMATION	CRET-EDWARDS	EOCE-OLMOS	EOCE-OLMOS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7189	2092	2604
WELLHEAD PRESSURE,PSIG	3000	900	1293
OPEN FLOW, MCFD	89000	2000	5100
COMPONENT, MOLE PCT			
METHANE	93.6	88.5	92.7
ETHANE	1.2	3.5	3.4
PROPANE	0.4	2.0	1.1
N-BUTANE	0.2	0.7	0.7
ISOBUTANE	0.2	0.7	0.3
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	1.9	3.3	0.8
OXYGEN	TRACE	0.3	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.6	0.0	---
CARBON DIOXIDE	1.6	TRACE	0.3
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1011	1103	1088
SPECIFIC GRAVITY	0.604	0.649	0.615

	INDEX 7096 SAMPLE 3862	INDEX 7097 SAMPLE 15086	INDEX 7098 SAMPLE 4753
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	AGUA PRIETA	BRELUM	CANTU
WELL NAME	VALENTIN SEPULVEDA NO. 2-B	DCRC NCT-29 NO. 7	CENOBIO CANTU JR. NO. 1
LOCATION	SEC. 15	J. POITEVENT SUR. A-447	SEC. 11, BENITO ROMOS SUR.
OWNER	TAYLOR REFINING CO.	TEXACO INC.	TEXAS CO.
COMPLETED	02/28/44	01/07/75	04/08/49
SAMPLED	06/01/44	08/--/77	06/11/49
FORMATION	NOT GIVEN	EOCE-CHERNOSKY	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	1526	4670
WELLHEAD PRESSURE,PSIG	NOT GIVEN	660	1413
OPEN FLOW, MCFD	36000	5600	375
COMPONENT, MOLE PCT			
METHANE	78.1	97.9	88.3
ETHANE	21.3	0.1	4.6
PROPANE	---	0.1	2.2
N-BUTANE	---	0.0	0.6
ISOBUTANE	---	0.1	0.5
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.0	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.3
NITROGEN	0.0	1.6	2.7
OXYGEN	0.1	TRACE	0.2
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.00	0.01	0.03
HEATING VALUE*	1173	1005	1104
SPECIFIC GRAVITY	0.665	0.567	0.644

	INDEX 7099 SAMPLE 4885	INDEX 7100 SAMPLE 4153	INOEX 7101 SAMPLE 10154
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	CHILTIPIN	CONOCO DRISCOLL	CONOCO-DRISCOLL
WELL NAME	FLORENCIA GARCIA	CLARA DRISCOLL NO. 4	ROBERT DRISCOLL NO. 112
LOCATION	M. G. PEREZ SUR., NO. 412	24 MI. N OF BENEVIDES	J.P. NELSON SUR.NO.448-A9120
OWNER	LULING OIL & GAS CO.	EDWIN B. COX & JAKE L. HAMON	CONTINENTAL OIL CO.
COMPLETED	10/20/49	06/13/45	10/06/64
SAMPLED	03/16/50	10/01/46	09/24/65
FORMATION	OLIG-FRIO	EOCE-LOMANOVIA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3268	3170	4007
WELLHEAD PRESSURE,PSIG	1068	700	1265
OPEN FLOW, MCFD	2280	6000	9400
COMPONENT, MOLE PCT			
METHANE	95.5	96.0	89.7
ETHANE	3.6	1.6	6.3
PROPANE	0.1	---	1.5
N-BUTANE	0.0	---	0.3
ISOBUTANE	0.0	---	0.6
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	0.5
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.3
NITROGEN	0.4	0.0	0.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	2.4	0.3
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1036	1001	1131
SPECIFIC GRAVITY	0.577	0.586	0.638

	INDEX 7102 SAMPLE 11649	INDEX 7103 SAMPLE 2608	INDEX 7104 SAMPLE 2276
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	DUVAL COUNTY RANCH CO. 79S	FREER	GOVERNMENT WELLS
WELL NAME	DCR-79 UNIT 2 NO. 1	JOHNSON NO. 5	J. O. WILSON NO. 1
LOCATION	SANTOS MONCADOS SUR. 262	NOT GIVEN	SEC. 136
OWNER	HUMBLE OIL & REFINING CO.	TEXAS CO.	UNITED GAS CORP., ET AL.
COMPLETED	05/23/68	01/15/33	01/14/31
SAMPLED	09/18/68	02/17/33	02/09/31
FORMATION	EOCE-WILCOX	NOT GIVEN	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7218	2251	2244
WELLHEAD PRESSURE,PSIG	2507	825	650
OPEN FLOW, MCFD	3900	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	98.6	95.1
ETHANE	5.5	0.0	0.0
PROPANE	2.7	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	0.6	---	---
NITROGEN	0.3	0.5	3.6
OXYGEN	0.0	0.5	1.0
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.6	0.4	0.3
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1160	999	963
SPECIFIC GRAVITY	0.676	0.563	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7105 SAMPLE 4513		INDEX 7106 SAMPLE 4593		INDEX 7107 SAMPLE 4655	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	GOVERNMENT WELLS		GOVERNMENT WELLS S		HAGIST RANCH	
WELL NAME	H. WENDT NO. 1		J. O. WILSON NO. 21		HAGIST RANCH NO. 1	
LOCATION	NOT GIVEN		SEC. 136, WHITE SUR.		SEC. 267	
OWNER	RALPH E. FAIR INC.		MAGNOLIA PETROLEUM CO.		ATLANTIC REFINING CO.	
COMPLETED	03/06/48		06/--/48		10/06/48	
SAMPLED	05/00/58		10/12/48		01/19/49	
FORMATION	EOCE-WILCOX		EOCE-COLE		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7488		1460		7180	
WELLHEAD PRESSURE,PSIG	3840		375		3120	
OPEN FLOW, MCFD	16000		28000		6600	
COMPONENT, MOLE PCT						
METHANE	81.0	----------	98.0	----------	87.9	----------
ETHANE	14.8		1.6		5.7	
PROPANE	---	----------	---	----------	2.6	----------
N-BUTANE	---		---		0.8	
ISOBUTANE	---	----------	---	----------	0.2	----------
N-PENTANE	---		---		0.2	
ISOPENTANE	---	----------	---	----------	0.2	----------
CYCLOPENTANE	---		---		0.1	
HEXANES PLUS	---	----------	---	----------	0.4	----------
NITROGEN	2.0		0.0		0.4	
OXYGEN	0.8	----------	0.2	----------	0.1	----------
ARGON	---		---		TRACE	
HYDROGEN	---	----------	---	----------	TRACE	----------
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	1.4	----------	0.2	----------	1.3	----------
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1046	----------	1021	----------	1139	----------
SPECIFIC GRAVITY	0.654		0.565		0.657	

	INDEX 7108 SAMPLE 15643		INDEX 7109 SAMPLE 4779		INDEX 7110 SAMPLE 14002	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	HAGIST RANCH		HOFFMAN		HOFFMAN	
WELL NAME	J. R. FOSTER NO. 5		J. FLORES NO. 1		A. WEIL NO. B-2	
LOCATION	SURVEY 270, A-1642		SEC. 118		SA & MG SUR., A-524	
OWNER	ARCO OIL & GAS CO.		BRIDWELL OIL CO.		KILLAM & HURD, INC.	
COMPLETED	05/15/76		06/19/49		09/15/71	
SAMPLED	06/13/79		09/20/49		05/02/74	
FORMATION	EOCE-WILCOX		OLIG-		EOCE-JACKSON	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9300		1938		1970	
WELLHEAD PRESSURE,PSIG	3185		670		600	
OPEN FLOW, MCFD	2450		2000		5600	
COMPONENT, MOLE PCT						
METHANE	89.0	----------	97.7	----------	98.4	----------
ETHANE	5.4		0.3		TRACE	
PROPANE	1.8	----------	0.2	----------	TRACE	----------
N-BUTANE	0.4		0.1		0.0	
ISOBUTANE	0.3	----------	0.0	----------	0.0	----------
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.2	----------	0.1	----------	0.0	----------
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1	----------	0.0	----------	0.0	----------
NITROGEN	0.2		1.4		1.4	
OXYGEN	0.0	----------	0.1	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	2.4	----------	0.1	----------	0.1	----------
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1047	----------	1011	----------	997	----------
SPECIFIC GRAVITY	0.642		0.571		0.561	

	INDEX 7111 SAMPLE 13530		INDEX 7112 SAMPLE 4480		INDEX 7113 SAMPLE 3861	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	KOHLER NE		LONGHORN S		MURALLA	
WELL NAME	V.KOHLER "AA" NO. 89 F		LEROY DENMAN A-1		J. M. SEPULVEDA NO. 1-A	
LOCATION	P. POITEVENT SUR. NO. 163		NOT GIVEN		SEC. 12	
OWNER	EXXON CO., U.S.A.		HIAWATHA OIL & GAS CO.		TAYLOR REFINING CO.	
COMPLETED	08/13/70		01/21/48		12/17/43	
SAMPLED	02/08/73		03/31/48		06/01/44	
FORMATION	EOCE-YEGUA		OLIG-		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9642		4842		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1271		925		NOT GIVEN	
OPEN FLOW, MCFD	59000		NOT GIVEN		2700	
COMPONENT, MOLE PCT						
METHANE	89.6	----------	83.5	----------	85.6	----------
ETHANE	4.0		14.7		13.6	
PROPANE	0.3	----------	---	----------	---	----------
N-BUTANE	TRACE		---		---	
ISOBUTANE	0.5	----------	---	----------	---	----------
N-PENTANE	0.0		---		---	
ISOPENTANE	0.2	----------	---	----------	---	----------
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1	----------	---	----------	---	----------
NITROGEN	4.4		1.2		0.0	
OXYGEN	0.7	----------	0.4	----------	0.3	----------
ARGON	TRACE		---		---	
HYDROGEN	0.2		---		---	
HYDROGEN SULFIDE**	0.2		---		---	
CARBON DIOXIDE	0.7	----------	0.4	----------	0.5	----------
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1018	----------	1107	----------	1111	----------
SPECIFIC GRAVITY	0.617		0.638		0.628	

	INDEX 7114 SAMPLE 4281		INDEX 7115 SAMPLE 4878		INDEX 7116 SAMPLE 9171	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	J. F. WELDER HRS. NO. 8C		HAGIST NO. 2		ADLEE PARR A NO. 4	
LOCATION	SEC. 142, SAM. ALEXANDER SUR		BS&F SURVEY		ANDRES GARCIA SAN ANDRES GRT	
OWNER	MIDCON & REYNOLDS, INC.		DELHI OIL CORP.		SUPERIOR OIL CO.	
COMPLETED	11/28/46		10/--/49		NOT GIVEN	
SAMPLED	02/06/47		02/14/50		11/14/63	
FORMATION	EOCE-LOMA NOVA		EOCE-WILCOX U		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2520		7100		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1005		2600		NOT GIVEN	
OPEN FLOW, MCFD	4000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	98.2	----------	87.2	----------	90.7	----------
ETHANE	0.8		5.9		4.7	
PROPANE	---	----------	2.0	----------	1.9	----------
N-BUTANE	---		1.8		0.6	
ISOBUTANE	---	----------	1.5	----------	0.6	----------
N-PENTANE	---		0.9		0.1	
ISOPENTANE	---	----------	0.2	----------	0.3	----------
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---	----------	0.3	----------	0.2	----------
NITROGEN	0.1		0.6		0.6	
OXYGEN	0.8	----------	0.1	----------	0.0	----------
ARGON	---		TRACE		TRACE	
HYDROGEN	---	----------	---	----------	0.0	----------
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3	----------	1.4	----------	0.2	----------
HELIUM	0.01		0.21		0.01	
HEATING VALUE*	1005	----------	1137	----------	1063	----------
SPECIFIC GRAVITY	0.560		0.666		0.634	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7117 SAMPLE 5918	INDEX 7118 SAMPLE 9487	INDEX 7119 SAMPLE 12515
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	PETERS	ROSITA W	SEVEN SISTERS
WELL NAME	W. R. PETERS NO. 1	HOFFMAN NO. 1	WELDER GAS UNIT NO. 4
LOCATION	T. A. CAVITT SUR. 34	SEC. 90, CHAS.W. PETRIE SUR.	J. POITEVENT SUR. NO.385
OWNER	MONTERAY OIL CO.	J. M. HUBER CORP. &SHELL OIL	ATLANTIC RICHFIELD CO.
COMPLETED	04/13/55	11/26/63	12/28/68
SAMPLED	08/17/55	07/09/64	11/05/70
FORMATION	EOCE-WILCOX U	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8712	10444	9524
WELLHEAD PRESSURE,PSIG	4772	7375	5496
OPEN FLOW, MCFD	3600	50500	15400
COMPONENT, MOLE PCT			
METHANE	89.1	84.3	88.8
ETHANE	5.3	7.4	3.4
PROPANE	1.8	3.3	1.0
N-BUTANE	0.4	0.4	0.1
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.1	0.0	2.2
OXYGEN	TRACE	TRACE	0.3
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	4.3	3.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1075	1098	1010
SPECIFIC GRAVITY	0.640	0.678	0.635

	INDEX 7120 SAMPLE 12516	INDEX 7121 SAMPLE 4594	INDEX 7122 SAMPLE 4642
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	SEVEN SISTERS	SEVENTY-SIX	SQUIRE
WELL NAME	WELDER GAS UNIT NO. 4	DUVAL STATE SEC. 76 WELL 3	WELDER NO. E-2
LOCATION	J. POITEVENT SUR. NO. 385	SEC. 76, CC SD&RG GN RR SUR.	M. G. ANDROSS SUR. NO. 24
OWNER	ATLANTIC RICHFIELD CO.	MAGNOLIA PETROLEUM CO.	JOHN F. CAMP & SONS
COMPLETED	12/28/68	05/--/48	01/03/48
SAMPLED	11/05/70	10/12/48	12/08/48
FORMATION	EOCE-WILCOX	EOCE-MIRANDO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9997	2100	3805
WELLHEAD PRESSURE,PSIG	6346	738	1465
OPEN FLOW, MCFD	61000	17000	10500
COMPONENT, MOLE PCT			
METHANE	84.1	94.5	91.1
ETHANE	7.1	4.3	6.9
PROPANE	2.4	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.9	0.6	1.5
OXYGEN	0.3	0.3	0.3
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.7	0.3	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1099	1034	1046
SPECIFIC GRAVITY	0.681	0.583	0.593

	INDEX 7123 SAMPLE 4147	INDEX 7124 SAMPLE 13109	INDEX 7125 SAMPLE 3895
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	STRAKE	STRAKE N	THOMAS LOCKHART
WELL NAME	JOHN O. YATES NO. 2-A	DRISCOLL ESTATE NO. 2	ELIZABETH PARR B NO. 2
LOCATION	JESSIE HARRIS SUR. NO. 5	SEC. 329, S&M SUR. A-581	8 MI. NW OF SAN DIEGO
OWNER	SANTA CLARA OIL CO. ET AL.	EDWIN L. COX	PAN AMERICAN PRODUCTION CO.
COMPLETED	06/29/46	12/18/69	--/--/43
SAMPLED	10/08/46	12/10/71	--/--/44
FORMATION	OLIG-FRIO	EOCE-COLE	-THOMAS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2248	2489	4000
WELLHEAD PRESSURE,PSIG	915	607	NOT GIVEN
OPEN FLOW, MCFD	5400	800	48000
COMPONENT, MOLE PCT			
METHANE	97.8	98.7	96.3
ETHANE	0.0	0.1	2.5
PROPANE	---	TRACE	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	1.8	0.8	0.0
OXYGEN	0.2	0.1	0.5
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	991	1002	1020
SPECIFIC GRAVITY	0.565	0.560	0.576

	INDEX 7126 SAMPLE 13880	INDEX 7127 SAMPLE 5449	INDEX 7128 SAMPLE 4945
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	VIGGO	VIGGO E	WATER WELL
WELL NAME	D.V. KOHLER A NO. 97D	V. KOHLER A-76	C. W. HAHL NO. 1
LOCATION	BS&F SUR. 401, A100	SK&K SUR. 165	E. RODRIGUEZ SUR. NO. A-1881
OWNER	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.	FAIR-WOODWARD
COMPLETED	08/02/72	12/14/52	05/23/50
SAMPLED	01/30/74	04/18/53	10/17/50
FORMATION	EOCE-YEGUA	EOCE-YEGUA	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3218	3244	7575
WELLHEAD PRESSURE,PSIG	600	1100	NOT GIVEN
OPEN FLOW, MCFD	50000	4200	11200
COMPONENT, MOLE PCT			
METHANE	94.0	93.3	87.7
ETHANE	3.7	3.2	5.8
PROPANE	0.2	0.0	2.3
N-BUTANE	0.0	0.1	0.6
ISOBUTANE	0.6	0.0	0.4
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.5	2.6	TRACE
OXYGEN	TRACE	0.3	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.2	2.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1053	1020	1118
SPECIFIC GRAVITY	0.596	0.593	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7129 SAMPLE 4154	INDEX 7130 SAMPLE 4624	INDEX 7131 SAMPLE 4625
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LEILA PETERS 11994 NO. 1	LEILA PETERS NO. 1	AGENT NO. 2
LOCATION	24 MI. NW OF BENEVIDES	SEC. 159	SEC. 159, J. POITEVENT SUR.
OWNER	EDWIN B. COX & JAKE L. HAMON	COX & HAMON	EDWIN B. COX, ET AL.
COMPLETED	07/17/46	12/31/47	01/06/48
SAMPLED	10/01/46	11/15/48	10/14/48
FORMATION	NOT GIVEN	NOT GIVEN	EOCE-GOVERNMENT WELLS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2413	2485	2490
WELLHEAD PRESSURE,PSIG	790	NOT GIVEN	740
OPEN FLOW, MCFD	11500	NOT GIVEN	9500
COMPONENT, MOLE PCT			
METHANE	99.3	94.0	96.8
ETHANE	0.0	4.8	2.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.3	---
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.6	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1006	1038	1025
SPECIFIC GRAVITY	0.560	0.587	0.572

	INDEX 7132 SAMPLE 4745	INDEX 7133 SAMPLE 5121	INDEX 7134 SAMPLE 70
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	EASTLAND
FIELD	WILDCAT	WILDCAT	CISCO
WELL NAME	DUVAL RANCH NO. 6	SINCLAIR HEIRS NO. 2	WARD NO. 1
LOCATION	SEC. 196	ABM SUR. NO. A-45	SEC. 151, HOXIE SUR.
OWNER	MAGNOLIA PETROLEUM CO.	MAGNOLIA PETROLEUM CO.	GILMAN & SIMMONS
COMPLETED	03/03/49	06/29/51	12/07/19
SAMPLED	05/18/49	10/29/51	02/23/20
FORMATION	EOCE-JACKSON	EOCE-TARANCAHAUS	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	425
DEPTH, FEET	1403	2165	3326
WELLHEAD PRESSURE,PSIG	225	770	1100
OPEN FLOW, MCFD	17000	7125	6000
COMPONENT, MOLE PCT			
METHANE	98.5	97.1	71.7
ETHANE	0.1	0.3	14.4
PROPANE	0.1	0.1	---
N-BUTANE	TRACE	0.2	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.9	1.3	12.6
OXYGEN	0.1	0.1	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.7	0.3
HELIUM	0.01	0.01	0.19
HEATING VALUE*	1011	1010	984
SPECIFIC GRAVITY	0.566	0.580	0.683

	INDEX 7135 SAMPLE 1780	INDEX 7136 SAMPLE 9592	INDEX 7137 SAMPLE 72
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	CISCO N	DOTHAN	EASTLAND
WELL NAME	WINCHELL NO. 1	C. E. PIPPEN NO. 1	HOLCOMB NO. 2
LOCATION	SEC. 385	SEC. TE&L NO. 3171	M. E. HOLCOMB SUR.
OWNER	EASTLAND OIL CO.	LONE STAR PRODUCING CO.	COSDEN OIL & GAS CO.
COMPLETED	01/30/29	01/16/63	08/11/19
SAMPLED	05/1A/29	10/08/64	02/25/20
FORMATION	PENN-RANGER	PENN-CADDO	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3736	3042	1580
WELLHEAD PRESSURE,PSIG	1575	1070	320
OPEN FLOW, MCFD	1480	1320	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.3	71.9	89.5
ETHANE	27.0	9.0	0.0
PROPANE	---	4.8	---
N-BUTANE	---	1.2	---
ISOBUTANE	---	0.7	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	7.8	10.8	9.3
OXYGEN	0.2	0.0	0.7
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.25	0.25	TRACE
HEATING VALUE*	1135	1118	907
SPECIFIC GRAVITY	0.724	0.741	0.600

	INDEX 7138 SAMPLE 89	INDEX 7139 SAMPLE 12710	INDEX 7140 SAMPLE 15710
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	EASTLAND	EASTLAND CO. REGULAR	GAILEY-ALLEN
WELL NAME	I. C. HARRELL NO. 1	J. L. GRAY NO. 1	O. H. DELANO NO. 11-L
LOCATION	NOT GIVEN	SEC. 406, SPRR CO. SUR.	DELANO SUR.
OWNER	EASTLAND OIL CORP.	PETROLEUM CORP. OF TEXAS	TEXAS PACIFIC OIL CO., INC.
COMPLETED	01/11/22	03/15/41	10/27/77
SAMPLED	12/1/29	03/--/71	07/23/79
FORMATION	PENN-STRAWN	PENN-LAKE SAND	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1871	3695	2964
WELLHEAD PRESSURE,PSIG	700	NOT GIVEN	1340
OPEN FLOW, MCFD	75000	5	6069
COMPONENT, MOLE PCT			
METHANE	90.0	70.0	77.3
ETHANE	4.7	11.9	9.7
PROPANE	---	6.6	4.4
N-BUTANE	---	1.7	1.1
ISOBUTANE	---	0.6	0.7
N-PENTANE	---	0.4	0.3
ISOPENTANE	---	0.6	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.4	0.3
NITROGEN	4.8	7.9	4.0
OXYGEN	0.3	0.0	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.2	0.0
CARBON DIOXIDE	1.0	0.1	1.7
HELIUM	0.08	0.14	0.13
HEATING VALUE*	996	1223	1176
SPECIFIC GRAVITY	1.600	0.776	0.727

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7141 SAMPLE 10889	INDEX 7142 SAMPLE 5148	INDEX 7143 SAMPLE 4465
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	ISETT	LAUTERDALE	LEE RAY
WELL NAME	ARMSTRONG NO. 2	M. F. LAUTERDALE NO. 1	MITCHAM E-1
LOCATION	SAM DAMON SUR. NO. 754	SEC. 6	S. P. RR SUR. NO. 491
OWNER	W. R. EVANS	MALCO REFINERIES INC.	LONE STAR PRODUCING CO.
COMPLETED	NOT GIVEN	01/09/52	09/05/47
SAMPLED	02/22/67	12/15/51	04/20/48
FORMATION	PENN-CADDO	PENN-CADDO	PENN-
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2597	2710	3968
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1057	1446
OPEN FLOW, MCFD	NOT GIVEN	6	1860
COMPONENT, MOLE PCT			
METHANE	67.8	71.4	66.0
ETHANE	12.3	9.3	26.4
PROPANE	7.7	4.2	---
N-BUTANE	1.9	0.5	---
ISOBUTANE	0.8	0.1	---
N-PENTANE	0.5	0.1	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	8.3	13.8	6.8
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.15	0.30	0.30
HEATING VALUE*	1238	1034	1142
SPECIFIC GRAVITY	0.786	0.715	0.716

	INDEX 7144 SAMPLE 4670	INDEX 7145 SAMPLE 8147	INDEX 7146 SAMPLE 8149
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	LEE RAY	LEE RAY	LEE RAY
WELL NAME	G. P. MITCHAM F NO. 2	G. P. MITCHAM NO. 1-C	VAN PARMER NO. 2
LOCATION	SEC. 386, SP RR SUR.	SP&RR SUR.	SP&RR SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
COMPLETED	12/07/48	12/26/46	05/01/59
SAMPLED	04/12/49	08/10/61	08/10/61
FORMATION	PENN-	PENN-RANGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3594	3828	2079
WELLHEAD PRESSURE,PSIG	1195	450	390
OPEN FLOW, MCFD	10000	1055	300
COMPONENT, MOLE PCT			
METHANE	68.7	72.9	77.8
ETHANE	11.9	11.3	2.5
PROPANE	6.1	4.9	1.1
N-BUTANE	1.2	1.5	0.3
ISOBUTANE	0.4	0.7	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.2	7.0	16.9
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	0.10	0.20	0.46
HEATING VALUE*	1148	1191	908
SPECIFIC GRAVITY	0.760	0.746	0.668

	INDEX 7147 SAMPLE 8148	INDEX 7148 SAMPLE 73	INDEX 7149 SAMPLE 74
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	LEE RAY-WARD	RANGER	RANGER
WELL NAME	E. J. WARD NO. 5	NASH NO. 3	G. E. NORWOOD NO. 1
LOCATION	BLK. 10, J. B. HONE SUR.	NASH LEASE	3.5 MI SW RANGER
OWNER	LONE STAR GAS CO.	MAGNOLIA PETROLEUM CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	06/30/43	09/20/19	02/23/20
SAMPLED	08/10/61	02/25/20	02/25/20
FORMATION	PENN-DUFFER	ORDO-ELLENBURGER	-GAS SAND
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3650	3826	3398
WELLHEAD PRESSURE,PSIG	300	200	220
OPEN FLOW, MCFD	398	1000	1500
COMPONENT, MOLE PCT			
METHANE	71.1	71.0	58.2
ETHANE	13.1	23.8	35.1
PROPANE	6.0	---	---
N-BUTANE	1.8	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	5.4	4.6	6.0
OXYGEN	TRACE	0.4	0.5
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	TRACE	0.00
HEATING VALUE*	1152	1146	1219
SPECIFIC GRAVITY	0.767	0.695	0.756

	INDEX 7150 SAMPLE 15325	INDEX 7151 SAMPLE 8194	INDEX 7152 SAMPLE 8960
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	SITTERLE	WILDCAT	WILDCAT
WELL NAME	PARMER HEIRS NO. 1	RUTH WILLIS NO. 1	ADRA L. FOX NO. 1
LOCATION	SEC. 477, SPRR SUR.	SEC. 10, HT&RR SUR.	LOT HH, LEAGUES 3 & 4
OWNER	CHAPARRAL MINERALS, INC.	CALLIHAN INTEREST, INC.	JERRY CUMMINGS, ET AL.
COMPLETED	05/29/77	04/03/52	03/15/63
SAMPLED	07/29/78	09/11/61	05/14/63
FORMATION	PENN-LAKE	PENN-MARBLE FALLS	PENN-STRAWN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3601	2829	991
WELLHEAD PRESSURE,PSIG	1427	489	500
OPEN FLOW, MCFD	5600	4100	7500
COMPONENT, MOLE PCT			
METHANE	74.3	73.9	86.4
ETHANE	9.0	9.5	2.1
PROPANE	5.9	5.1	1.2
N-BUTANE	1.3	1.3	0.5
ISOBUTANE	0.7	0.7	TRACE
N-PENTANE	0.3	0.3	TRACE
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	TRACE
NITROGEN	7.3	7.9	9.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.18	0.15	0.30
HEATING VALUE*	1174	1168	974
SPECIFIC GRAVITY	0.737	0.740	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7153 SAMPLE 9211		INDEX 7154 SAMPLE 15058		INDEX 7155 SAMPLE 2651	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	EASTLAND		EASTLAND		ECTOR	
FIELD	WILDCAT		WILDCAT		ECTOR	
WELL NAME	NO. 2		L. ABBOTT NO. 1		J. M. COWDEN NO. 3	
LOCATION	SEC. 26, TH&TC SUR.		L. ABBOTT SUR. NO. A-2		SEC. 34, T1N, BLK. 43	
OWNER	CUMCO OIL & GAS CORP.		TEXAS PACIFIC OIL CO.		STANOLIND OIL & GAS CO.	
COMPLETED	12/01/63		04/24/76		--/--/33	
SAMPLED	12/16/63		07/25/77		10/17/33	
FORMATION	PENN-STRAWN		PENN-MARBLE FALLS		-LIME	
GEOLOGIC PROVINCE CODE	425		425		430	
DEPTH, FEET	1192		3421		4025	
WELLHEAD PRESSURE,PSIG	90		1400		NOT GIVEN	
OPEN FLOW, MCFD	250		4726		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.0		79.6		72.3	
ETHANE	1.0		9.8		21.8	
PROPANE	0.9		4.0		---	
N-BUTANE	0.9		1.0		---	
ISOBUTANE	0.4		0.4		---	
N-PENTANE	0.3		0.3		---	
ISOPENTANE	0.4		0.2		---	
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.3		0.2		---	
NITROGEN	5.2		4.3		5.3	
OXYGEN	0.0		0.0		0.4	
ARGON	0.0		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		TRACE		0.1	
HELIUM	0.20		0.12		0.08	
HEATING VALUE*	1046		1168		1123	
SPECIFIC GRAVITY	0.634		0.698		0.687	

	INDEX 7156 SAMPLE 1945		INDEX 7157 SAMPLE 13637		INDEX 7158 SAMPLE 12738	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ECTOR		ECTOR		ECTOR	
FIELD	ECTOR COUNTY		GOLDSMITH		GOLDSMITH N	
WELL NAME	UNIVERSITY T-1		TXL "L" NO. 1		EMBAR NO. 35	
LOCATION	SEC. 3, BLK. 35, UNIV. LANDS		SEC. 31, BLK. 43, T&P RR SUR		SEC. 17, BLK. T1N, T&P SUR.	
OWNER	LANDRETH PRODUCTION CORP.		FOREST OIL CORP.		PHILLIPS PETROLEUM CO.	
COMPLETED	02/01/30		03/07/72		06/03/64	
SAMPLED	03/07/30		07/06/73		03/25/71	
FORMATION	PERM-		PERM-CLEARFORK		PERM-SAN ANDRES	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	3138		6400		3982	
WELLHEAD PRESSURE,PSIG	600		1817		700	
OPEN FLOW, MCFD	5020		2000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	78.1		78.2		77.5	
ETHANE	19.2		9.2		8.5	
PROPANE	---		5.0		3.5	
N-BUTANE	---		1.4		0.7	
ISOBUTANE	---		0.6		0.9	
N-PENTANE	---		0.2		0.5	
ISOPENTANE	---		0.4		TRACE	
CYCLOPENTANE	---		0.1		0.6	
HEXANES PLUS	---		0.1		2.0	
NITROGEN	2.2		4.3		5.2	
OXYGEN	0.5		0.0		0.0	
ARGON	---		0.0		0.0	
HYDROGEN	---		TRACE		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.5		0.5	
HELIUM	0.06		0.07		0.05	
HEATING VALUE*	1135		1149		1129	
SPECIFIC GRAVITY	0.662		0.719		0.751	

	INDEX 7159 SAMPLE 12730		INDEX 7160 SAMPLE 2056		INDEX 7161 SAMPLE 7527	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ECTOR		ECTOR		ECTOR	
FIELD	HEADLEE		PENWELL		TXL	
WELL NAME	HDU 2-A		UNIVERSITY T NO. 2, OIL WELL		J. D. SLATOR NO. 1	
LOCATION	SEC. 7, BLK. 41, T-2 SUR.		SEC. 3, BLK. 35, UNIV. LAND		SEC. 4, BLK. 45, T&P SUR.	
OWNER	GETTY OIL CO., ET AL.		LANDRETH PRODUCTION CORP.		OHIO OIL CO.	
COMPLETED	06/11/70		03/20/30		05/06/47	
SAMPLED	03/23/71		05/22/30		04/26/60	
FORMATION	DEVO-		PERM-GRAYBURG		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	11974		3600		9282	
WELLHEAD PRESSURE,PSIG	4471		NOT GIVEN		510	
OPEN FLOW, MCFD	9400		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	78.8		6.5		70.9	
ETHANE	12.7		82.4		13.9	
PROPANE	4.6		---		5.0	
N-BUTANE	0.9		---		1.1	
ISOBUTANE	0.6		---		0.3	
N-PENTANE	0.4		---		0.3	
ISOPENTANE	0.0		---		0.2	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.3		---		0.1	
NITROGEN	1.0		7.8		6.9	
OXYGEN	0.0		0.4		TRACE	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		1.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.7		2.9		0.1	
HELIUM	0.152		0.01		0.10	
HEATING VALUE*	1232		1142		1174	
SPECIFIC GRAVITY	0.714		1.025		0.730	

	INDEX 7162 SAMPLE 12779		INDEX 7163 SAMPLE 4087		INDEX 7164 SAMPLE 14580	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ECTOR		ECTOR		EDWARDS	
FIELD	TXL		WILDCAT		COMPANARO E	
WELL NAME	TXL B NO. 7		H. F. CUMMINS NO. 1		PHILLIPS NO. 2	
LOCATION	NOT GIVEN		SEC. 11		SEC. 3, BLK 16, GC&SERR SUR.	
OWNER	ATLANTIC RICHFIELD CO.		HUMBLE OIL & REFINING CO.		NORTH AMERICAN ROYALTIES,INC	
COMPLETED	NOT GIVEN		NOT GIVEN		04/12/74	
SAMPLED	04/23/71		08/04/45		02/11/76	
FORMATION	PERM-SAN ANDRES		PERM-YATES		PENN-CANYON	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	4853		2650		3179	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		680	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		2800	
COMPONENT, MOLE PCT						
METHANE	77.4		36.0		89.8	
ETHANE	10.4		19.7		2.6	
PROPANE	5.2		---		1.5	
N-BUTANE	1.2		---		0.3	
ISOBUTANE	0.7		---		0.4	
N-PENTANE	0.3		---		0.1	
ISOPENTANE	0.5		---		0.1	
CYCLOPENTANE	0.2		---		TRACE	
HEXANES PLUS	0.3		---		0.1	
NITROGEN	2.9		43.3		4.6	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		1.0		0.2	
HELIUM	0.03		0.03		0.19	
HEATING VALUE*	1238		718		1036	
SPECIFIC GRAVITY	0.728		0.840		0.621	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7165 SAMPLE 13159	INDEX 7166 SAMPLE 14404	INDEX 7167 SAMPLE 14304
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	LULA	PAN GIL RANCH	ROY BAKER
WELL NAME	JOE PETERSON NO. 1	MORRIS NO. 13-1	ROY BAKER NO. 1
LOCATION	14 MI. NE ROCKSPRINGS	SEC. 13, AB&M SUR	SEC. 15, A-1352, WASH.CO. RR
OWNER	WAYNE PETROLEUM CO.	MITCHELL ENERGY CORP.	NORTH AMERICAN ROYALTIES,INC
COMPLETED	07/20/71	01/23/73	09/01/73
SAMPLED	02/26/72	07/02/75	03/18/75
FORMATION	ORDO-ELLENBURGER	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4100	2262	3221
WELLHEAD PRESSURE,PSIG	1317	580	450
OPEN FLOW, MCFD	6200	2200	3400
COMPONENT, MOLE PCT			
METHANE	84.1	88.9	88.8
ETHANE	4.6	2.3	2.2
PROPANE	2.0	1.1	1.2
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	8.0	6.5	6.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.22	0.31	0.25
HEATING VALUE*	1028	997	991
SPECIFIC GRAVITY	0.650	0.614	0.613

	INDEX 7168 SAMPLE 646	INDEX 7169 SAMPLE 15337	INDEX 7170 SAMPLE 4823
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ERATH	ERATH	ERATH
FIELD	GARNER	MINNIE	NOT GIVEN
WELL NAME	C. M. BARTOM NO. 1	MINNIE Q. LOWE NO. 1	C. H. PACK NO. 1
LOCATION	NOT GIVEN	JAMES MCCOY SUR. 29, A-563	G. WEST SUR. NO. A-808
OWNER	TEXAS PACIFIC COAL & OIL CO.	TEXAS PACIFIC OIL CO., INC.	CONTINENTAL OIL CO.
COMPLETED	03/--/20	05/13/65	01/07/49
SAMPLED	09/07/21	08/01/78	12/28/49
FORMATION	NOT GIVEN	PENN-STRAWN	PENN-
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	3226	1374	3604
WELLHEAD PRESSURE,PSIG	420	645	1600
OPEN FLOW, MCFD	43	6968	668
COMPONENT, MOLE PCT			
METHANE	69.6	83.5	76.7
ETHANE	29.6	6.5	9.5
PROPANE	---	3.4	5.2
N-BUTANE	---	0.8	1.2
ISOBUTANE	---	0.5	0.4
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.6	4.3	5.4
OXYGEN	0.0	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.3
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.08	0.18	0.12
HEATING VALUE*	1335	1126	1171
SPECIFIC GRAVITY	0.702	0.673	0.716

	INDEX 7171 SAMPLE 12624	INDEX 7172 SAMPLE 13379	INDEX 7173 SAMPLE 4348
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ERATH	FALLS	FAYETTE
FIELD	X-RAY	DENNY	NOT GIVEN
WELL NAME	C. C. RUSSELL NO. 1	EZELL NO. 3	AUGUST PIETSCH NO. 1
LOCATION	N. STEPHENVILLE	A. POWELL SUR. A-52	8 MI. N OF LAGRANGE
OWNER	COASTAL STATES GAS PROD. CO.	JAKE L. HAMON	SEABOARD OIL CO.
COMPLETED	NOT GIVEN	04/26/71	01/18/47
SAMPLED	01/11/71	09/08/72	08/--/47
FORMATION	PENN-MARBLE FALLS	JURA-COTTON VALLEY	EOCE-
GEOLOGIC PROVINCE CODE	415	260	220
DEPTH, FEET	NOT GIVEN	9222	6521
WELLHEAD PRESSURE,PSIG	315	3225	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	56000	2900
COMPONENT, MOLE PCT			
METHANE	77.1	87.1	38.4
ETHANE	11.0	5.7	58.8
PROPANE	4.9	1.6	---
N-BUTANE	1.4	0.4	---
ISOBUTANE	0.8	0.3	---
N-PENTANE	0.5	0.2	---
ISOPENTANE	0.4	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	3.0	2.7	0.8
OXYGEN	0.0	0.4	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	1.2	1.3
HELIUM	0.06	0.01	0.01
HEATING VALUE*	1242	1073	1143
SPECIFIC GRAVITY	0.737	0.644	0.865

	INDEX 7174 SAMPLE 8155	INDEX 7175 SAMPLE 8156	INDEX 7176 SAMPLE 5118
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FISHER	FISHER	FISHER
FIELD	ROUND TOP	ROUND TOP	ROYSTON
WELL NAME	H. F. REQUS	W. D. STEPHENS NO. 1	J. L. SHARP NO. 1
LOCATION	GBR&CRR SUR.	SEC. 78, BLK. 1, B&TC SUR.	SEC. 207, BLK.1, BBB&C SUR.
OWNER	SO-JOURNER DRILLING CO.	A. POLLAND SIMONS	MOUTRAY MOORE DRILLING CO.
COMPLETED	09/10/60	11/25/58	03/10/51
SAMPLED	08/11/61	08/11/61	10/25/51
FORMATION	PENN-SWASTIKA L	PENN-CANYON	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3858	4318	3814
WELLHEAD PRESSURE,PSIG	1100	1200	1600
OPEN FLOW, MCFD	4250	2800	3775
COMPONENT, MOLE PCT			
METHANE	73.9	69.3	56.4
ETHANE	7.0	10.9	16.5
PROPANE	4.7	7.8	15.5
N-BUTANE	1.2	1.7	3.9
ISOBUTANE	0.7	1.0	1.5
N-PENTANE	0.1	0.2	0.6
ISOPENTANE	0.3	0.4	0.7
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	11.3	8.2	4.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.29	0.20	0.02
HEATING VALUE*	1082	1221	1525
SPECIFIC GRAVITY	0.720	0.776	0.926

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7177 SAMPLE 10633	INDEX 7178 SAMPLE 6544	INDEX 7179 SAMPLE 6539
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FLOYD	FOARD	FOARD
FIELD	WILDCAT	FOARD COUNTY REGULAR	THALIA
WELL NAME	R. M. BATTAY NO. 1	R. H. COOPER NO. 7	MATHEWS
LOCATION	J. W. PREWITT SUR. A-1372	SEC. 3, GC&SF SUR.	NOT GIVEN
OWNER	ROY FURR	LAMB & FORD DRILLING CO.	WELCH & WHITE DRILLING CO.
COMPLETED	06/15/66	03/19/56	NOT GIVEN
SAMPLED	NOT GIVEN	04/05/58	04/05/58
FORMATION	NOT GIVEN	PENN-CANYON	PERM-WICHITA FALLS
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	2007	900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	65.6	57.3
ETHANE	0.0	11.1	1.9
PROPANE	0.0	6.7	0.8
N-BUTANE	0.0	1.9	0.3
ISOBUTANE	0.0	1.1	0.3
N-PENTANE	0.0	0.4	0.2
ISOPENTANE	0.0	0.4	0.1
CYCLOPENTANE	0.0	0.2	0.2
HEXANES PLUS	0.0	0.5	0.4
NITROGEN	99.3	11.7	37.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.12	0.10	1.00
HEATING VALUE*	4	1206	696
SPECIFIC GRAVITY	0.962	0.803	0.751

	INDEX 7180 SAMPLE 6540	INDEX 7181 SAMPLE 6541	INDEX 7182 SAMPLE 6543
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	THALIA	THALIA	THALIA
WELL NAME	NETTIE TARVER NO. 1	R. H. COOPER NO. 2	R. H. COOPER NO. 1
LOCATION	SEC. 3 GC&SF RR CO	SEC. 3, GC&SF SUR.	SEC. 3, GC&SF SUR.
OWNER	WELCH & WHITE DRILLING CO.	LAMB & FORD DRILLING CO.	LAMB & FORD DRILLING CO.
COMPLETED	--/--/55	07/14/53	05/03/53
SAMPLED	04/05/58	04/05/58	04/05/58
FORMATION	PENN-TANNEHILL	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	800	2048	2018
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.3	58.2	60.3
ETHANE	3.1	4.7	5.8
PROPANE	1.5	3.1	3.9
N-BUTANE	0.6	1.5	1.6
ISOBUTANE	0.4	0.7	0.9
N-PENTANE	0.4	0.5	0.5
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	0.4	0.2	0.2
HEXANES PLUS	0.8	0.5	0.5
NITROGEN	35.5	29.3	25.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.80	0.70	0.50
HEATING VALUE*	776	996	972
SPECIFIC GRAVITY	0.781	0.793	0.795

	INDEX 7183 SAMPLE 6609	INDEX 7184 SAMPLE 6610	INDEX 7185 SAMPLE 6611
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	THALIA	THALIA	THALIA
WELL NAME	TARVER NO. A	NETTIE TARVER	MATHEWS
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	L. B. SCOTT	L. B. SCOTT	L. B. SCOTT
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/31/58	05/31/58	05/31/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	800	900
WELLHEAD PRESSURE,PSIG	275	325	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.5	62.5	61.5
ETHANE	3.1	2.9	3.5
PROPANE	1.1	1.3	1.6
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	36.4	31.3	31.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.80	0.90	0.90
HEATING VALUE*	701	760	764
SPECIFIC GRAVITY	0.745	0.728	0.733

	INDEX 7186 SAMPLE 6612	INDEX 7187 SAMPLE 6613	INDEX 7188 SAMPLE 6614
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	THALIA	THALIA	THALIA
WELL NAME	MATUS GAS WELL	T. L. WARD	NANNIE NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	L. B. SCOTT	L. B. SCOTT	L. B. SCOTT
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/31/58	NOT GIVEN	05/31/58
FORMATION	PERM-WICHITA FALLS	NOT GIVEN	PERM-WICHITA FALLS
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	800	NOT GIVEN	900
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.6	61.8	57.7
ETHANE	3.8	3.8	3.2
PROPANE	1.7	1.8	1.2
N-BUTANE	0.6	0.4	0.4
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	31.0	30.6	35.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.90	0.90	0.90
HEATING VALUE*	771	774	715
SPECIFIC GRAVITY	0.732	0.732	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7189 SAMPLE 11134		INDEX 7190 SAMPLE 13051		INDEX 7191 SAMPLE 9678	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	CLODINE		FULSHEAR		HUNGERFORD E	
WELL NAME	J. R. FARMER EST. NO. 1		ROBINSON UNIT NO. 1		RAGSDALE UNIT NO. 1-T	
LOCATION	SEC. 1, I&GNRR SUR. A353		G. W. CARTWRIGHT SUR. A-149		JOSEPH M.MCCORMICK SUR.A-57	
OWNER	EDWIN L. COX		PENNZOIL PRODUCING CO.		SUN OIL CO.	
COMPLETED	04/29/66		05/28/70		01/01/63	
SAMPLED	09/26/67		09/29/71		12/27/64	
FORMATION	-HATFIELD		EOCE-IIID SAND		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7480		7421		5108	
WELLHEAD PRESSURE,PSIG	2472		1550		1565	
OPEN FLOW, MCFD	12500		968		47000	
COMPONENT, MOLE PCT						
METHANE	91.1		90.8		97.0	
ETHANE	4.6		4.5		1.6	
PROPANE	1.7		2.1		0.3	
N-BUTANE	0.5		0.4		0.1	
ISOBUTANE	0.4		0.5		TRACE	
N-PENTANE	0.1		0.2		TRACE	
ISOPENTANE	0.3		0.2		TRACE	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.2		0.2		TRACE	
NITROGEN	0.4		0.4		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.6		0.5	
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1107		1116		1022	
SPECIFIC GRAVITY	0.626		0.633		0.573	

	INDEX 7192 SAMPLE 15268		INDEX 7193 SAMPLE 5884		INDEX 7194 SAMPLE 13443	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	HUNGERFORD E		LONG POINT		MOORE'S ORCHARD	
WELL NAME	GORDON UNIT NO. 1-X		GULF FEE NO. 1		J. M. MOORE ET AL NO. 93	
LOCATION	ISAAC MCGARY SUR. A-58		F. F. WARD SUR. NO. 462		MARK SMITH SUR. A-314	
OWNER	CADDO OIL CO.		GOLDSTON OIL CORP.		GULF OIL CO.-U.S.	
COMPLETED	02/08/75		05/18/55		12/22/70	
SAMPLED	04/19/78		07/26/55		09/21/72	
FORMATION	MIOC-		OLIG-FRIO		EOCE-YEGUA FY-2	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2542		5196		6650	
WELLHEAD PRESSURE,PSIG	1057		1972		1820	
OPEN FLOW, MCFD	2002		12000		28500	
COMPONENT, MOLE PCT						
METHANE	98.9		96.0		84.6	
ETHANE	0.1		2.5		6.0	
PROPANE	TRACE		0.5		3.8	
N-BUTANE	0.0		0.2		1.3	
ISOBUTANE	0.0		TRACE		1.4	
N-PENTANE	0.0		0.0		0.6	
ISOPENTANE	0.0		0.1		0.6	
CYCLOPENTANE	0.0		0.1		0.3	
HEXANES PLUS	0.0		0.1		0.9	
NITROGEN	0.8		0.4		0.3	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1004		1050		1263	
SPECIFIC GRAVITY	0.559		0.584		0.717	

	INDEX 7195 SAMPLE 15154		INDEX 7196 SAMPLE 15155		INDEX 7197 SAMPLE 15946	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	NEEDVILLE		NEEDVILLE		PECAN GROVE	
WELL NAME	NOWOTNY NO. 1		NOWOTNY NO. 1		PECAN GROVE GAS UNIT NO. 1	
LOCATION	H&TCRR SUR. 39, A-224		H&TCRR SUR. 39, A-224		RANDALL JONES SUR. A-42	
OWNER	GROVER J. GEISELMAN		GROVER J. GEISELMAN		EXXON CO., U.S.A.	
COMPLETED	02/05/76		02/05/76		09/05/79	
SAMPLED	11/14/77		11/14/77		04/22/80	
FORMATION	MIOC-		MIOC-		EOCE-COOK MOUNTAIN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3903		3708		8686	
WELLHEAD PRESSURE,PSIG	900		1000		5442	
OPEN FLOW, MCFD	2000		6000		4998	
COMPONENT, MOLE PCT						
METHANE	99.1		99.4		90.5	
ETHANE	0.1		0.1		5.2	
PROPANE	TRACE		TRACE		1.8	
N-BUTANE	TRACE		0.0		0.4	
ISOBUTANE	TRACE		0.0		0.4	
N-PENTANE	TRACE		0.0		0.1	
ISOPENTANE	TRACE		0.0		0.3	
CYCLOPENTANE	TRACE		0.0		0.1	
HEXANES PLUS	TRACE		0.0		0.3	
NITROGEN	0.5		0.4		0.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.4	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1006		1009		1120	
SPECIFIC GRAVITY	0.555		0.556		0.633	

	INDEX 7198 SAMPLE 15954		INDEX 7199 SAMPLE 16126		INDEX 7200 SAMPLE 10005	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	PECAN GROVE		PECAN GROVE		ROSENBERG N	
WELL NAME	PECAN GROVE GAS UNIT NO. 1		PECAN GROVE GAS UNIT NO. 1		FOSTEK FARMS NO. 1	
LOCATION	RANDALL JONES SUR., A-42		RANDALL JONES SUR. A-42		JOHN FOSTER LEAGUE A-25	
OWNER	EXXON CO., U.S.A.		EXXON CO., U.S.A.		COASTAL STATES GAS PROD. CO.	
COMPLETED	09/05/79		11/08/79		01/27/63	
SAMPLED	04/22/80		10/29/80		06/15/66	
FORMATION	EOCE-COOK MOUNTAIN		EOCE-COOK MOUNTAIN		MIOC-3400 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8686		8567		3414	
WELLHEAD PRESSURE,PSIG	5442		5457		1450	
OPEN FLOW, MCFD	4998		4998		47000	
COMPONENT, MOLE PCT						
METHANE	85.6		88.3		98.9	
ETHANE	4.9		5.6		0.2	
PROPANE	1.8		2.3		0.1	
N-BUTANE	0.5		1.0		0.0	
ISOBUTANE	0.4		0.7		0.0	
N-PENTANE	0.1		0.3		0.0	
ISOPENTANE	0.3		0.7		0.0	
CYCLOPENTANE	0.2		0.2		0.0	
HEXANES PLUS	0.3		0.4		0.0	
NITROGEN	4.5		0.3		0.7	
OXYGEN	1.1		TRACE		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.1	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1072		1183		1008	
SPECIFIC GRAVITY	0.657		0.668		0.560	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7201 SAMPLE 15173		INDEX 7202 SAMPLE 13625		INDEX 7203 SAMPLE 11982	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	SUGAR LAND		SUGARLAND		THOMPSONS	
WELL NAME	HAMNER FEE NO. 14		BANKERS MORTGAGE A NO. 2		A. P. GEORGE NO. 11-F	
LOCATION	W. LITTLE SUR. A-54		WM. LITTLE SUR. A-54		JOHN RABB SUR. A-73	
OWNER	EXXON CORP.		EXXON CO., U.S.A.		HUMBLE OIL & REFINING CO.	
COMPLETED	03/11/76		09/14/73		05/23/67	
SAMPLED	12/21/77		11/21/73		07/25/69	
FORMATION	MIOC-		MIOC-		MIOC-8 SEGMENT 6	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	1920		2800		3435	
WELLHEAD PRESSURE,PSIG	185		1215		1334	
OPEN FLOW, MCFD	47185		NOT GIVEN		13300	
COMPONENT, MOLE PCT						
METHANE	98.7		95.3		97.6	
ETHANE	0.1		0.4		0.1	
PROPANE	TRACE		0.4		TRACE	
N-BUTANE	0.0		0.3		0.0	
ISOBUTANE	0.0		0.2		0.0	
N-PENTANE	0.0		0.2		0.0	
ISOPENTANE	0.0		0.2		0.0	
CYCLOPENTANE	0.0		0.2		0.0	
HEXANES PLUS	0.0		0.4		0.0	
NITROGEN	0.6		0.6		1.2	
OXYGEN	0.0		0.1		0.3	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		1.7		0.6	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1002		1045		991	
SPECIFIC GRAVITY	0.562		0.609		0.566	

	INDEX 7204 SAMPLE 11983		INDEX 7205 SAMPLE 12049		INDEX 7206 SAMPLE 12428	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FRANKLIN		FRANKLIN	
FIELD	THOMPSONS		CHITSEY		MONCRIEF	
WELL NAME	A. P. GEORGE NO. 11-H		CHITSEY NO. 1		MONCRIEF NO. 1	
LOCATION	JOHN RABB SUR. A-73		J. H. MILLIGAN SUR. A-309		T. P. MOSLEY SUR. A-308	
OWNER	HUMBLE OIL & REFINING CO.		JAKE L. HAMON		W. A. MONCRIEF, JR.	
COMPLETED	07/05/67		05/14/69		07/11/64	
SAMPLED	07/25/69		09/23/69		10/02/70	
FORMATION	MIOC-6 SEGMENT 6		JURA-SMACKOVER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	220		260		260	
DEPTH, FEET	3191		13134		12300	
WELLHEAD PRESSURE,PSIG	1073		3270		3200	
OPEN FLOW, MCFD	32500		16000		9000	
COMPONENT, MOLE PCT						
METHANE	98.6		18.6		37.5	
ETHANE	0.1		5.5		6.1	
PROPANE	TRACE		4.8		3.4	
N-BUTANE	0.0		1.6		0.9	
ISOBUTANE	0.0		2.1		1.0	
N-PENTANE	0.0		0.4		0.3	
ISOPENTANE	0.0		0.4		0.1	
CYCLOPENTANE	0.0		0.1		0.1	
HEXANES PLUS	0.0		0.4		0.2	
NITROGEN	0.4		62.5		46.6	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		3.5		3.6	
HELIUM	TRACE		0.09		0.10	
HEATING VALUE*	1001		595		672	
SPECIFIC GRAVITY	0.562		1.005		0.888	

	INDEX 7207 SAMPLE 6486		INDEX 7208 SAMPLE 6487		INDEX 7209 SAMPLE 12662	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FRANKLIN		FRANKLIN		FRANKLIN	
FIELD	NEW HOPE		NEW HOPE		W. A. MONCRIEF	
WELL NAME	DEEP UNIT NO. 2-1-D		DEEP UNIT NO. 3-1-D		J. M. MITCHELL NO. 1	
LOCATION	C. F. MCKENZIE SUR.		C. F. MCKENZIE SUR.		S. S. PAYNE SUR. A-366	
OWNER	TIDEWATER OIL CO.		TIDEWATER OIL CO.		WESTLAND OIL DEVELOPMENT	
COMPLETED	09/21/54		10/17/55		05/11/68	
SAMPLED	01/28/58		01/28/58		01/29/71	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	11996		12126		12200	
WELLHEAD PRESSURE,PSIG	2862		2372		2880	
OPEN FLOW, MCFD	11900		6600		63000	
COMPONENT, MOLE PCT						
METHANE	44.0		39.7		34.3	
ETHANE	10.6		12.4		6.3	
PROPANE	6.7		8.9		3.7	
N-BUTANE	3.6		5.5		1.5	
ISOBUTANE	2.9		4.4		1.4	
N-PENTANE	1.6		2.4		0.6	
ISOPENTANE	1.4		2.9		0.5	
CYCLOPENTANE	0.2		0.4		0.2	
HEXANES PLUS	1.4		2.5		0.8	
NITROGEN	7.1		6.5		47.4	
OXYGEN	0.2		0.2		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	14.0		7.9		0.0	
CARBON DIOXIDE	6.3		6.2		3.2	
HELIUM	0.08		0.01		0.10	
HEATING VALUE*	1326		1609		750	
SPECIFIC GRAVITY	1.049		1.164		0.938	

	INDEX 7210 SAMPLE 12663		INDEX 7211 SAMPLE 12267		INDEX 7212 SAMPLE 12942	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FRANKLIN		FREESTONE		FREESTONE	
FIELD	W. A. MONCRIEF		CARTER-BLOXOM		CARTER-BLOXOM	
WELL NAME	MARY L. STANLEY NO. 1		M. D. BLOXOM NO. 1		MADGE BLOXOM NO. 1	
LOCATION	W. B. JORDAN SUR. A-581		J. MATTHEWS SUR. A-418		J. MATTHEWS SUR. A-418	
OWNER	WESTLAND OIL DEVELOPMENT		GETTY OIL CO.		GETTY OIL CO.	
COMPLETED	09/14/68		05/18/70		02/03/70	
SAMPLED	01/29/71		05/18/70		NOT GIVEN	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	12200		11985		6541	
WELLHEAD PRESSURE,PSIG	2408		3980		2560	
OPEN FLOW, MCFD	15000		17500		6000	
COMPONENT, MOLE PCT						
METHANE	31.9		59.3		91.8	
ETHANE	9.8		9.1		2.5	
PROPANE	7.6		11.2		0.8	
N-BUTANE	4.5		5.6		0.1	
ISOBUTANE	4.3		6.5		0.1	
N-PENTANE	2.5		0.1		0.1	
ISOPENTANE	2.2		4.5		TRACE	
CYCLOPENTANE	2.1		TRACE		TRACE	
HEXANES PLUS	2.4		0.2		0.1	
NITROGEN	31.8		11.8		1.1	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		3.2	
HYDROGEN SULFIDE**	0.0		17.2		0.0	
CARBON DIOXIDE	3.2		5.5		0.0	
HELIUM	0.19		0.33		0.06	
HEATING VALUE*	462		871		1022	
SPECIFIC GRAVITY	0.929		0.827		0.570	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7213 SAMPLE 4118	INDEX 7214 SAMPLE 4120	INDEX 7215 SAMPLE 4999
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	FAIRFIELD	FAIRFIELD	FREESTONE
WELL NAME	NANCY HAM NO. 1	A. L. MCKNIGHT NO. 1	FREESTONE GAS UNIT NO. 1
LOCATION	6 MI. S OF FAIRFIELD	BETWEEN FAIRFIELD & TEAGUE	J. L. CHAVERT SUR. NO. A-10
OWNER	TEXAS CO.	TEXAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/21/45	02/24/45	09/13/50
SAMPLED	10/02/46	10/02/46	02/05/51
FORMATION	CRET-PETTIT	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7980	8330	8234
WELLHEAD PRESSURE, PSIG	3050	3195	3878
OPEN FLOW, MCFD	10000	14600	2100
COMPONENT, MOLE PCT			
METHANE	87.6	89.8	96.0
ETHANE	10.8	7.4	1.8
PROPANE	---	---	0.4
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	1.2	0.6
OXYGEN	0.4	0.8	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.8	0.8
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1081	1042	1027
SPECIFIC GRAVITY	0.622	0.608	0.582

	INDEX 7216 SAMPLE 5003	INDEX 7217 SAMPLE 15094	INDEX 7218 SAMPLE 15095
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	FREESTONE	FREESTONE	FREESTONE
WELL NAME	R. P. MCWATTERS NO. 1	C. A. NEWSOM NO. 1	C. A. NEWSOM NO. 1
LOCATION	G. LAMB & F. H. HOWELL SUR.	JOEL NEWSOM SUR. A-420	JOEL NEWSOM SUR. A-420
OWNER	HUMBLE OIL & REFINING CO.	ENSERCH EXPLORATION, INC.	ENSERCH EXPLORATION, INC.
COMPLETED	01/29/49	03/19/76	03/19/76
SAMPLED	02/05/51	09/02/77	09/02/77
FORMATION	CRET-PETTIT	JURA-BOSSIER	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8315	11849	9787
WELLHEAD PRESSURE, PSIG	3431	5640	3505
OPEN FLOW, MCFD	6500	5709	4686
COMPONENT, MOLE PCT			
METHANE	94.0	92.1	97.1
ETHANE	2.5	4.0	0.8
PROPANE	1.1	0.9	0.1
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.3	0.3	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	2.0	1.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1067	1055	1001
SPECIFIC GRAVITY	0.606	0.616	0.574

	INDEX 7219 SAMPLE 15973	INDEX 7220 SAMPLE 15994	INDEX 7221 SAMPLE 3792
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	NEAL SMACKOVER	NEAL SMACKOVER	NOT GIVEN
WELL NAME	GLAYDENE NEAL NO. 1	GLAYDENE NEAL NO. 1	M. L. STEWARD NO. 1
LOCATION	JOHN BRADLEY SUR., A-53	JOHN BRADLEY SUR., A-53	JAS. LEAGUE
OWNER	GETTY OIL CO.	GETTY OIL CO.	CARTER-GRAGG OIL CO.
COMPLETED	03/14/79	03/14/79	03/01/43
SAMPLED	06/02/80	07/02/80	NOT GIVEN
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11599	11599	4001
WELLHEAD PRESSURE, PSIG	3826	3826	NOT GIVEN
OPEN FLOW, MCFD	13600	13600	25000
COMPONENT, MOLE PCT			
METHANE	49.7	38.4	88.0
ETHANE	8.0	7.0	8.9
PROPANE	3.2	2.7	---
N-BUTANE	1.2	1.0	---
ISOBUTANE	1.2	0.9	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.5	0.4	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.7	0.4	2.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	28.9	44.4	---
CARBON DIOXIDE	5.0	4.3	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1040	964	1051
SPECIFIC GRAVITY	0.922	0.984	0.614

	INDEX 7222 SAMPLE 10021	INDEX 7223 SAMPLE 11619	INDEX 7224 SAMPLE 11620
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	NOT GIVEN	REED	REED
WELL NAME	H. C. BROWN NO. 1	RUBY MIDDLETON NO. 1	RUBY MIDDLETON NO. 1
LOCATION	G. BREWSTER SUR. NO. A-5	A. ANGLIN SUR. A-46	A. ANGLIN SUR. A-46
OWNER	CONTINENTAL OIL CO.	TEXACO INC.	TEXACO INC.
COMPLETED	03/01/65	05/27/67	05/27/67
SAMPLED	05/26/65	08/06/68	08/06/68
FORMATION	JURA-COTTON VALLEY	CRET-RODESSA	JURA-HAYNESVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	12000	7255	11837
WELLHEAD PRESSURE, PSIG	5500	1815	6000
OPEN FLOW, MCFD	NOT GIVEN	3355	1671
COMPONENT, MOLE PCT			
METHANE	96.7	89.9	94.5
ETHANE	0.7	3.7	1.4
PROPANE	0.2	2.5	0.4
N-BUTANE	0.0	1.1	0.2
ISOBUTANE	0.0	0.5	TRACE
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	0.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.0	2.4
HELIUM	0.01	0.02	0.01
HEATING VALUE*	9970	1141	1026
SPECIFIC GRAVITY	0.582	0.654	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7225 SAMPLE 12519		INDEX 7226 SAMPLE 12472		INDEX 7227 SAMPLE 12473	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	REED		RISCHER'S STORE		RISCHER'S STORE	
WELL NAME	NORTHERN G.U. NO. 1		A. W. JACOBS NO. 1		A. W. JACOBS NO. 1	
LOCATION	NOT GIVEN		HENRY AWALT SUR. A-4		HENRY AWALT SUR. A-4	
OWNER	TEXACO INC.		GETTY OIL CO.		GETTY OIL CO.	
COMPLETED	08/13/49		10/14/69		10/14/69	
SAMPLED	11/04/70		10/21/70		10/21/70	
FORMATION	CRET-TRAVIS PEAK		CRET-PETTIT		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	8208		6904		6393	
WELLHEAD PRESSURE,PSIG	800		2435		2394	
OPEN FLOW, MCFD	1500		7210		850	
COMPONENT, MOLE PCT						
METHANE	95.2		87.8		89.2	
ETHANE	1.2		5.6		5.6	
PROPANE	0.4		2.8		3.6	
N-BUTANE	0.2		0.8		0.0	
ISOBUTANE	0.3		0.6		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.1		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.2		0.0	
NITROGEN	1.6		1.3		1.3	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.1	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.7		0.0	
HELIUM	0.02		0.03		0.02	
HEATING VALUE*	1027		1129		1097	
SPECIFIC GRAVITY	0.590		0.652		0.623	

	INDEX 7228 SAMPLE 5236		INDEX 7229 SAMPLE 11603		INDEX 7230 SAMPLE 12506	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	STEWARDS MILL NE		TEAGUE		TEAGUE	
WELL NAME	C. W. MARSTERS NO. 1		J. F. ROPER NO. 1		HAM GAS UNIT NO. 1-T	
LOCATION	NOT GIVEN		D.C.CANNON SUR. A-130		NOT GIVEN	
OWNER	HUMBLE OIL & REFINING CO.		NORTH CENTRAL OIL CORP.		TEXACO INC.	
COMPLETED	06/05/52		01/25/67		NOT GIVEN	
SAMPLED	06/13/52		07/31/68		11/03/70	
FORMATION	CRET-PETTIT		JURA-COTTON VALLEY		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	7700		11965		7532	
WELLHEAD PRESSURE,PSIG	3629		5150		965	
OPEN FLOW, MCFD	3000		10500		3500	
COMPONENT, MOLE PCT						
METHANE	92.1		95.7		92.5	
ETHANE	3.4		1.0		1.8	
PROPANE	1.4		TRACE		0.5	
N-BUTANE	0.4		0.1		0.1	
ISOBUTANE	0.2		TRACE		0.2	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.1		0.0		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	TRACE		0.3		0.1	
NITROGEN	1.3		0.4		2.5	
OXYGEN	0.1		0.0		0.5	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.8		2.2		1.4	
HELIUM	0.03		0.01		0.02	
HEATING VALUE*	1059		1014		1002	
SPECIFIC GRAVITY	0.612		0.594		0.602	

	INDEX 7231 SAMPLE 15345		INDEX 7232 SAMPLE 12509		INDEX 7233 SAMPLE 12510	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	TEAGUE TOWNSITE		TEAGUE W		TEAGUE W	
WELL NAME	J. W. BROWN NO. 1		M. E. PRUIETT NO. 1-C		J. E. WRIGHT NO. 1-T	
LOCATION	GEORGE BREWER SUR., A-5		1570		1572	
OWNER	HIGHLAND RESOURCES, INC.		UNION OIL CO. OF CALIFORNIA		UNION OIL CO. OF CALIFORNIA	
COMPLETED	10/28/76		12/03/60		01/22/52	
SAMPLED	08/17/78		10/30/70		10/30/70	
FORMATION	JURA-COTTON VALLEY		CRET-RODESSA		CRET-TRAVIS PEAK	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	11955		6664		7534	
WELLHEAD PRESSURE,PSIG	6500		680		1160	
OPEN FLOW, MCFD	11500		410		1330	
COMPONENT, MOLE PCT						
METHANE	95.6		94.7		96.1	
ETHANE	0.7		2.1		1.9	
PROPANE	0.1		0.7		0.5	
N-BUTANE	TRACE		0.2		0.0	
ISOBUTANE	0.1		0.2		0.0	
N-PENTANE	TRACE		0.0		0.0	
ISOPENTANE	TRACE		0.2		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.1		0.0	
NITROGEN	2.3		0.6		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.9		0.9		0.5	
HELIUM	TRACE		0.02		0.02	
HEATING VALUE*	992		1043		1021	
SPECIFIC GRAVITY	0.591		0.594		0.576	

	INDEX 7234 SAMPLE 14151		INDEX 7235 SAMPLE 4441		INDEX 7236 SAMPLE 4848	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FRIO	
FIELD	TEAS		WILDCAT		DIVOT	
WELL NAME	HENRY WILLIAMS NO. 1		E. L. IRVIN NO. 1		SID KRATZ NO. 1	
LOCATION	CHAPLES TEAS SUR. A-610		NOT GIVEN		D. D. HARRIGAN SUBDIVISION	
OWNER	GETTY OIL CO.		TEXAS CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	03/24/73		09/03/47		02/11/50	
SAMPLED	09/20/74		01/14/48		02/21/50	
FORMATION	CRET-PETTIT		CRET-GLEN ROSE L		CRET-NAVARRO	
GEOLOGIC PROVINCE CODE	260		260		220	
DEPTH, FEET	6898		8055		4088	
WELLHEAD PRESSURE,PSIG	2334		3870		1629	
OPEN FLOW, MCFD	8400		23000		16000	
COMPONENT, MOLE PCT						
METHANE	88.5		89.6		90.4	
ETHANE	5.7		4.8		5.3	
PROPANE	2.0		---		1.6	
N-BUTANE	0.5		---		0.5	
ISOBUTANE	0.6		---		0.3	
N-PENTANE	0.1		---		0.1	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.2		---		0.3	
NITROGEN	1.2		0.2		2.9	
OXYGEN	TRACE		0.2		0.1	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.7		1.3		0.3	
HELIUM	0.13		0.11		0.03	
HEATING VALUE*	1115		1044		1071	
SPECIFIC GRAVITY	0.643		0.612		0.627	

* CALCULATED GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7237 SAMPLE 4796	INDEX 7238 SAMPLE 5088	INDEX 7239 SAMPLE 4140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FRIO	FRIO	FRIO
FIELD	DOERING RANCH	NOT GIVEN	PEARSALL
WELL NAME	FRANK DOERING NO. 2	HUMBEL-MARRS MCLEAN B-1	HALFF & OPPENHEIMER NO. 12
LOCATION	GBB&CRR SUR. NO. 1081	BS&F SUR., A-116	J. W. GIBSON SUR. NO. 15
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HIGHLAND OIL CO.
COMPLETED	06/01/49	NOT GIVEN	07/04/46
SAMPLED	10/10/49	09/19/51	09/26/46
FORMATION	CRET-U	CRET-OLMOS	CRET-U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4079	NOT GIVEN	4274
WELLHEAD PRESSURE,PSIG	1823	NOT GIVEN	1875
OPEN FLOW, MCFD	6000	NOT GIVEN	36000
COMPONENT, MOLE PCT			
METHANE	90.5	90.2	84.2
ETHANE	3.1	2.9	12.7
PROPANE	1.5	1.4	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.1	0.3	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	3.2	4.1	2.2
OXYGEN	0.1	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1067	1049	1081
SPECIFIC GRAVITY	0.624	0.629	0.633

	INDEX 7240 SAMPLE 2666	INDEX 7241 SAMPLE 12093	INDEX 7242 SAMPLE 8519
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FRIO	GAINES	GAINES
FIELD	WILDCAT	BRUMLEY	FELMAC
WELL NAME	F. DOERING NO. 1	MOORS ESTATE NO. 1	MERRITT NO. 1
LOCATION	M. L. CARRANZA SUR. NO. 302	SEC. 12, BLK. A-12, PSL SUR.	SEC. 24, C&M SUR.
OWNER	AMERADA PET. COR'., ET AL.	BELL PETROLEUM CO.	MCGRATH & SMITH
COMPLETED	NOT GIVEN	01/17/68	04/17/62
SAMPLED	03/28/34	11/01/69	05/07/62
FORMATION	CRET-L	PERM-DRINKARD	PERM-YATES
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	NOT GIVEN	7164	3337
WELLHEAD PRESSURE,PSIG	2000	1879	2400
OPEN FLOW, MCFD	1500	5100	2100
COMPONENT, MOLE PCT			
METHANE	79.2	69.5	50.5
ETHANE	8.8	6.8	7.5
PROPANE	---	4.1	2.7
N-BUTANE	---	4.7	0.7
ISOBUTANE	---	1.8	0.2
N-PENTANE	---	4.3	0.2
ISOPENTANE	---	2.2	TRACE
CYCLOPENTANE	---	0.7	TRACE
HEXANES PLUS	---	2.6	0.2
NITROGEN	5.1	3.0	37.8
OXYGEN	0.3	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	6.6	TRACE	0.1
HELIUM	0.03	0.06	0.06
HEATING VALUE*	960	1589	765
SPECIFIC GRAVITY	0.685	0.941	0.798

	INDEX 7243 SAMPLE 12698	INDEX 7244 SAMPLE 6799	INDEX 7245 SAMPLE 4046
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	G M K	HOMANN S	SEMINOLE
WELL NAME	O. D. C. C. NO. 1A	G. H. NELSON	RILEY C NO. 3
LOCATION	SEC. 65, BLK. G	SEC. 47, BLK. G, WTRR SUR.	SEC. 249, BLK. G, WTRR SUR.
OWNER	RESERVE OIL & GAS CO	TIDEWATER OIL CO.	ATLANTIC REFINING CO.
COMPLETED	NOT GIVEN	07/02/58	04/24/40
SAMPLED	03/--/71	08/19/58	05/29/45
FORMATION	PERM-YATES	NOT GIVEN	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3475	3482	3190
WELLHEAD PRESSURE,PSIG	500	2510	1575
OPEN FLOW, MCFD	NOT GIVEN	3300	2008
COMPONENT, MOLE PCT			
METHANE	53.0	55.5	54.4
ETHANE	7.3	7.5	27.5
PROPANE	2.6	2.3	---
N-BUTANE	0.7	0.7	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	33.3	33.1	17.9
OXYGEN	2.0	TRACE	0.1
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.03	0.04	0.05
HEATING VALUE*	739	815	1044
SPECIFIC GRAVITY	0.796	0.779	0.766

	INDEX 7246 SAMPLE 4165	INDEX 7247 SAMPLE 4166	INDEX 7248 SAMPLE 4167
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	RILEY C-3	TURLIN NO. 7	RILEY NO. 3
LOCATION	NOT GIVEN	SEC. 218	SEC. 229
OWNER	ATLANTIC REFINING CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/10/46	12/12/46	12/10/46
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3150	3150	3150
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1650	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.4	57.6	53.4
ETHANE	17.5	23.1	22.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.6	18.6	24.0
OXYGEN	0.2	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.04	0.04	0.05
HEATING VALUE*	936	997	935
SPECIFIC GRAVITY	0.730	0.750	0.765

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7249 SAMPLE 4168	INDEX 7250 SAMPLE 4169	INDEX 7251 SAMPLE 4170
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	MANN NO. 3	MATTHEWS NO. 3	TIPPETT NO. 5
LOCATION	SEC. 220	SEC. 231, BLK. G, WTRR SUR.	SEC. 250
OWNER	AMERADA PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	OHIO OIL CO.
COMPLETED	NOT GIVEN	03/30/41	NOT GIVEN
SAMPLED	12/12/46	12/12/46	12/12/46
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3150	3150	3150
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.1	56.7	51.4
ETHANE	14.9	18.4	15.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	28.5	24.2	32.4
OXYGEN	0.3	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.3	0.1
HELIUM	0.05	0.04	0.04
HEATING VALUE*	825	904	806
SPECIFIC GRAVITY	0.758	0.751	0.769

	INDEX 7252 SAMPLE 4200	INDEX 7253 SAMPLE 4201	INDEX 7254 SAMPLE 4204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	RILEY B NO. 7	RILEY E NO. 2	MATTHEWS A NO. 4
LOCATION	SEC. 229	SEC. 197	SEC. 231
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/19/47	02/19/47	02/20/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5110	5240	5132
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	29.9	66.0
ETHANE	15.2	52.3	23.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	0.3	1.8
OXYGEN	0.0	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	8.5	16.9	8.5
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1039	1240	1091
SPECIFIC GRAVITY	0.715	0.982	0.761

	INDEX 7255 SAMPLE 4205	INDEX 7256 SAMPLE 4206	INDEX 7257 SAMPLE 4208
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	LAMB NO. 3	TIPPETT NO. 5	ROBERTSON NO. 1
LOCATION	SEC. 250	SEC. 250	SEC. 196
OWNER	AMERADA PETROLEUM CORP.	OHIO OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/20/47	02/20/47	02/20/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5121	5124	5155
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.8	73.3	67.0
ETHANE	23.1	15.9	25.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	4.1	1.1
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	7.8	6.4	6.6
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1091	1027	1127
SPECIFIC GRAVITY	0.755	0.714	0.749

	INDEX 7258 SAMPLE 4212	INDEX 7259 SAMPLE 4213	INDEX 7260 SAMPLE 4214
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	AUSTIN NO. 1	MANN NO. 5	MANN NO. 3
LOCATION	SEC. 194, BLK. G, WTRR SUR.	SEC. 220, BLK. G, WTRR SUR.	SEC. 220, BLK. G, WTRR SUR.
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5100	5038	5064
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	73.6	73.4
ETHANE	19.0	16.2	18.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.9	5.4	2.9
OXYGEN	0.0	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.0	4.7	5.0
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1081	1036	1075
SPECIFIC GRAVITY	0.709	0.703	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7261 SAMPLE 4215	INDEX 7262 SAMPLE 4216	INDEX 7263 SAMPLE 4217
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	AVERITT NO. A-1	COFFEY NO. 2	COFFEY NO. 4
LOCATION	SEC. 228	SEC. 252	SEC. 252
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5187	5071	5166
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.8	71.1	64.9
ETHANE	19.1	17.2	24.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.5	3.7	1.7
OXYGEN	0.3	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	7.3	8.0	8.7
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1049	1028	1100
SPECIFIC GRAVITY	0.736	0.733	0.768

	INDEX 7264 SAMPLE 4218	INDEX 7265 SAMPLE 4219	INDEX 7266 SAMPLE 4220
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	HAHN NO. 2	TURLIN NO. 4	TURLIN NO. 9
LOCATION	SEC. 230	SEC. 218	SEC. 218
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5145	5124	5215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.3	67.7	65.7
ETHANE	22.5	23.6	28.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	2.6	0.2
OXYGEN	0.2	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.2	6.0	5.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1115	1109	1171
SPECIFIC GRAVITY	0.731	0.741	0.752

	INDEX 7267 SAMPLE 4229	INDEX 7268 SAMPLE 4230	INDEX 7269 SAMPLE 4231
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	LAMB NO. 4	MATTHEWS A NO. 7	MATTHEWS A NO. 1
LOCATION	SEC. 250	SEC. 231	SEC. 231
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5122	5152	5132
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.0	72.9	71.4
ETHANE	26.5	18.6	20.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.3	3.0	3.2
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.9	5.2	4.8
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1103	1072	1087
SPECIFIC GRAVITY	0.767	0.711	0.717

	INDEX 7270 SAMPLE 4232	INDEX 7271 SAMPLE 4233	INDEX 7272 SAMPLE 4234
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	SAWYER A NO. 1	BLAKEMORE NO. 7	BLAKEMORE NO. 3
LOCATION	SEC. 248	SEC. 232	SEC. 232
OWNER	AMERADA PETROLEUM CORP.	AMERADA PET. CORP.& HUMBLE	AMERADA PET. CORP. & HUMBLE
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5246	5262	5140
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.1	57.7	65.0
ETHANE	26.8	33.2	27.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	0.7	1.4
OXYGEN	0.3	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.8	8.2	5.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1130	1179	1158
SPECIFIC GRAVITY	0.763	0.803	0.753

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7273 SAMPLE 4235		INDEX 7274 SAMPLE 4236		INDEX 7275 SAMPLE 4237	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GAINES		GAINES		GAINES	
FIELD	SEMINOLE		SEMINOLE		SEMINOLE	
WELL NAME	ANDREWS NO. 1		AUSTIN B NO. 2		AVERITT NO. 1	
LOCATION	SEC. 222		SEC. 190		SEC. 22A	
OWNER	BAY PETROLEUM CORP.		BAY PETROLEUM CORP.		OHIO OIL CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	02/17/47		02/17/47		02/17/47	
FORMATION	PERM-SAN ANDRES		PERM-SAN ANDRES		PERM-SAN ANDRES	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	5155		5201		5000	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	65.4	----------	19.1	----------	72.1	----------
ETHANE	25.8	----------	74.4	----------	17.6	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	4.5		2.4		5.6	
OXYGEN	0.4	----------	0.5	----------	0.1	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	5.9	----------	3.6	----------	4.6	----------
HELIUM	0.02		TRACE		0.04	
HEATING VALUE*	1089	----------	1527	----------	1046	----------
SPECIFIC GRAVITY	0.750		0.970		0.710	

	INDEX 7276 SAMPLE 4238		INDEX 7277 SAMPLE 4239		INDEX 7278 SAMPLE 4267	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GAINES		GAINES		GAINES	
FIELD	SEMINOLE		SEMINOLE		SEMINOLE	
WELL NAME	TIPPETT NO. 8		GIBBS NO. 5		RILEY B NO. 3	
LOCATION	SEC. 250		SEC. 230		SEC. 229	
OWNER	OHIO OIL CO.		OHIO OIL CO.		ATLANTIC REFINING CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	02/17/47		02/17/47		02/19/47	
FORMATION	PERM-SAN ANDRES		PERM-SAN ANDRES		PERM-SAN ANDRES	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	5087		5160		5090	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	72.2	----------	66.4	----------	71.5	----------
ETHANE	19.1		22.9		18.4	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	3.3		4.3		3.7	
OXYGEN	0.3	----------	0.2	----------	0.1	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	5.1	----------	6.2	----------	6.3	----------
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1074	----------	1083	----------	1054	----------
SPECIFIC GRAVITY	0.714		0.747		0.723	

	INDEX 7279 SAMPLE 4268		INDEX 7280 SAMPLE 4269		INDEX 7281 SAMPLE 4320	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GAINES		GAINES		GAINES	
FIELD	SEMINOLE		SEMINOLE		SEMINOLE	
WELL NAME	TIPPETT B NO. 3		BRAND NO. 1		TIPPET NO. A-2	
LOCATION	SEC. 266		SEC. 284		SEC. 264	
OWNER	GENERAL AMERICAN OIL CO.		GENERAL AMERICAN OIL CO.		GENERAL AMERICAN OIL CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		10/19/39	
SAMPLED	02/19/47		02/19/47		05/21/47	
FORMATION	PERM-SAN ANDRES		PERM-SAN ANDRES		PERM-SAN ANDRES	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	5130		5120		5318	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		1200	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		719	
COMPONENT, MOLE PCT						
METHANE	70.7	----------	73.2	----------	43.9	----------
ETHANE	21.9		17.1		15.0	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	0.8		4.2		40.5	
OXYGEN	0.1	----------	0.1	----------	0.5	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	4.5	----------	5.4	----------	0.1	----------
HELIUM	0.01		0.03		0.04	
HEATING VALUE*	1109	----------	1048	----------	714	----------
SPECIFIC GRAVITY	0.730		0.710		0.800	

	INDEX 7282 SAMPLE 7787		INDEX 7283 SAMPLE 7788		INDEX 7284 SAMPLE 3923	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GAINES		GAINES		GAINES	
FIELD	SEMINOLE		SEMINOLE		WILDCAT	
WELL NAME	S. F. MANN NO. 9		NO. 12		E. B. HOMANN NO. 1	
LOCATION	SEC. 220, BLK. 6, WT&RR SUR.		SEC. 251, WTRR SUR.		SEC. 96, BLK. GWTRR	
OWNER	AMERADA PETROLEUM CORP.		MOBIL OIL CO.		HONOLULU OIL CORP.	
COMPLETED	12/17/51		12/01/60		04/07/44	
SAMPLED	12/06/60		12/06/60		06/13/44	
FORMATION	PERM-YATES		PERM-YATES		PERM-YATES	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	3110		3250		3330	
WELLHEAD PRESSURE,PSIG	1750		1606		2340	
OPEN FLOW, MCFD	1450		18000		5512	
COMPONENT, MOLE PCT						
METHANE	66.2	----------	66.0	----------	0.0	----------
ETHANE	6.9		9.4		94.0	
PROPANE	1.4	----------	5.1	----------	---	----------
N-BUTANE	1.0		0.9		---	
ISOBUTANE	2.4	----------	0.3	----------	---	----------
N-PENTANE	0.3		0.3		---	
ISOPENTANE	TRACE	----------	TRACE	----------	---	----------
CYCLOPENTANE	2.1		TRACE		---	
HEXANES PLUS	0.3	----------	0.3	----------	---	----------
NITROGEN	19.1		19.7		5.0	
OXYGEN	TRACE	----------	0.0	----------	0.5	----------
ARGON	TRACE		TRACE		---	
HYDROGEN	0.7	----------	0.0	----------	---	----------
HYDROGEN SULFIDE**	0.1		0.0		0.0	
CARBON DIOXIDE	TRACE	----------	TRACE	----------	0.5	----------
HELIUM	0.05		0.27		TRACE	
HEATING VALUE*	997	----------	986	----------	1,64	----------
SPECIFIC GRAVITY	0.746		0.745		1.048	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7285 SAMPLE 4662	INDEX 7286 SAMPLE 5877	INDEX 7287 SAMPLE 12298
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GALVESTON	GALVESTON
FIELD	WILDCAT	ALGOA	ALGOA
WELL NAME	RILEY NO. 1-123	COOPER B UNIT NO. 1	ALLEN UNIT NO. 1
LOCATION	SEC. 123	I&GN SUR. NO. 13, A-601	I&GN RR SUR. A-600
OWNER	HONOLULU OIL CORP.	SUPERIOR OIL CO.	GOODALE, BERTMAN & CO., INC.
COMPLETED	10/04/48	05/15/55	03/30/69
SAMPLED	02/10/49	07/13/55	NOT GIVEN
FORMATION	PERM-YATES	OLIG-FRIO L	OLIG-FRIO
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	3436	11514	10240
WELLHEAD PRESSURE,PSIG	2200	A000	1600
OPEN FLOW, MCFD	1774	12800	110000
COMPONENT, MOLE PCT			
METHANE	53.3	91.1	93.7
ETHANE	6.7	4.2	2.3
PROPANE	1.8	2.0	0.7
N-BUTANE	0.6	0.6	0.1
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.4	0.3	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	36.8	0.3	1.5
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	---	0.9	0.9
HELIUM	0.05	0.01	TRACE
HEATING VALUE*	752	1111	1025
SPECIFIC GRAVITY	0.779	0.634	0.596

	INDEX 7288 SAMPLE 13134	INDEX 7289 SAMPLE 14197	INDEX 7290 SAMPLE 15141
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	ALTA LOMA W	BLOCK 176-S	CAPLEN
WELL NAME	HORTON SAYKO ET AL NO. 1	STATE TRACT 176-S NO. 3	ZINN & FOREMAN NO. 5
LOCATION	SEC.308,LEMUEL CRAWFORD A-47	OFFSHORE	S.F. HUGHES SUR. A-90
OWNER	HASSIE HUNT TRUST	MITCHELL ENERGY CORP.	SUN OIL CO.
COMPLETED	09/07/71	07/24/72	06/05/76
SAMPLED	01/12/72	10/--/74	11/03/77
FORMATION	EOCE-RYCADE	OLIG-FRIO L-1	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10466	8604	5798
WELLHEAD PRESSURE,PSIG	1615	3115	2313
OPEN FLOW, MCFD	19100	54000	13756
COMPONENT, MOLE PCT			
METHANE	92.8	94.5	95.8
ETHANE	3.2	3.3	1.4
PROPANE	1.1	0.9	0.3
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.5	0.3	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.4	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.2	0.4
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	1075	1070	1019
SPECIFIC GRAVITY	0.617	0.598	0.581

	INDEX 7291 SAMPLE 13813	INDEX 7292 SAMPLE 15135	INDEX 7293 SAMPLE 10084
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	DICKINSON	DOLLAR POINT	GALVESTON BAY W
WELL NAME	BAYOU DEVELOPMENT CO NO. 13	STATE LEASE 115-A NO. 2	STATE TR. NO. 72, WELL NO. 1
LOCATION	JOHN SELLERS SUR. A-180	STATE TRACT 115A	STATE TRACT NO. 72
OWNER	EXXON CO., U.S.A.	HOUSTON OIL & MINERALS CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/21/72	08/03/76	07/05/64
SAMPLED	11/13/73	11/02/77	08/26/65
FORMATION	OLIG-FRIO	OLIG-FRIO A	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8611	9925	7136
WELLHEAD PRESSURE,PSIG	1305	2290	2500
OPEN FLOW, MCFD	5300	73000	45700
COMPONENT, MOLE PCT			
METHANE	90.1	81.0	92.9
ETHANE	3.9	7.6	3.5
PROPANE	1.9	4.3	1.1
N-BUTANE	0.4	1.5	0.4
ISOBUTANE	1.0	1.9	0.4
N-PENTANE	0.3	0.7	0.3
ISOPENTANE	0.2	0.7	0.1
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.7	0.8	0.6
NITROGEN	0.5	0.2	0.3
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.2	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1144	1287	1115
SPECIFIC GRAVITY	0.655	0.748	0.624

	INDEX 7294 SAMPLE 10150	INDEX 7295 SAMPLE 14985	INDEX 7296 SAMPLE 11993
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	GALVESTON ISLAND	GALVESTON ISLAND	GILLOCK
WELL NAME	WM. OSTERMEYER NO. 1	STATE OF TEXAS 70601 NO. 1	LOUIS CRAIG NO. 5
LOCATION	HALL & JONES SUR. A-121	SEC. 3, TRIMBLE&LINDSEY SUR.	W. K. WILSON SUR. A-28
OWNER	HUMBLE OIL & REFINING CO.	CABOT CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/03/64	03/12/76	10/01/68
SAMPLED	09/16/65	04/28/77	08/11/69
FORMATION	OLIG-DISCORBIS	MIOC-DISCORBIS	MIOC-KEN BEN
GEOLOGIC PROVINCE CODE	220	955	220
DEPTH, FEET	7762	7618	8074
WELLHEAD PRESSURE,PSIG	3510	3082	497
OPEN FLOW, MCFD	14300	51000	5040
COMPONENT, MOLE PCT			
METHANE	96.1	95.0	88.4
ETHANE	2.3	2.9	4.0
PROPANE	0.5	0.7	2.4
N-BUTANE	0.1	0.2	0.8
ISOBUTANE	0.2	0.2	1.1
N-PENTANE	0.1	TRACE	0.5
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	0.4	0.5	0.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1051	1060	1170
SPECIFIC GRAVITY	0.584	0.592	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7297 SAMPLE 15473	INDEX 7298 SAMPLE 4752	INDEX 7299 SAMPLE 14879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	GREEN LAKE	HANNA REEF	HASTING SE
WELL NAME	CRESTON KING NO. 2	STATE-HANNA REEF NO. 1	A. J. EASTHAM NO. 1
LOCATION	WILLIAM SCOTT SUR. A-177	NOT GIVEN	SEC. 5, I&GNRR SUR.A-622
OWNER	BUTTES RESOURCES CO.	SUN OIL CO.	SUPERIOR OIL CO.
COMPLETED	03/16/77	02/09/49	04/07/76
SAMPLED	10/06/78	06/04/49	12/28/76
FORMATION	MIOC-	OLIG-NODOSARIA U	OLIG-F-46, SEG. A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6958	10670	9702
WELLHEAD PRESSURE,PSIG	2612	5515	3550
OPEN FLOW, MCFD	80000	6600	8000
COMPONENT, MOLE PCT			
METHANE	90.8	86.3	93.2
ETHANE	4.5	7.8	4.1
PROPANE	2.2	2.8	1.0
N-BUTANE	0.5	0.6	0.3
ISOBUTANE	0.7	0.6	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	0.9	0.6	0.1
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.8	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1134	1150	1074
SPECIFIC GRAVITY	0.636	0.662	0.605

	INDEX 7300 SAMPLE 14880	INDEX 7301 SAMPLE 14977	INDEX 7302 SAMPLE 13750
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	HASTING SE	HASTING SE	HIGH ISLAND
WELL NAME	A. J. EASTHAM NO. 1	EMMA RUEGE NO. 1	BLOCK 140, NO. C-1
LOCATION	SEC. 5, I&GNRR SUR. A-622	SEC. 5, RSAF SUR., A-625	FEDERAL BLOCK NO. 140
OWNER	SUPERIOR OIL CO.	CROWN CENTRAL PETROLEUM	CHEVRON OIL CO.
COMPLETED	04/07/76	06/05/75	10/25/71
SAMPLED	12/28/76	04/?-/77	10/09/73
FORMATION	OLIG-F-47, SEG. A	OLIG-FRIO	MIOC-M-20
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9837	9266	6508
WELLHEAD PRESSURE,PSIG	3150	3400	2600
OPEN FLOW, MCFD	8407	12000	32000
COMPONENT, MOLE PCT			
METHANE	92.0	92.7	94.9
ETHANE	4.3	3.9	2.6
PROPANE	1.3	1.2	0.8
N-BUTANE	0.3	0.3	0.1
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	0.4	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1077	1087	1065
SPECIFIC GRAVITY	0.615	0.615	0.598

	INDEX 7303 SAMPLE 12295	INDEX 7304 SAMPLE 12376	INDEX 7305 SAMPLE 14204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	HIGH ISLAND, BLOCK 140-L	MITCHCOCK	LAFITTES GOLD
WELL NAME	FEDERAL BLOCK 140 NO. B-1	W. H. COON NO. 1	GALVESTON TOWNSITE NO. 5
LOCATION	FEDERAL BLK. 140, OFFSHORE	THOMAS TOBY SUR., NO.16, A194	BLK.406, MB MENARD SUR.A-628
OWNER	CHEVRON OIL CO.	WILLIAM F. FULLER	MITCHELL ENERGY CORP.
COMPLETED	10/07/68	11/09/69	03/24/73
SAMPLED	08/20/70	08/20/70	11/07/74
FORMATION	OLIG-FRIO, AMP	MIOC-5300 FT. SAND	MIOC-L-2 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7375	5321	9716
WELLHEAD PRESSURE,PSIG	2775	2179	6215
OPEN FLOW, MCFD	33000	6500	63000
COMPONENT, MOLE PCT			
METHANE	94.7	98.4	93.1
ETHANE	2.6	0.5	4.2
PROPANE	0.8	TRACE	1.3
N-BUTANE	0.2	0.0	0.3
ISOBUTANE	0.3	0.0	0.5
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	0.6	0.9	0.1
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1071	1006	1098
SPECIFIC GRAVITY	0.603	0.561	0.612

	INDEX 7306 SAMPLE 13804	INDEX 7307 SAMPLE 14279	INDEX 7308 SAMPLE 15472
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	POINT BOLIVAR N	POINT BOLIVAR N	TEICHMAN POINT
WELL NAME	STATE TRACT 342 NO. 1	NP&FSU NO. 3	GALVESTON TOWNSITE NO. 16-1
LOCATION	STATE TRACT 342	STATE TR. 342 GALVESTON BAY	LOT 10 BLK 523 GALVESTON TWP
OWNER	HOUSTON OIL & MINERALS CORP.	HOUSTON OIL & MINERALS CORP.	BUTTES RESOURCES CO.
COMPLETED	09/23/72	09/03/75	01/10/77
SAMPLED	11/09/73	03/03/76	10/06/78
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-O3
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12516	12281	7583
WELLHEAD PRESSURE,PSIG	7739	7470	2683
OPEN FLOW, MCFD	15068	636074	26075
COMPONENT, MOLE PCT			
METHANE	96.3	83.3	94.6
ETHANE	3.0	8.2	2.5
PROPANE	0.8	3.6	1.0
N-BUTANE	0.1	0.8	0.3
ISOBUTANE	0.3	1.1	0.5
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.2	0.0	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	2.4	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1053	1185	1074
SPECIFIC GRAVITY	0.596	0.701	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF GAS DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7309 SAMPLE 14895	INDEX 7310 SAMPLE 7209	INDEX 7311 SAMPLE 11844
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GARZA	GLASSCOCK
FIELD	TEXAS CITY	TEAS	CREDO
WELL NAME	STATE TRACT 114A NO. 1	SHELL SLAUGHTER C NO. 5	REED 1 NO. 4
LOCATION	GALVESTON BAY	SEC. 33, BLK. 2, T&NO SUR.	SEC. 21,BLK.30, W&NW RR SUR.
OWNER	HOUSTON OIL & MINERALS CORP.	SHELL OIL CO.	ODEN OIL CO.
COMPLETED	11/11/75	NOT GIVEN	12/01/68
SAMPLED	01/24/77	08/--/59	04/28/69
FORMATION	OLIG-FRIO	PERM-YATES	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	10200	1300	7714
WELLHEAD PRESSURE,PSIG	3100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	132000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	0.2	71.9
ETHANE	5.4	TRACE	11.0
PROPANE	2.2	0.4	9.3
N-BUTANE	0.6	0.0	2.9
ISOBUTANE	0.8	0.0	0.8
N-PENTANE	0.2	0.0	0.5
ISOPENTANE	0.4	0.0	0.9
CYCLOPENTANE	0.1	0.0	0.2
HEXANES PLUS	0.4	0.0	0.3
NITROGEN	0.5	98.7	1.7
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.5
HELIUM	TRACE	0.20	0.03
HEATING VALUE*	1150	14	1374
SPECIFIC GRAVITY	0.654	0.965	0.808

	INDEX 7312 SAMPLE 2059	INDEX 7313 SAMPLE 12075	INDEX 7314 SAMPLE 12076
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GLASSCOCK	GOLIAD	GOLIAD
FIELD	GLASSCOCK	A-B-R	A-B-R
WELL NAME	BAKER NO. 1, OIL WELL	Z. A. BOOTH NO. 2	RALPH W. RAMSEY NO. 1
LOCATION	SEC. 23, BLK. 33, T&P SUR.	JOSE MONTEZ SUR. A-204	M. DEJESUS BARVO GRT. A-51
OWNER	CALIFORNIA CO.	ABEL & RANCROFT	ABEL & RANCROFT
COMPLETED	05/09/30	11/20/68	02/14/68
SAMPLED	06/17/30	10/06/69	10/06/69
FORMATION	NOT GIVEN	OLIG-VICKSBURG	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	2260	3037	8497
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1220	2938
OPEN FLOW, MCFD	NOT GIVEN	5100	7200
COMPONENT, MOLE PCT			
METHANE	24.8	94.2	80.6
ETHANE	52.2	0.1	7.4
PROPANE	---	TRACE	5.4
N-BUTANE	---	0.0	1.1
ISOBUTANE	---	0.0	1.0
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.6
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.2
NITROGEN	9.1	4.4	0.8
OXYGEN	0.5	1.0	0.0
ARGON	---	0.1	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	13.4	0.1	2.7
HELIUM	0.06	0.01	TRACE
HEATING VALUE*	1187	956	1204
SPECIFIC GRAVITY	0.984	0.580	0.727

	INDEX 7315 SAMPLE 12077	INDEX 7316 SAMPLE 4868	INDEX 7317 SAMPLE 15464
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	A-B-R	ANGEL CITY	BIG OAK
WELL NAME	RALPH W. RAMSEY NO. 1	J. BLUHM NO. 1	W. P. PITTMAN NO. 1
LOCATION	M. DEJESUS BARVO GRT. A-51	DEJESUS YBARRO SUR. NO. A-51	MARIA JESUS DELEON SUR. A-22
OWNER	ABEL & RANCROFT	STANOLIND OIL & GAS CO.	LIGHTNING OIL CO.
COMPLETED	02/14/68	11/08/49	09/20/77
SAMPLED	10/06/69	05/23/50	10/31/78
FORMATION	EOCE-WILCOX	EOCE-SLICK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8740	8042	2585
WELLHEAD PRESSURE,PSIG	2850	2850	950
OPEN FLOW, MCFD	3400	6800	5000
COMPONENT, MOLE PCT			
METHANE	83.2	89.7	98.2
ETHANE	7.1	5.1	0.1
PROPANE	3.4	2.3	TRACE
N-BUTANE	0.7	0.6	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.5	0.0
NITROGEN	1.4	0.4	1.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.8	0.7	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1130	1132	997
SPECIFIC GRAVITY	0.688	0.648	0.569

	INDEX 7318 SAMPLE 14577	INDEX 7319 SAMPLE 14578	INDEX 7320 SAMPLE 12031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CABEZA CREEK	CABEZA CREEK	CABEZA CREEK S
WELL NAME	PETTUS UNIT NO. 44	PETTUS UNIT NO. 44	HELEN BETHKE NO. 2
LOCATION	SEBASTINA VELA SUR., A-337	SEBASTINA VELA SUR., A-337	T. S. NELSON SUR. A-223
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	08/29/74	02/06/76	02/13/68
SAMPLED	02/06/76	EOCE-YEGUA	09/09/69
FORMATION	EOCF-PETTUS	220	EOCE-WESER
GEOLOGIC PROVINCE CODE	220	4903	220
DEPTH, FEET	4294	1623	5093
WELLHEAD PRESSURE,PSIG	883	3150	1852
OPEN FLOW, MCFD	2080		3080
COMPONENT, MOLE PCT			
METHANE	89.7	89.4	87.6
ETHANE	5.7	5.8	6.3
PROPANE	2.3	2.3	2.8
N-BUTANE	0.4	0.4	0.6
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.5	0.5	0.8
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1134	1133	1158
SPECIFIC GRAVITY	0.639	0.640	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7321 SAMPLE 4661	INDEX 7322 SAMPLE 7140	INDEX 7323 SAMPLE 12511
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CHARCO N	CHARCO SE	CLIP
WELL NAME	WILBERN NO. 1	REAGAN GAS UNIT NO. 2C	B. B. GAYLE NO. 5-F
LOCATION	NOT GIVEN	RAMON MUSQUIZ SUR.	IGNACIO GUAJARDO SUR. A-127
OWNER	W. L. GOLDSTON	NORTHERN PUMP CO.	DOW CHEMICAL CO.
COMPLETED	01/12/49	04/01/59	12/19/68
SAMPLED	09/04/49	07/10/59	11/03/70
FORMATION	EOCE-	EOCE-LULING	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8650	7488	2684
WELLHEAD PRESSURE,PSIG	3925	2397	957
OPEN FLOW, MCFD	18000	24500	4030
COMPONENT, MOLE PCT			
METHANE	80.3	86.8	97.7
ETHANE	6.6	6.0	0.0
PROPANE	5.1	3.7	TRACE
N-BUTANE	1.7	0.7	0.0
ISOBUTANE	1.1	0.6	0.0
N-PENTANE	0.8	0.2	0.0
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	1.1	0.2	0.0
NITROGEN	0.8	0.0	1.6
OXYGEN	0.1	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	1.7	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1173	1153	990
SPECIFIC GRAVITY	0.753	0.671	0.562

	INDEX 7324 SAMPLE 12512	INDEX 7325 SAMPLE 12514	INDEX 7326 SAMPLE 10695
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CLIP	CLIP	EMMA HAYNES
WELL NAME	B. B. GAYLE NO. 5-H	B. B. GAYLE NO. 5-J	A. F. OOHMANN NO. 1
LOCATION	IGNACIO GUAJARDO SUR. A-127	IGNACIO GUAJARDO SUR. A-127	H. T. CALLIHAN SUR. A-80
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	LONE STAR GAS CO.
COMPLETED	12/19/68	10/30/70	06/02/65
SAMPLED	11/03/70	11/03/70	07/27/66
FORMATION	OLIG-FRIO U	MIOC-L	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2296	1500	11300
WELLHEAD PRESSURE,PSIG	787	590	7686
OPEN FLOW, MCFD	8400	1500	36000
COMPONENT, MOLE PCT			
METHANE	99.2	97.0	88.8
ETHANE	0.0	0.0	4.7
PROPANE	TRACE	TRACE	1.7
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	0.4	2.8	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	2.7
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1005	983	1096
SPECIFIC GRAVITY	0.558	0.565	0.650

	INDEX 7327 SAMPLE 10696	INDEX 7328 SAMPLE 5020	INDEX 7329 SAMPLE 5293
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	EMMA HAYNES	GLADYS POWELL	GOLIAD
WELL NAME	A. F. OOHMANN NO. 1	KAUFFMANN ESTATE NO. 1	GREUTZMACHER NO. 1-T
LOCATION	H. T. CALLIHAN SUR. A-80	ABSTRACT - 267	MATHEW G. CARICE SUR. A-90
OWNER	LONE STAR GAS CO.	FRANK W. MICHAUX	GEORGE R. BROWN
COMPLETED	06/02/65	12/16/50	04/05/52
SAMPLED	07/27/66	03/06/51	10/01/52
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12650	7675	8046
WELLHEAD PRESSURE,PSIG	7050	2827	3300
OPEN FLOW, MCFD	2750	29000	750
COMPONENT, MOLE PCT			
METHANE	87.6	89.4	86.7
ETHANE	5.6	4.7	6.5
PROPANE	1.6	2.2	2.6
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.4	0.0	0.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.0	2.1	2.4
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1099	1102	1118
SPECIFIC GRAVITY	0.660	0.647	0.662

	INDEX 7330 SAMPLE 4994	INDEX 7331 SAMPLE 15306	INDEX 7332 SAMPLE 4743
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	GOTTSCHALT	HORDES CREEK E	HORDES CREEK N
WELL NAME	HUGO MCMILLEN NO. 1	W. H. RÖTHKOLTER NO. 1	G. T. POWELL NO. 1
LOCATION	T. H. CALLIHAN SUR.	VINCENTE RAMOS SUR. A-241	W. O. SUTHERLAND SUR.
OWNER	HUMBLE OIL & REFINING CO.	I. W. LOVELADY	HUMBLE OIL & REFINING CO.
COMPLETED	09/12/50	01/07/74	01/25/49
SAMPLED	02/13/51	NOT GIVEN	05/30/49
FORMATION	EOCE-	EOCE-WILCOX	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7480	8101	7646
WELLHEAD PRESSURE,PSIG	3294	2445	3358
OPEN FLOW, MCFD	6200	9500	4400
COMPONENT, MOLE PCT			
METHANE	90.0	85.1	89.2
ETHANE	4.6	5.2	5.1
PROPANE	2.0	2.4	2.0
N-BUTANE	0.7	0.6	0.4
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	TRACE	0.4	0.0
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	0.1	2.1	0.4
OXYGEN	0.1	2.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.0	2.5	1.9
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1122	1109	1098
SPECIFIC GRAVITY	0.649	0.678	0.646

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7333 SAMPLE 8679	INDEX 7334 SAMPLE 11170	INDEX 7335 SAMPLE 11171
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	HORNEY	LIVE OAK LAKE	LIVE OAK LAKE
WELL NAME	ANNA HORNEY NO. 1	L.W. OCONNOR ESTATE A NO. 14	L.W. OCONNOR ESTATE A NO. 1
LOCATION	W. S. CAMPBELL SUR. NO. A-92	JAMES MCCUNE SUR.	GALON N
OWNER	SINCLAIR OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	05/31/62	04/22/66	02/19/65
SAMPLED	09/22/62	10/13/67	10/13/67
FORMATION	-GAS SAND	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2130	4350	5230
WELLHEAD PRESSURE,PSIG	491	1550	1715
OPEN FLOW, MCFD	22000	16750	2590
COMPONENT, MOLE PCT			
METHANE	99.0	94.6	95.3
ETHANE	TRACE	2.1	3.1
PROPANE	TRACE	0.8	0.3
N-BUTANE	0.0	0.2	TRACE
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	0.8	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1003	1067	1049
SPECIFIC GRAVITY	0.558	0.604	0.589

	INDEX 7336 SAMPLE 4771	INDEX 7337 SAMPLE 4631	INDEX 7338 SAMPLE 9713
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	MARSHALL	MELROSE	SOLEBERG
WELL NAME	J. BLANFORTH NO. 1-C	BLUNTZER NO. B-1	L. H. VON DOHLEN NO. 1
LOCATION	SOLOMON GRIFFIN SUR. A-126	NOT GIVEN	JOHN SOLEBERG SUR. A-271
OWNER	SUNRAY OIL CORP.	ATLANTIC REFINING CO.	ASSOCIATED OIL & GAS CO.
COMPLETED	06/05/49	09/05/48	10/06/62
SAMPLED	09/29/49	11/17/48	01/24/65
FORMATION	EOCE-YEGUA	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8924	7845	10090
WELLHEAD PRESSURE,PSIG	3265	NOT GIVEN	5994
OPEN FLOW, MCFD	3300	1280	22500
COMPONENT, MOLE PCT			
METHANE	89.8	75.7	84.9
ETHANE	5.8	23.0	7.1
PROPANE	1.8	---	3.5
N-BUTANE	0.5	---	0.7
ISOBUTANE	0.3	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.3	---	0.1
NITROGEN	0.3	0.8	0.0
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.6	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	3.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1123	1179	1130
SPECIFIC GRAVITY	0.626	0.675	0.678

	INDEX 7339 SAMPLE 13540	INDEX 7340 SAMPLE 12079	INDEX 7341 SAMPLE 12080
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	SWICKHEIMER	TERRELL POINT E	TERRELL POINT E
WELL NAME	G.G. SWICKHEIMER NO. 2	STATE OF TEXAS NO. 1	STATE OF TEXAS NO. 1
LOCATION	J.P. FERRELL SUR. A-356	G. MCKNIGHT SUR. A-24	G. MCKNIGHT SUR. A-24
OWNER	INEXCO OIL CO.	MERIDIAN EXPLORATION CO.	MERIDIAN EXPLORATION CO.
COMPLETED	01/22/71	03/03/68	03/03/68
SAMPLED	02/20/73	10/02/69	10/02/69
FORMATION	OLIG-FRIO	MIOC-CATAHOULA	OLIG-FRIO 4030
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2759	2902	4030
WELLHEAD PRESSURE,PSIG	1005	1200	1300
OPEN FLOW, MCFD	1460	10000	390
COMPONENT, MOLE PCT			
METHANE	98.2	98.6	89.3
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.4	0.9	8.2
OXYGEN	TRACE	TRACE	1.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	997	1001	907
SPECIFIC GRAVITY	0.562	0.560	0.599

	INDEX 7342 SAMPLE 5275	INDEX 7343 SAMPLE 13544	INDEX 7344 SAMPLE 10241
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GONZALES
FIELD	WILDCAT	WILDCAT	CHEAPSIDE
WELL NAME	BILL RODGERS NO. 1	J.F. MCCORD NO. 3	FRANK ULMAN NO. 1
LOCATION	W. P. MILLER SUR. NO. A-193	NOAH G. STEBBINS SUR. A-256	OTTO VON ROEDER SUR. A-462
OWNER	MAGNOLIA PETROLEUM CO.	COASTAL STATES GAS PROD. CO.	TENNECO OIL CO.
COMPLETED	12/16/51	01/06/72	10/01/64
SAMPLED	04/17/52	02/--/73	NOT GIVEN
FORMATION	OLIG-FRIO 3200 FT. SAND	EOCE-WILCOX	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3205	9872	11800
WELLHEAD PRESSURE,PSIG	1397	635	4100
OPEN FLOW, MCFD	1450	31500	16000
COMPONENT, MOLE PCT			
METHANE	98.6	87.1	83.8
ETHANE	0.8	5.1	5.0
PROPANE	0.3	1.7	3.0
N-BUTANE	0.0	0.3	0.6
ISOBUTANE	0.0	0.4	0.2
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	0.3	TRACE	0.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.2
CARBON DIOXIDE	0.0	4.9	6.5
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1021	1063	1073
SPECIFIC GRAVITY	0.563	0.665	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7345 SAMPLE 983	INDEX 7346 SAMPLE 5307	INDEX 7347 SAMPLE 11616
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	GRAY COUNTY	HOBART	HOOVER NE
WELL NAME	G. M. SAUNDERS NO. 1	HOBART NO. 1	SPEARMAN UNIT NO. 1-LT
LOCATION	SEC. 3, BLK. 5, ACH&B SUR.	SEC. 26, BLK. 3, I&GN SUR.	SEC. 23, BLK. 3, HGN SUR.
OWNER	TEXAS CO.	PHILLIPS PETROLEUM CO.	SINCLAIR OIL & GAS CO.
COMPLETED	01/--/28	08/20/52	01/01/67
SAMPLED	01/09/25	09/15/52	08/05/68
FORMATION	-LIME	PENN-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2995	NOT GIVEN	9028
WELLHEAD PRESSURE,PSIG	448	NOT GIVEN	2340
OPEN FLOW, MCFD	60000	3250	7990
COMPONENT, MOLE PCT			
METHANE	77.8	90.0	90.6
ETHANE	17.4	4.8	3.6
PROPANE	---	1.6	1.3
N-BUTANE	---	0.3	0.5
ISOBUTANE	---	0.1	0.1
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	4.2	2.5	2.9
OXYGEN	0.5	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.11	0.16	0.08
HEATING VALUE*	1100	1066	1072
SPECIFIC GRAVITY	0.662	0.618	0.625

	INDEX 7348 SAMPLE 11617	INDEX 7349 SAMPLE 6092	INDEX 7350 SAMPLE 8420
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	HOOVER NE	LAKETON	LAKETON
WELL NAME	SPEARMAN UNIT NO. 1-UT	WITMORE NO. 1	DELP NO. 2
LOCATION	SEC. 23, BLK. 3, I&GN SUR.	SEC. 109, BLK. M-2, BS&F SUR	SEC. 110, BLK. M-2, AS&F SUR
OWNER	SINCLAIR OIL & GAS CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/01/67	NOT GIVEN	10/02/61
SAMPLED	08/05/68	06/25/56	03/01/62
FORMATION	PENN-VIRGIL	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	5010	7967	9822
WELLHEAD PRESSURE,PSIG	1195	2313	2949
OPEN FLOW, MCFD	9448	19340	5200
COMPONENT, MOLE PCT			
METHANE	87.5	89.5	91.9
ETHANE	4.2	3.9	3.4
PROPANE	1.9	1.5	1.6
N-BUTANE	0.6	0.7	0.8
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.4	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	4.8	2.8	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.13	0.08	0.04
HEATING VALUE*	1169	1100	1109
SPECIFIC GRAVITY	0.640	0.640	0.629

	INDEX 7351 SAMPLE 11758	INDEX 7352 SAMPLE 15838	INDEX 7353 SAMPLE 7674
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	LAKETON	LAKETON	NOT GIVEN
WELL NAME	M. M. BOSTON NO. 1	DELP NO. 1	PARKER NO. A-2
LOCATION	SEC. 62, BLK. A-6, H&GN SUR.	SEC. 110, BLK. M-2, BS&F SUR	NOT GIVEN
OWNER	SUN OIL CO.	PAGE PETROLEUM INC.	JAMES E. & H. T. PARKER
COMPLETED	01/25/67	06/30/79	NOT GIVEN
SAMPLED	02/10/69	11/13/79	NOT GIVEN
FORMATION	CAMO-ARBUCKLE	PERM-GRANITE WASH	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	11440	10800	2889
WELLHEAD PRESSURE,PSIG	3270	2210	NOT GIVEN
OPEN FLOW, MCFD	56000	90000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.9	71.4	74.9
ETHANE	5.8	7.9	9.2
PROPANE	3.3	4.6	6.8
N-BUTANE	1.0	1.1	2.2
ISOBUTANE	0.6	0.6	1.2
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	2.1	13.4	4.1
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.07	0.16	0.10
HEATING VALUE*	1159	1072	1272
SPECIFIC GRAVITY	0.673	0.734	0.762

	INDEX 7354 SAMPLE 2830	INDEX 7355 SAMPLE 3618	INDEX 7356 SAMPLE 3970
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
WELL NAME	URBANCZYK NO. 3	BAIRD & TALLEY NO. 1	OSBORNE NO. 1-T
LOCATION	SEC. 109, BLK. 7, I&GN SUR.	SEC. 219, BLK. 9-2, H&GN SUR	SEC. 10A, BLK. 3, I&GN SUR.
OWNER	H&GY, HARRINGTON & HARSH	NORTHERN NATURAL GAS CO.	TEXOMA NATURAL GAS CO.
COMPLETED	10/11/39	NOT GIVEN	04/16/27
SAMPLED	11/02/39	03/01/43	12/21/44
FORMATION	PERM-	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2810	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	411	NOT GIVEN	199
OPEN FLOW, MCFD	24017	NOT GIVEN	2430
COMPONENT, MOLE PCT			
METHANE	67.9	73.6	59.7
ETHANE	14.6	20.2	12.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.0	5.7	23.7
OXYGEN	0.6	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	3.7
HELIUM	0.71	0.25	0.18
HEATING VALUE*	949	1108	832
SPECIFIC GRAVITY	0.695	0.678	0.750

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7357 SAMPLE 5318	INDEX 7358 SAMPLE 5225	INDEX 7359 SAMPLE 5226
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE E	PANHANDLE E
WELL NAME	ASH C WELL NO. 1	GOLDSTON NO. 1	RICE NO. 1
LOCATION	SEC. 3, BLK. 26, H&GN SUR.	BS&F SUR.	SEC. 32, BLK. 30
OWNER	KEWANEE OIL CO.	T. J. WAGNER, JR.	T. J. WAGNER, JR.
COMPLETED	12/27/50	08/10/51	04/15/52
SAMPLED	11/18/52	06/11/52	06/11/52
FORMATION	PENN-CISCO L	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2295	2378	2310
WELLHEAD PRESSURE,PSIG	87	NOT GIVEN	270
OPEN FLOW, MCFD	5400	2500	2000
COMPONENT, MOLE PCT			
METHANE	69.0	82.1	82.7
ETHANE	13.8	5.6	4.8
PROPANE	8.0	2.9	2.4
N-BUTANE	2.6	0.7	0.7
ISOBUTANE	1.3	0.4	0.2
N-PENTANE	0.6	TRACE	0.1
ISOPENTANE	0.6	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	3.5	7.7	7.9
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.05	0.20	0.23
HEATING VALUE*	1356	1057	1047
SPECIFIC GRAVITY	0.811	0.666	0.666

	INDEX 7360 SAMPLE 5228	INDEX 7361 SAMPLE 7142	INDEX 7362 SAMPLE 7359
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	YOES NO. B-1	R. E. DARSEY A-3	M. A. SHAW NO. 2
LOCATION	SEC. 4, BS&F SUR.	SEC. 13	SEC. 5, BLK. 1, ACH&B SUR.
OWNER	T. J. WAGNER, JR.	AMARILLO OIL CO.	TEXACO INC.
COMPLETED	03/25/52	07/06/58	09/07/59
SAMPLED	06/11/52	07/15/59	01/26/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2279	2442	2294
WELLHEAD PRESSURE,PSIG	422	313	52
OPEN FLOW, MCFD	1000	7800	900
COMPONENT, MOLE PCT			
METHANE	83.2	84.3	76.0
ETHANE	5.4	6.2	7.8
PROPANE	2.6	2.7	6.6
N-BUTANE	0.6	0.0	2.6
ISOBUTANE	0.2	1.2	1.1
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.2	0.0	0.8
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	7.2	5.1	4.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1056	1092	1271
SPECIFIC GRAVITY	0.659	0.660	0.762

	INDEX 7363 SAMPLE 7653	INDEX 7364 SAMPLE 7654	INDEX 7365 SAMPLE 7694
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	KAREN NO. 1	KAREN NO. A-1	JOHNSON-FEDERAL NO. 1
LOCATION	SEC. 28, BLK. 1, ACH&B SUR.	SEC. 28, BLK. 1, ACH&B SUR.	SEC. 9, ROCKWALL CTY. SCHOOL
OWNER	R. W. ADAMS & SON	R. W. ADAMS & SON	KERR-MCGEE CORP.
COMPLETED	06/07/56	01/01/57	08/23/60
SAMPLED	08/25/60	08/25/60	09/20/60
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2904	2890	2615
WELLHEAD PRESSURE,PSIG	150	150	340
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	450
COMPONENT, MOLE PCT			
METHANE	74.5	79.0	33.1
ETHANE	8.5	7.7	4.4
PROPANE	6.9	5.1	10.2
N-BUTANE	2.6	1.8	4.2
ISOBUTANE	0.7	0.5	2.5
N-PENTANE	0.8	0.4	0.9
ISOPENTANE	0.6	0.4	1.3
CYCLOPENTANE	0.5	0.1	0.2
HEXANES PLUS	0.9	0.3	0.7
NITROGEN	3.8	4.3	41.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.10	0.10	0.70
HEATING VALUE*	1322	1202	1043
SPECIFIC GRAVITY	0.791	0.720	1.016

	INDEX 7366 SAMPLE 834	INDEX 7367 SAMPLE 1536	INDEX 7368 SAMPLE 4443
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	TEXAS NO. 1 SAUNDERS	WALL NO. 1	LUCILE NO. 1
LOCATION	SEC. 3, BLK. 1	SEC. 161, BLK. 3, I&GN SUR.	SEC. 103, BLK. 2, H&GN SUR.
OWNER	TEXAS CO.	EMPIRE GAS & FUEL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	04/01/23	11/--/26	09/04/47
SAMPLED	01/09/24	11/01/27	01/19/48
FORMATION	NOT GIVEN	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2270	2300	2810
WELLHEAD PRESSURE,PSIG	50	420	398
OPEN FLOW, MCFD	NOT GIVEN	35000	3550
COMPONENT, MOLE PCT			
METHANE	79.1	70.9	60.4
ETHANE	16.8	21.5	20.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.6	7.2	18.6
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.12	0.23	0.55
HEATING VALUE*	1102	1104	972
SPECIFIC GRAVITY	0.652	0.693	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7369 SAMPLE 5280		INDEX 7370 SAMPLE 5613		INDEX 7371 SAMPLE 5690	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GRAY		GRAY		GRAY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	MCCRAKEN NO. 1		KROUCH NO. A-1		BAKER NO. 1	
LOCATION	SEC. 31, BLK. 25, H&GN SUR.		SEC. 187, BLK. E, D&P SUR.		SEC. 176, D&P SUR.	
OWNER	SHAMROCK OIL & GAS CORP.		PANOMA CORP.		CABOT CARBON CO.	
COMPLETED	04/25/52		02/09/54		06/10/54	
SAMPLED	10/02/52		04/30/54		09/20/54	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2365		2350		2569	
WELLHEAD PRESSURE,PSIG	231		415		388	
OPEN FLOW, MCFD	560		NOT GIVEN		5300	
COMPONENT, MOLE PCT						
METHANE	82.1		79.9		71.6	
ETHANE	6.8		5.6		8.6	
PROPANE	3.8		2.6		3.7	
N-BUTANE	1.0		0.6		0.8	
ISOBUTANE	0.7		0.2		0.5	
N-PENTANE	0.4		0.1		0.2	
ISOPENTANE	0.2		TRACE		0.1	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	4.5		10.4		13.8	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	TRACE		0.0		0.1	
HELIUM	0.12		0.27		0.31	
HEATING VALUE*	1149		1014		1041	
SPECIFIC GRAVITY	0.689		0.665		0.720	

	INDEX 7372 SAMPLE 6300		INDEX 7373 SAMPLE 6301		INDEX 7374 SAMPLE 6598	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GRAY		GRAY		GRAY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	REEVES NO. 1		HIBLER NO. 1-A		WORLEY NO. 31	
LOCATION	SEC. 48, BLK. E, D&P SUR.		SEC. 66, BLK. E, D&P SUR.		SEC. 61, BLK. 3, H&GN SUR.	
OWNER	EL PASO NATURAL GAS CO.		EL PASO NATURAL GAS CO.		WILCOX OIL CO.	
COMPLETED	02/09/57		02/13/57		--/--/29	
SAMPLED	04/10/57		04/10/57		05/21/58	
FORMATION	PERM-GRANITE WASH		PERM-WICHITA-ALBANY		NOT GIVEN	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2586		2502		3100	
WELLHEAD PRESSURE,PSIG	428		416		60	
OPEN FLOW, MCFD	3900		1400		600	
COMPONENT, MOLE PCT						
METHANE	72.0		70.7		76.6	
ETHANE	3.0		5.9		7.9	
PROPANE	1.6		3.0		5.4	
N-BUTANE	0.6		0.8		2.1	
ISOBUTANE	0.4		0.3		1.1	
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.2		0.2		0.8	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.1		0.1		0.4	
NITROGEN	21.2		16.3		4.9	
OXYGEN	0.0		2.1		TRACE	
ARGON	TRACE		0.1		0.0	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.1	
HELIUM	0.60		0.21		0.20	
HEATING VALUE*	885		955		1241	
SPECIFIC GRAVITY	0.698		0.716		0.751	

	INDEX 7375 SAMPLE 7060		INDEX 7376 SAMPLE 7061		INDEX 7377 SAMPLE 7147	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GRAY		GRAY		GRAY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	ALEN W. KNORPP NO. 1		BEAVER NO. 1		W. H. TAYLOR C NO. 1	
LOCATION	SEC. 18, BLK. B-3, H&GN SUR.		SEC. 124, BLK. B-2, H&GN SUR		SEC. 39, BLK. B-2, H&GN SUR.	
OWNER	CABOT CARBON CO.		CABOT CARBON CO.		TEXACO INC.	
COMPLETED	04/29/53		02/26/26		12/15/58	
SAMPLED	05/05/59		05/05/59		07/17/59	
FORMATION	PERM-WICHITA-ALBANY		PERM-GRANITE WASH		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2855		2684		2474	
WELLHEAD PRESSURE,PSIG	253		173		286	
OPEN FLOW, MCFD	294		1524		8800	
COMPONENT, MOLE PCT						
METHANE	59.8		81.8		84.0	
ETHANE	3.0		6.5		5.9	
PROPANE	2.6		3.8		2.6	
N-BUTANE	0.9		1.2		0.7	
ISOBUTANE	0.5		0.6		0.5	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.3		0.4		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	31.4		5.0		5.5	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.1		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	1.00		0.20		0.10	
HEATING VALUE*	810		1140		1082	
SPECIFIC GRAVITY	0.761		0.689		0.661	

	INDEX 7378 SAMPLE 7479		INDEX 7379 SAMPLE 7480		INDEX 7380 SAMPLE 7622	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GRAY		GRAY		GRAY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	JOHNSON C NO. 1		JOHNSON A NO. 1		JACKSON NO. 1	
LOCATION	SEC. 6, BLK. E, B&B SUR.		SEC. 179, BLK. E, D&P SUR.		SEC. 58, BLK. B-2, H&GN SUR.	
OWNER	D. D. HARRINGTON		D. D. HARRINGTON		PETROLEUM EXPLORATION, INC.	
COMPLETED	09/--/59		09/--/59		NOT GIVEN	
SAMPLED	03/03/60		03/03/60		07/23/60	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2678		2674		2753	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		187	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		1062	
COMPONENT, MOLE PCT						
METHANE	65.0		67.1		79.8	
ETHANE	9.2		8.6		7.7	
PROPANE	6.3		4.5		5.2	
N-BUTANE	1.9		1.3		1.0	
ISOBUTANE	1.0		0.8		0.5	
N-PENTANE	0.4		0.3		0.4	
ISOPENTANE	0.6		0.3		0.5	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.4		0.2	
NITROGEN	15.1		16.0		3.4	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.30		0.40		0.10	
HEATING VALUE*	1146		1071		1212	
SPECIFIC GRAVITY	0.799		0.762		0.717	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7381 SAMPLE 7712	INDEX 7382 SAMPLE 5346	INDEX 7383 SAMPLE 5347
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PURSLEY RANCH	PURSLEY RANCH
WELL NAME	YOES NO. 1-A	DONA NO. 1	RACHEL NO. 1
LOCATION	SEC. 4, BLK. 3, B&B SUR.	SEC. 9, BLK. 25, H&GN SUR.	SEC. 9, BLK. 25, H&GN SUR.
OWNER	EL PASO NATURAL GAS CO.	C. P. PURSLEY	C. P. PURSLEY
COMPLETED	01/30/53	NOT GIVEN	NOT GIVEN
SAMPLED	10/08/60	01/14/53	12/09/52
FORMATION	-DOLOMITE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	121	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	611	1700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	84.7	84.6
ETHANE	6.6	5.8	5.7
PROPANE	3.1	3.1	3.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	6.7	4.4	4.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.20	0.13	0.13
HEATING VALUE*	1086	1114	1097
SPECIFIC GRAVITY	0.673	0.665	0.659

	INDEX 7384 SAMPLE 5349	INDEX 7385 SAMPLE 5350	INDEX 7386 SAMPLE 10509
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PURSLEY RANCH	PURSLEY RANCH	WILDCAT
WELL NAME	MADELINE NO. 1	MOLLY RUTH NO. 1	R. B. MATHERS 2 NO. 1
LOCATION	SEC. 20, BLK. 25, H&GN SUR.	SEC. 30, BLK. 30, H&GN SUR.	SEC.1-BLK.S,J.STUMP SUR.
OWNER	C. P. PURSLEY	C. P. PURSLEY	STANDARD OIL CO. OF TEXAS
COMPLETED	12/--/52	NOT GIVEN	02/13/66
SAMPLED	12/09/52	12/09/52	04/07/66
FORMATION	NOT GIVEN	NOT GIVEN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	11690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4200
COMPONENT, MOLE PCT			
METHANE	85.1	84.5	82.8
ETHANE	5.0	5.3	7.7
PROPANE	2.3	2.9	4.0
N-BUTANE	0.6	1.1	1.1
ISOBUTANE	0.2	0.4	0.5
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.0	5.0	2.2
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.7
HELIUM	0.16	0.14	0.02
HEATING VALUE*	1056	1100	1161
SPECIFIC GRAVITY	0.645	0.662	0.686

	INDEX 7387 SAMPLE 16077	INDEX 7388 SAMPLE 12937	INDEX 7389 SAMPLE 4137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAYSON	GRAYSON
FIELD	WILDCAT	GORDONVILLE	HANDY
WELL NAME	WM. D. STOCKSTILL NO. 1	R. R. ROBBINS NO. 1	J. R. HANDY NO. 3
LOCATION	SEC. 185, BLK. M2, BS&F SUR.	THOMAS TOBY SUR. A-1240	25 MI. NE OF GAINESVILLE
OWNER	HUNT ENERGY CORP.	JAKE L. HAMON	TEXAS CO.
COMPLETED	05/06/80	03/07/70	09/04/46
SAMPLED	09/04/80	07/19/71	10/17/46
FORMATION	-STRAY SAND	ORDO-OIL CREEK	CRET-BASAL
GEOLOGIC PROVINCE CODE	440	350	350
DEPTH, FEET	9740	15445	398
WELLHEAD PRESSURE,PSIG	3473	7535	125
OPEN FLOW, MCFD	4650	24000	469
COMPONENT, MOLE PCT			
METHANE	91.2	90.2	88.2
ETHANE	3.5	5.2	5.7
PROPANE	1.5	2.3	---
N-BUTANE	0.5	0.6	---
ISOBUTANE	0.1	0.4	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	2.3	0.7	5.4
OXYGEN	TRACE	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.05	0.02	0.13
HEATING VALUE*	1077	1123	996
SPECIFIC GRAVITY	0.622	0.634	0.610

	INDEX 7390 SAMPLE 10650	INDEX 7391 SAMPLE 16060	INDEX 7392 SAMPLE 7889
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GRAYSON	GRAYSON
FIELD	HANDY	MINERAL CREEK W	NEW MAG
WELL NAME	IDA A. THORN NO. 12	PETRO LEWIS-KUSCH GU NO. 1	MARY I. MCADAMS 3-2
LOCATION	SAMUEL STEWART SUR. A1069	1/2MI.W OF POTTSBORO	W. B. CHILES A-317 SUR.
OWNER	TEXACO INC	AMERICAN QUASAR PET. CO.	STANDARD OIL CO. OF TEXAS
COMPLETED	07/24/65	03/24/80	03/01/59
SAMPLED	07/14/66	09/04/80	03/08/61
FORMATION	-GRAY	PENN-DORNICK HILLS	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4639	12198	12813
WELLHEAD PRESSURE,PSIG	1982	5813	5224
OPEN FLOW, MCFD	3150	28500	78000
COMPONENT, MOLE PCT			
METHANE	86.1	84.1	86.4
ETHANE	6.0	9.2	7.8
PROPANE	3.4	3.4	3.1
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.8	0.8	0.7
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.2
HELIUM	0.06	0.02	0.03
HEATING VALUE*	1163	1168	1165
SPECIFIC GRAVITY	0.670	0.672	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7393 SAMPLE 12553		INDEX 7394 SAMPLE 1731		INDEX 7395 SAMPLE 11735	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GRAYSON		GRAYSON		GRAYSON	
FIELD	NEW MAG		POTTSBORO		SHERMAN	
WELL NAME	NEW MAG UNIT NO. 12-1		WALL NO. 1		ROY LOGSTON NO. 1	
LOCATION	NOT GIVEN		JAMES INGRAM SUR.		J. R. MCANAIR SUR. A-763	
OWNER	CHEVRON OIL CO.		SIMPSON-FELL OIL CO.		STANDARD OIL CO. OF TEXAS	
COMPLETED	07/24/61		01/--/29		04/11/67	
SAMPLED	11/27/70		04/05/29		01/14/69	
FORMATION	ORDO-OILCREEK		CRET-TRINITY		-CORDELL	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	12776		070		8590	
WELLHEAD PRESSURE,PSIG	4200		220		525	
OPEN FLOW, MCFD	3860		4		1240	
COMPONENT, MOLE PCT						
METHANE	84.3	----------	87.2	----------	83.2	----------
ETHANE	8.2		6.8		7.1	
PROPANE	4.3	----------	---	----------	4.6	----------
N-BUTANE	0.8		---		1.4	
ISOBUTANE	0.5	----------	---	----------	1.1	----------
N-PENTANE	0.2		---		0.4	
ISOPENTANE	TRACE	----------	---	----------	0.0	----------
CYCLOPENTANE	0.1		---		0.2	
HEXANES PLUS	0.2	----------	---	----------	0.5	----------
NITROGEN	1.1		5.5		1.1	
OXYGEN	0.1	----------	0.2	----------	0.1	----------
ARGON	0.0		---		0.0	
HYDROGEN	0.1	----------	---	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE	----------	0.3	----------	0.2	----------
HELIUM	0.03		0.20		TRACE	
HEATING VALUE*	1179	----------	1005	----------	1224	----------
SPECIFIC GRAVITY	0.672		0.615		0.704	

	INDEX 7396 SAMPLE 12478		INDEX 7397 SAMPLE 12479		INDEX 7398 SAMPLE 3731	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GREGG		GREGG		GREGG	
FIELD	DANVILLE		DANVILLE		WILLOW SPRINGS	
WELL NAME	D.I. GALLENGER G.U. NO. 3-L		D.I. GALLENGER G.U. NO. 3-U		HORTON-DICKSON NO. 4	
LOCATION	HADEN EDWARDS SUR.		HADEN EDWARDS SUR.		H. G. HUDSON SUR.	
OWNER	TEXACO INC.		TEXACO INC.		LONE STAR PRODUCING CO.	
COMPLETED	11/04/63		11/04/63		12/06/42	
SAMPLED	10/22/70		10/22/70		03/24/44	
FORMATION	CRET-TRAVIS PEAK		CRET-GLOYD		CRET-PETTIT L	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	7516		6791		7250	
WELLHEAD PRESSURE,PSIG	1245		355		NOT GIVEN	
OPEN FLOW, MCFD	350		250		3500	
COMPONENT, MOLE PCT						
METHANE	90.9	----------	90.7	----------	49.4	----------
ETHANE	3.9		4.0		46.9	
PROPANE	1.3	----------	1.3	----------	---	----------
N-BUTANE	0.4		0.4		---	
ISOBUTANE	0.4	----------	0.5	----------	---	----------
N-PENTANE	0.4		0.2		---	
ISOPENTANE	0.0	----------	0.0	----------	---	----------
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.5	----------	0.4	----------	---	----------
NITROGEN	0.9		1.4		0.8	
OXYGEN	0.0	----------	0.1	----------	0.5	----------
ARGON	TRACE		TRACE		---	
HYDROGEN	0.1	----------	0.1	----------	---	----------
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.9	----------	0.8	----------	2.4	----------
HELIUM	0.01		0.01		0.00	
HEATING VALUE*	1098	----------	1088	----------	1341	----------
SPECIFIC GRAVITY	0.631		0.630		0.816	

	INDEX 7399 SAMPLE 5647		INDEX 7400 SAMPLE 12594		INDEX 7401 SAMPLE 12595	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GREGG		GREGG		GREGG	
FIELD	WILLOW SPRINGS		WILLOW SPRINGS		WILLOW SPRINGS	
WELL NAME	NORRIS ESTATE NO. 1		J. M. ROBERTSON NO. 3		E. O. ROBERTSON NO. A-2	
LOCATION	G. W. GROCE SUR.		A. FERGUSON SUR. A-75		ALEXANDER-FERGUSON SUR. A-76	
OWNER	MIDSTATES OIL CORP.		LONE STAR PRODUCING CO.		LONE STAR PRODUCING CO.	
COMPLETED	01/30/54		10/29/69		02/23/59	
SAMPLED	10/28/70		12/18/70		12/16/70	
FORMATION	CRET-RODESSA		CRET-TRAVIS PEAK		CRET-PETTIT	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	7606		7451		7294	
WELLHEAD PRESSURE,PSIG	2700		2938		560	
OPEN FLOW, MCFD	3100		4028		1761	
COMPONENT, MOLE PCT						
METHANE	90.1	----------	91.9	----------	90.6	----------
ETHANE	5.0		3.8		4.3	
PROPANE	1.2	----------	0.9	----------	1.4	----------
N-BUTANE	0.3		0.2		0.5	
ISOBUTANE	0.4	----------	0.3	----------	0.5	----------
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	TRACE	----------	0.0	----------	0.1	----------
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2	----------	0.3	----------	0.4	----------
NITROGEN	1.1		1.3		0.8	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	0.0		0.0		THACE	
HYDROGEN	0.2	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2	----------	1.1	----------	1.1	----------
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1076	----------	1059	----------	1102	----------
SPECIFIC GRAVITY	0.625		0.615		0.636	

	INDEX 7402 SAMPLE 12596		INDEX 7403 SAMPLE 12621		INDEX 7404 SAMPLE 12710	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	GREGG		GREGG		GREGG	
FIELD	WILLOW SPRINGS		WILLOW SPRINGS		WILLOW SPRINGS	
WELL NAME	B. A. SKIPPER NO. B-1		THRASHER NO. 2C		TOLAR UNIT NO. 1	
LOCATION	MARSHALL-MANN SUR. A-256		2 MI. NW LONGVIEW		NOT GIVEN	
OWNER	LONE STAR PRODUCING CO.		DOREMAN PRODUCTION CO.		SOUTHERN UNION PROD. CO.	
COMPLETED	NOT GIVEN		12/30/59		07/31/69	
SAMPLED	12/16/70		12/29/70		03/12/71	
FORMATION	CRET-RODESSA		PLIO-HENDERSON		CRET-TRAVIS PEAK	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	7326		6809		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	476		270		2100	
OPEN FLOW, MCFD	4500		296		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.6	----------	91.9	----------	90.5	----------
ETHANE	4.3		4.1		4.5	
PROPANE	1.7	----------	1.1	----------	1.1	----------
N-BUTANE	0.7		0.3		0.3	
ISOBUTANE	0.8	----------	0.6	----------	0.3	----------
N-PENTANE	0.6		0.1		0.2	
ISOPENTANE	0.1	----------	0.0	----------	THACE	----------
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.6	----------	0.3	----------	0.2	----------
NITROGEN	1.5		0.6		1.4	
OXYGEN	0.2	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1	----------	0.8	----------	1.3	----------
HELIUM	0.21		0.21		0.03	
HEATING VALUE*	1139	----------	1092	----------	1065	----------
SPECIFIC GRAVITY	0.643		0.623		0.623	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7405 SAMPLE 5450	INDEX 7406 SAMPLE 8140	INDEX 7407 SAMPLE 12666
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HALE	HAMILTON	HAMILTON
FIELD	PLAINVIEW	POTTSVILLE	POTTSVILLE
WELL NAME	GRIFFITH PROD.-BIER NO. 1	T. K. REA HEIRS NO. 1	D. B. DAWSON NO. 1
LOCATION	SEC. 1, BLK. D-A, GC&SF SUR.	DAVID COOK SUR.	BBB&C SUR. NO. 41
OWNER	JOHN F. BIER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	10/--/50	03/25/36	07/08/36
SAMPLED	04/25/53	08/09/61	02/08/71
FORMATION	NOT GIVEN	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	435	415	415
DEPTH, FEET	3466	2412	2558
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1160	308
OPEN FLOW, MCFD	NOT GIVEN	34000	4160
COMPONENT, MOLE PCT			
METHANE	0.6	89.7	87.7
ETHANE	0.0	4.4	5.2
PROPANE	0.5	0.8	1.3
N-BUTANE	0.0	0.2	0.3
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	98.5	4.0	4.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.13	0.20	0.16
HEATING VALUE*	29	1043	1057
SPECIFIC GRAVITY	0.970	0.617	0.632

	INDEX 7408 SAMPLE 4427	INDEX 7409 SAMPLE 4429	INDEX 7410 SAMPLE 8139
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	POTTSVILLE S	POTTSVILLE S	POTTSVILLE S
WELL NAME	CLARENCE REA NO. 1	E. L. RIEWE NO. 1	E. L. RIEWE NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	RICHARD BROWN SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	10/10/47	08/30/47	08/--/47
SAMPLED	02/05/48	02/05/48	08/09/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	2720	2590	2658
WELLHEAD PRESSURE,PSIG	1160	1160	1160
OPEN FLOW, MCFD	6800	13500	21000
COMPONENT, MOLE PCT			
METHANE	82.7	84.3	88.3
ETHANE	11.7	8.9	4.9
PROPANE	---	---	1.0
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	TRACE
NITROGEN	4.8	5.7	4.7
OXYGEN	0.3	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.6	0.1
HELIUM	0.16	0.15	0.10
HEATING VALUE*	1047	1013	1040
SPECIFIC GRAVITY	0.636	0.629	0.623

	INDEX 7411 SAMPLE 5010	INDEX 7412 SAMPLE 6296	INDEX 7413 SAMPLE 5955
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HAMILTON	HANSFORD	HANSFORD
FIELD	WILDCAT	ATOKA	BERNSTEIN
WELL NAME	ALICE D. COWLING NO. 1	ATKINS C-3	TOMLINSON NO. 1
LOCATION	JOHN PERSON SUR.	SEC. 17, BLK. 1, PSL SUR.	SEC. 3, BLK. 2, SA&MG SUR.
OWNER	AMERADA PETROLEUM CORP.	PHILLIPS PETROLEUM CO.	SHARPLES OIL CORP.
COMPLETED	12/13/50	02/12/57	05/--/55
SAMPLED	03/16/51	04/04/57	10/29/55
FORMATION	PENN-MARBLE FALLS	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	415	360	360
DEPTH, FEET	3164	6469	6914
WELLHEAD PRESSURE,PSIG	1735	1073	1700
OPEN FLOW, MCFD	3000	480	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.7	89.3	93.6
ETHANE	5.9	5.1	0.1
PROPANE	1.7	2.3	0.1
N-BUTANE	0.4	0.6	TRACE
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	9.4	1.6	5.7
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.08	0.17	0.31
HEATING VALUE*	1006	1104	983
SPECIFIC GRAVITY	0.657	0.632	0.579

	INDEX 7414 SAMPLE 13923	INDEX 7415 SAMPLE 13927	INDEX 7416 SAMPLE 6774
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	BERNSTEIN	BERNSTEIN E	BERNSTEIN S
WELL NAME	THORENSEN NO. 1	BRAVO-HART NO. 1	A. H. FRAZIER NO. 1
LOCATION	SEC. 29, BLK. 1, CIF SUR.	SEC. 32, BLK.1, C1F SUR.	SEC. 14, BLK. 1, CIF SUR.
OWNER	BASIN PETROLEUM CORP.	H & L OPERATING CO.	NATURAL GAS PIPELINE CO.
COMPLETED	07/04/74	06/01/73	05/08/58
SAMPLED	02/15/74	02/23/74	08/01/58
FORMATION	PENN-MORROW U	PENN-LANSING	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6722	5393	6770
WELLHEAD PRESSURE,PSIG	1239	1851	1140
OPEN FLOW, MCFD	9500	3010	2850
COMPONENT, MOLE PCT			
METHANE	81.1	82.2	81.9
ETHANE	7.3	7.6	7.8
PROPANE	4.7	4.7	4.4
N-BUTANE	1.3	1.3	1.4
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.9	2.4	2.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.20	0.13	0.20
HEATING VALUE*	1175	1195	1186
SPECIFIC GRAVITY	0.701	0.696	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7417 SAMPLE 6777	INDEX 7418 SAMPLE 7066	INDEX 7419 SAMPLE 11946
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	BERNSTEIN S	BRILLHART	BRILLHART
WELL NAME	A. H. FRAZIER NO. 1	C. D. ALEXANDER NO. 1-9	A. K. BURLESON NO. 1
LOCATION	SEC. 14, BLK. 1, CIF SUR.	SEC. 9, BLK. 11, WELL SUR.	SEC. 27, BLK. 45, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	GULF,& BAKER & TAYLOR DRLG.	FEDERAL PETROLEUM, INC.
COMPLETED	05/08/58	05/01/59	08/28/68
SAMPLED	08/01/58	05/11/59	06/26/69
FORMATION	PENN-CHEROKEE	PENN-	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6096	6738	6144
WELLHEAD PRESSURE,PSIG	1475	1730	1672
OPEN FLOW, MCFD	8750	5270	5400
COMPONENT, MOLE PCT			
METHANE	82.2	91.4	77.9
ETHANE	9.1	4.6	7.3
PROPANE	4.2	1.5	5.2
N-BUTANE	1.2	0.5	1.0
ISOBUTANE	0.5	0.2	0.6
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.7	0.6	7.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.0
HELIUM	0.10	0.10	0.19
HEATING VALUE*	1193	1098	1140
SPECIFIC GRAVITY	0.688	0.621	0.709

	INDEX 7420 SAMPLE 9836	INDEX 7421 SAMPLE 11540	INDEX 7422 SAMPLE 7501
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	CLEMENTINE	CLEMENTINE	CLEVELAND
WELL NAME	CLEMENTINE NO. 1	VENNEMAN NO. 1	R. R. SMITH NO. 1
LOCATION	SEC. 31, BLK. 1, WCRR SUR.	SEC. 29, BLK. 1, WCRR SUR.	SEC. 142, BLK. 4-T, T&NO SUR
OWNER	GULF OIL CORP.	AIKMAN BROTHERS CORP.	TEXACO INC.
COMPLETED	07/17/64	03/08/68	02/11/60
SAMPLED	04/05/65	06/13/68	04/08/60
FORMATION	PENN-MORROW	PENN-MORROW U	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6760	6709	6421
WELLHEAD PRESSURE,PSIG	1657	1555	240
OPEN FLOW, MCFD	9250	3300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.1	91.0	74.5
ETHANE	4.7	4.6	13.1
PROPANE	1.5	1.4	7.6
N-BUTANE	0.4	0.5	2.5
ISOBUTANE	0.3	0.0	0.7
N-PENTANE	0.2	0.5	0.5
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.9	1.3	0.2
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.2
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1096	1075	1347
SPECIFIC GRAVITY	0.623	0.617	0.771

	INDEX 7423 SAMPLE 9898	INDEX 7424 SAMPLE 12702	INDEX 7425 SAMPLE 5583
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	COLLARD	FARWELL CREEK	GRUVER E
WELL NAME	H. T. COLLARD G. U. NO. 1-LC	BROOKS NO. 1	S. P. & K. K. JACKSON NO. 1
LOCATION	SEC. 189, BLK. 45, H&TC SUR.	SEC.224, BLK.2,GH&H RR SUR.	SEC. 111, BLK.45,H&TCRR SUR.
OWNER	TEXACO INC.	SIDWELL OIL & GAS, INC.	HUMBLE OIL & REFINING CO.
COMPLETED	04/18/64	01/06/71	12/29/53
SAMPLED	05/11/65	03/08/71	12/29/53
FORMATION	PENN-VIRGIL-TONKAWA	PENN-MORROW L	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4682	7121	4960
WELLHEAD PRESSURE,PSIG	1106	1479	1086
OPEN FLOW, MCFD	43000	6450	2680
COMPONENT, MOLE PCT			
METHANE	74.6	74.9	81.9
ETHANE	4.8	4.5	6.4
PROPANE	3.1	2.5	3.6
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.7	13.8	5.5
OXYGEN	0.0	1.9	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.43	0.22	0.29
HEATING VALUE*	1008	977	1110
SPECIFIC GRAVITY	0.708	0.703	0.678

	INDEX 7426 SAMPLE 11575	INDEX 7427 SAMPLE 11576	INDEX 7428 SAMPLE 13527
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	GRUVER N	GRUVER N	GRUVER NW
WELL NAME	RHODA HART NO. 1	RHODA HART NO. 1	MORRISON NO. 1
LOCATION	SEC. 17, BLK P, H&GNRR SUR.	SEC. 17, BLK P, H&GNRR SUR.	SEC. 253, BLK. 2, GH&H SUR.
OWNER	GULF OIL CORP.	GULF OIL CORP.	MESA PETROLFUM CO.
COMPLETED	07/24/68	07/06/68	06/27/72
SAMPLED	07/16/68	07/16/68	02/09/73
FORMATION	PENN-MORROW U	PENN-HEPLER	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6328	5770	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1476	1530	1625
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3600
COMPONENT, MOLE PCT			
METHANE	79.5	78.3	87.6
ETHANE	6.7	9.1	6.1
PROPANE	4.7	4.6	2.9
N-BUTANE	1.4	1.4	0.8
ISOBUTANE	2.3	0.3	0.4
N-PENTANE	2.5	0.3	0.2
ISOPENTANE	TRACE	2.5	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.1	4.8	1.2
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.20	0.18	0.14
HEATING VALUE*	1167	1167	1140
SPECIFIC GRAVITY	0.733	0.711	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7429 SAMPLE 14013	INDEX 7430 SAMPLE 14014	INDEX 7431 SAMPLE 14016
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANNAS DRAW	HANNAS DRAW	HANNAS DRAW
WELL NAME	CLUCK NO. C-1	HART NO. C-1	RACOL NO. 2
LOCATION	SEC. 117, BLK. 2, GH&H SUR.	SEC. 77, BLK. 2, GH&H SUR.	SEC. 116, BLK. 2, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/27/74	08/27/73	08/14/73
SAMPLED	05/30/74	05/30/74	05/30/74
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4820	4728	4750
WELLHEAD PRESSURE,PSIG	990	999	999
OPEN FLOW, MCFD	2800	21000	20000
COMPONENT, MOLE PCT			
METHANE	79.1	80.1	79.8
ETHANE	5.9	6.2	6.1
PROPANE	3.9	4.0	4.1
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	8.0	6.7	6.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.38	0.36	0.35
HEATING VALUE*	1105	1118	1124
SPECIFIC GRAVITY	0.699	0.694	0.700

	INDEX 7432 SAMPLE 5785	INDEX 7433 SAMPLE 5919	INDEX 7434 SAMPLE 6058
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	MATHEWS UNIT II	S. P. MILLER NO. 1	WELL NO. 1
LOCATION	SEC. 104, BLK. 45, H&TC SUR.	SEC. 5, BLK. 2, PSL SUR.	SEC. 108, BLK. 45, H&TC SUR.
OWNER	R. H. FULTON	STANOLIND OIL & GAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/04/54	04/26/55	02/21/56
SAMPLED	03/02/55	08/18/55	05/15/56
FORMATION	PENN-MORROW	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6879	6156	7245
WELLHEAD PRESSURE,PSIG	1916	1560	1659
OPEN FLOW, MCFD	16090	32000	24000
COMPONENT, MOLE PCT			
METHANE	85.1	79.4	97.9
ETHANE	7.0	8.9	TRACE
PROPANE	3.3	4.7	0.3
N-BUTANE	1.0	1.4	0.1
ISOBUTANE	0.5	0.5	0.0
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.6	3.9	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.13	0.17	0.17
HEATING VALUE*	1168	1189	1016
SPECIFIC GRAVITY	0.674	0.710	0.569

	INDEX 7435 SAMPLE 6129	INDEX 7436 SAMPLE 7336	INDEX 7437 SAMPLE 7476
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	HANSFORD GAS WELL NO. 1	E. M. CARMODY NO. 4	V. MATHEWS A NO. 1
LOCATION	SEC. 120, BLK. 45, H&TC SUR.	SEC. 34, BLK. 4T, T&NO SUR.	SEC. 56, BLK. R, AB&M SUR.
OWNER	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.	GULF OIL CORP.
COMPLETED	03/20/56	06/28/59	NOT GIVEN
SAMPLED	09/04/56	01/13/60	03/25/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6942	7468	8544
WELLHEAD PRESSURE,PSIG	1859	1810	2070
OPEN FLOW, MCFD	33000	3	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	76.9	91.1
ETHANE	4.9	8.3	4.0
PROPANE	2.1	4.4	1.6
N-BUTANE	0.7	1.1	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.3	1.5	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.5
NITROGEN	1.2	5.5	1.0
OXYGEN	TRACE	0.8	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.12	0.20	0.10
HEATING VALUE*	1124	1173	1112
SPECIFIC GRAVITY	0.640	0.727	0.633

	INDEX 7438 SAMPLE 8681	INDEX 7439 SAMPLE 8682	INDEX 7440 SAMPLE 10821
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	O.D.C. NO. 1	O.D.C. NO. 1	H. H. CROOK NO. 1
LOCATION	SEC. 1, BLK. 45, H&TC SUR.	SEC. 1, BLK. 45, H&TC SUR.	SEC. 30, BLK. R, B&B SUR.
OWNER	ROY FURR	ROY FURR	HUMBLE OIL & REFINING CO.
COMPLETED	07/20/62	07/20/62	08/18/66
SAMPLED	09/22/62	09/22/62	12/15/66
FORMATION	PENN-MORROW	PENN-MORROW	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6924	7475	6386
WELLHEAD PRESSURE,PSIG	1623	2284	1317
OPEN FLOW, MCFD	10250	2400	2490
COMPONENT, MOLE PCT			
METHANE	88.5	88.2	82.3
ETHANE	4.3	5.5	6.9
PROPANE	2.7	2.5	4.0
N-BUTANE	1.0	0.7	1.2
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	1.9	1.6	3.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.12	0.13	0.18
HEATING VALUE*	1130	1108	1172
SPECIFIC GRAVITY	0.651	0.638	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7441 SAMPLE 5873	INDEX 7442 SAMPLE 5954	INDEX 7443 SAMPLE 6207
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	HENDERSON NO. 1	BECK NO. 1-B	MILLER NO. 1
LOCATION	SEC. 95, BLK. 45, H&TC SUR.	SEC. 80, BLK. 45, H&TC SUR.	SEC. 14, BLK. 22, SA&MG SUR.
OWNER	SHARPLES OIL CORP.	SHARPLES OIL CORP.	SPICKNALL ENTERPRISES
COMPLETED	10/27/54	06/--/55	11/27/56
SAMPLED	NOT GIVEN	10/29/55	12/10/56
FORMATION	PENN-HEPLER	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6283	6820	5324
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1336
OPEN FLOW, MCFD	7700	NOT GIVEN	120000
COMPONENT, MOLE PCT			
METHANE	81.8	87.6	85.7
ETHANE	8.5	0.0	6.6
PROPANE	4.1	0.5	2.0
N-BUTANE	1.2	TRACE	1.0
ISOBUTANE	0.3	0.0	0.7
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.2	0.0	0.7
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	2.9	10.0	2.4
OXYGEN	TRACE	0.9	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.16	0.02	0.13
HEATING VALUE*	1174	900	1126
SPECIFIC GRAVITY	0.690	0.603	0.661

	INDEX 7444 SAMPLE 7834	INDEX 7445 SAMPLE 11756	INDEX 7446 SAMPLE 11757
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	J. I. STEELE NO. 1	C. R. COX GAS UNIT NO. 1	HENDERSON GAS UNIT NO. 1
LOCATION	SEC. 53, BLK. 45, H&TC SUR.	SEC. 9, BLK. 2, SA&MG SUR.	SEC. 82, BLK. 45, H&TC SUR.
OWNER	GULF OIL CORP.	SHARPLES & CO. PROPERTIES	SHARPLES & CO. PROPERTIES
COMPLETED	10/10/59	05/25/55	07/22/55
SAMPLED	02/01/61	02/07/69	02/07/69
FORMATION	PENN-TONKAWA	PENN-MORROW L	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5338	7374	7004
WELLHEAD PRESSURE,PSIG	1270	782	336
OPEN FLOW, MCFD	14800	2460	500
COMPONENT, MOLE PCT			
METHANE	86.3	90.8	89.3
ETHANE	6.3	3.8	4.0
PROPANE	3.0	1.6	1.1
N-BUTANE	1.0	0.5	0.6
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.8	1.7	3.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.10	0.16	0.21
HEATING VALUE*	1151	1089	1075
SPECIFIC GRAVITY	0.665	0.625	0.633

	INDEX 7447 SAMPLE 11767	INDEX 7448 SAMPLE 11771	INDEX 7449 SAMPLE 11772
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	VIRGINIA HUDSON NO. 1	REX SANDERS GAS UNIT NO. 1C	REX SANDERS GAS UNIT NO. 1T
LOCATION	SEC. 7, BLK. P, H&GN SUR.	SEC. 94, BLK. 45, H&TC SUR.	SEC. 94, BLK. 45, H&TC SUR.
OWNER	MOBIL OIL CORP.	SUN OIL CO., DX DIVISION	SUN OIL CO., DX DIVISION
COMPLETED	04/--/58	06/07/56	05/13/56
SAMPLED	02/--/69	NOT GIVEN	02/25/69
FORMATION	PENN-MORROW	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7268	6981	7264
WELLHEAD PRESSURE,PSIG	666	392	392
OPEN FLOW, MCFD	NOT GIVEN	161	214
COMPONENT, MOLE PCT			
METHANE	90.1	90.2	90.0
ETHANE	4.1	4.4	4.0
PROPANE	1.7	1.5	1.7
N-BUTANE	0.6	0.3	0.5
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.0	2.5	2.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.17	0.25	0.21
HEATING VALUE*	1088	1059	1065
SPECIFIC GRAVITY	0.628	0.617	0.621

	INDEX 7450 SAMPLE 11841	INDEX 7451 SAMPLE 11842	INDEX 7452 SAMPLE 13986
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	W.E. MAUPIN ETEL NO. 1-C	GERTRUDE OGLE NO. 1-T	A.R. HENDERSON NO. 2
LOCATION	W.D.C. HALL SUR.	SEC. 11, BLK. 2, SA&MG SUR.	SEC. 82, BLK.45, H&TC SUR.
OWNER	GULF OIL CORP.	GULF OIL CORP.	YUCCA PETROLEUM CO.
COMPLETED	06/22/59	12/07/55	03/07/74
SAMPLED	05/01/69	05/01/69	04/29/74
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7326	7733	5352
WELLHEAD PRESSURE,PSIG	1625	1530	773
OPEN FLOW, MCFD	7100	2000	4350
COMPONENT, MOLE PCT			
METHANE	89.8	89.4	85.1
ETHANE	6.9	4.2	6.6
PROPANE	1.8	1.8	3.7
N-BUTANE	0.8	0.6	1.1
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.9	2.4	1.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.16	0.19	0.13
HEATING VALUE*	1100	1091	1157
SPECIFIC GRAVITY	0.638	0.638	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7453 SAMPLE 13917	INDEX 7454 SAMPLE 5608	INDEX 7455 SAMPLE 7780
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HART RANCH	HITCHLAND	HITCHLAND
WELL NAME	HART NO. 1	HITCHLAND GAS UNIT NO. 1	MCCUTCHEN A NO. 1
LOCATION	SEC. 5, BLK. 5-T, T&NO SUR.	SEC. 35, BLK.1, WCRR CO.SUR.	SEC. 3, BLK. 2, PSL SUR.
OWNER	COLORADO INTERSTATE GAS CO.	HUMBLE OIL & REFINING CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	02/04/54	09/13/60
SAMPLED	02/18/74	04/16/54	11/23/60
FORMATION	PENN-CLEVELAND	PENN-CISCO	PENN-COLLIER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5994	4586	4626
WELLHEAD PRESSURE,PSIG	1390	1123	978
OPEN FLOW, MCFD	3300	1400	5600
COMPONENT, MOLE PCT			
METHANE	85.2	83.9	84.1
ETHANE	6.9	5.9	6.4
PROPANE	3.6	3.6	3.6
N-BUTANE	1.1	1.2	1.0
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.9	4.0	3.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.13	0.16	0.20
HEATING VALUE*	1157	1134	1129
SPECIFIC GRAVITY	0.669	0.677	0.669

	INDEX 7456 SAMPLE 13273	INDEX 7457 SAMPLE 14655	INDEX 7458 SAMPLE 14651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HITCHLAND	HITCHLAND	HITCHLAND W
WELL NAME	HITCHLAND GAS UNIT NO. 1	HITCH NO. E-2	HITCH NO. S-2
LOCATION	SEC. 35, BLK. 1, WCRR SUR.	SEC. 10, BLK. 1, PSL SUR.	SEC. 58, BLK. P, H&GN SUR.
OWNER	HUMBLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/12/72	02/24/59	09/01/59
SAMPLED	06/21/72	04/27/76	04/27/76
FORMATION	PENN-MORROW U	PENN-MORROW L	PENN-COLLIER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6933	4595
WELLHEAD PRESSURE,PSIG	1530	530	270
OPEN FLOW, MCFD	9700	360	68
COMPONENT, MOLE PCT			
METHANE	90.3	82.2	82.4
ETHANE	5.2	4.9	6.6
PROPANE	1.9	4.7	4.0
N-BUTANE	0.5	1.9	1.2
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.2	0.5	0.4
ISOPENTANE	0.2	0.8	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	0.9	3.6	4.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	0.14	0.17
HEATING VALUE*	1103	1207	1150
SPECIFIC GRAVITY	0.626	0.717	0.688

	INDEX 7459 SAMPLE 14653	INDEX 7460 SAMPLE 14657	INDEX 7461 SAMPLE 6402
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HITCHLAND W	HITCHLAND W	HORIZON
WELL NAME	HITCH NO. F-2	HITCH NO. D-2	MEEK A NO. 1
LOCATION	SEC. 9, BLK. 1, PSL SUR.	SEC. 1, BLK. P, H&GN SUR.	SEC. 145, BLK. 4-T, T&NO SUR
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	06/03/59	09/13/59	07/20/57
SAMPLED	04/27/76	04/27/76	09/18/57
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6832	6747	6335
WELLHEAD PRESSURE,PSIG	760	575	1521
OPEN FLOW, MCFD	1275	753	7835
COMPONENT, MOLE PCT			
METHANE	82.4	82.5	84.1
ETHANE	5.0	5.0	8.5
PROPANE	4.6	4.4	3.6
N-BUTANE	1.9	1.8	1.1
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.7	0.9	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	3.6	3.7	0.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.16	0.16	0.10
HEATING VALUE*	1198	1191	1192
SPECIFIC GRAVITY	0.712	0.709	0.681

	INDEX 7462 SAMPLE 6505	INDEX 7463 SAMPLE 7450	INDEX 7464 SAMPLE 5328
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HORIZON	HORIZON	HUGOTON, TEXAS
WELL NAME	G. N. OCHILTREE NO. 1-147	V. MATHEWS A NO. 1	NORTON NO. 1
LOCATION	SEC. 147, BLK. 4-T, T&NO SUR	SEC. 56, BLK. R, AB&M SUR.	SEC. 81, BLK 2, GH&H SUR.
OWNER	HORIZON OIL & GAS CO.	GULF OIL CORP.	TASCOSA GAS CO.
COMPLETED	09/06/57	NOT GIVEN	06/23/50
SAMPLED	02/15/58	03/17/60	11/19/52
FORMATION	PENN-MORROW U	PENN-CLEVELAND	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7483	6604	3176
WELLHEAD PRESSURE,PSIG	1820	1600	415
OPEN FLOW, MCFD	38500	NOT GIVEN	621
COMPONENT, MOLE PCT			
METHANE	92.8	82.7	70.7
ETHANE	3.5	7.9	6.3
PROPANE	1.2	4.0	3.6
N-BUTANE	0.5	1.3	0.9
ISOBUTANE	0.2	0.5	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.7	2.3	16.6
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.0
HELIUM	0.10	0.10	0.93
HEATING VALUE*	1084	1188	989
SPECIFIC GRAVITY	0.613	0.693	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7465 SAMPLE 5371		INDEX 7466 SAMPLE 5427		INDEX 7467 SAMPLE 11859	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HANSFORD		HANSFORD		HANSFORD	
FIELD	HUGOTON, TEXAS		HUGOTON, TEXAS		HUGOTON, TEXAS	
WELL NAME	SEALY & SMITH NO. 1		GETZ NO. 2		S.D. & K.K. JACKSON NO. 2	
LOCATION	SEC. 9, BLK. 3, GH&H SUR.		SEC. 2, BLK. P, H&GN SUR.		SEC. 21, BLK. 2, H&GR SUR.	
OWNER	TEXAS CO.		PHILLIPS PETROLEUM CO.		ASHLAND OIL & REFINING CO.	
COMPLETED	09/27/52		10/27/52		02/24/49	
SAMPLED	12/31/52		03/24/53		05/13/69	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	3101		2700		2821	
WELLHEAD PRESSURE,PSIG	416		329		168	
OPEN FLOW, MCFD	379		4392		396	
COMPONENT, MOLE PCT						
METHANE	77.6		76.0		72.2	
ETHANE	6.9		6.0		6.3	
PROPANE	3.3		3.7		3.7	
N-BUTANE	0.6		1.2		1.1	
ISOBUTANE	0.4		0.4		0.4	
N-PENTANE	0.1		0.3		0.3	
ISOPENTANE	0.0		0.3		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	10.6		11.4		15.1	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		0.1		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	0.69		0.40		0.57	
HEATING VALUE*	1029		1067		1013	
SPECIFIC GRAVITY	0.680		0.711		0.718	

	INDEX 7468 SAMPLE 11864		INDEX 7469 SAMPLE 11868		INDEX 7470 SAMPLE 14650	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HANSFORD		HANSFORD		HANSFORD	
FIELD	HUGOTON, TEXAS		HUGOTON, TEXAS		HUGOTON, TEXAS	
WELL NAME	S.D. & K.K. JACKSON NO. 1		LOLA JACKSON NO. 1		HITCH NO. E-1	
LOCATION	SEC. 50, BLK. 1, WCRR SUR.		SEC. 28, BLK. 2, H&BO SUR.		SEC. 10, BLK. 1, PFSL SUR.	
OWNER	ASHLAND OIL & REFINING CO.		ASHLAND OIL & REFINING CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	04/19/49		03/16/49		08/13/45	
SAMPLED	05/13/69		05/13/69		04/27/76	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2830		2855		2620	
WELLHEAD PRESSURE,PSIG	199		173		107	
OPEN FLOW, MCFD	595		116		266	
COMPONENT, MOLE PCT						
METHANE	72.9		72.6		75.4	
ETHANE	6.4		6.5		6.4	
PROPANE	3.5		3.7		3.7	
N-BUTANE	0.9		1.1		1.1	
ISOBUTANE	0.5		0.4		0.4	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	14.5		14.2		11.8	
OXYGEN	0.0		0.2		0.0	
ARGON	0.1		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		TRACE	
HELIUM	0.59		0.61		0.42	
HEATING VALUE*	1013		1030		1047	
SPECIFIC GRAVITY	0.712		0.719		0.701	

	INDEX 7471 SAMPLE 14652		INDEX 7472 SAMPLE 14654		INDEX 7473 SAMPLE 14656	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HANSFORD		HANSFORD		HANSFORD	
FIELD	HUGOTON, TEXAS		HUGOTON, TEXAS		HUGOTON, TEXAS	
WELL NAME	EDGAR NO. 1		HITCH NO. 1		HITCH NO. S-1	
LOCATION	SEC. 80, BLK. P, H&GN SUR.		SEC. 62, BLK. P, H&GN SUR.		SEC. 58, BLK. P, H&GN SUR.	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	10/13/45		07/17/45		08/31/53	
SAMPLED	04/27/76		04/27/76		04/27/76	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2768		2792		2825	
WELLHEAD PRESSURE,PSIG	85		102		93	
OPEN FLOW, MCFD	250		198		136	
COMPONENT, MOLE PCT						
METHANE	75.2		73.5		73.3	
ETHANE	6.4		6.1		6.2	
PROPANE	3.7		3.5		3.6	
N-BUTANE	1.0		1.0		1.0	
ISOBUTANE	0.5		0.4		0.4	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.4		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	12.1		14.3		14.3	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.41		0.53		0.53	
HEATING VALUE*	1049		1014		1016	
SPECIFIC GRAVITY	0.706		0.708		0.708	

	INDEX 7474 SAMPLE 14658		INDEX 7475 SAMPLE 14659		INDEX 7476 SAMPLE 14660	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HANSFORD		HANSFORD		HANSFORD	
FIELD	HUGOTON, TEXAS		HUGOTON, TEXAS		HUGOTON, TEXAS	
WELL NAME	HITCH NO. A-1		HITCH NO. D-1		HITCH NO. C-1	
LOCATION	SEC. 289, BLK. 2, GH&H SUR.		SEC. 1, BLK. P, H&GN SUR.		SEC. 8, BLK. 1, PFSL SUR.	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	11/17/48		01/24/48		02/12/48	
SAMPLED	04/27/76		04/27/76		04/27/76	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2816		2647		2770	
WELLHEAD PRESSURE,PSIG	121		98		108	
OPEN FLOW, MCFD	142		150		301	
COMPONENT, MOLE PCT						
METHANE	75.2		75.4		75.5	
ETHANE	6.5		6.5		6.3	
PROPANE	4.0		3.9		3.7	
N-BUTANE	1.2		1.2		1.0	
ISOBUTANE	0.5		0.5		0.4	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	11.4		11.4		12.1	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.43		0.41		0.41	
HEATING VALUE*	1077		1073		1047	
SPECIFIC GRAVITY	0.711		0.713		0.704	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7477 SAMPLE 14661	INDEX 7478 SAMPLE 14662	INDEX 7479 SAMPLE 15220
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUNTER
WELL NAME	SAME NO. 1	HITCH NO. F-1	HUNTER NO. 1
LOCATION	SEC. 11, BLK. 1, PSL SUR.	SEC. 9, BLK. 1, PSL SUR.	SEC.147, BLK. 45, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	ARGONAUT ENERGY CORP.
COMPLETED	09/21/45	05/26/45	01/21/77
SAMPLED	04/27/76	04/27/76	03/07/78
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2745	2769	3254
WELLHEAD PRESSURE,PSIG	103	120	576
OPEN FLOW, MCFD	481	408	2350
COMPONENT, MOLE PCT			
METHANE	75.6	75.6	75.9
ETHANE	6.3	6.4	6.7
PROPANE	3.7	3.8	3.5
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.9	11.6	11.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.43	0.40	0.82
HEATING VALUE*	1047	1052	1047
SPECIFIC GRAVITY	0.703	0.702	0.697

	INDEX 7480 SAMPLE 10833	INDEX 7481 SAMPLE 14400	INDEX 7482 SAMPLE 14148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUTCHINSON N	LANDIS	MORSE NE
WELL NAME	COLLARD A NO. 1	LANDIS NO. 1	E.T. RAFFERTY NO. 1
LOCATION	SEC. 7, BLK.3, SA&MG SUR.	SEC. 34, BLK. R,B.&B. SUR.	SEC. 1, BLK. 4, PSL SUR.
OWNER	ANADARKO PRODUCTION CO.	R. L. BURNS CORP.	CIG EXPLORATION, INC.
COMPLETED	03/03/66	--/--/-74	07/26/74
SAMPLED	01/09/67	06/--/-75	09/17/74
FORMATION	-WHITE DOLOMITE	PENN-CLEVELAND	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3408	6099	4704
WELLHEAD PRESSURE,PSIG	603	1468	1035
OPEN FLOW, MCFD	3630	5600	5900
COMPONENT, MOLE PCT			
METHANE	75.1	81.7	77.3
ETHANE	6.9	6.3	5.2
PROPANE	4.0	3.8	3.5
N-BUTANE	1.2	1.3	1.1
ISOBUTANE	0.3	0.5	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	10.7	4.8	11.0
OXYGEN	0.1	0.4	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.69	0.20	0.45
HEATING VALUE*	1074	1144	1051
SPECIFIC GRAVITY	0.710	0.694	0.698

	INDEX 7483 SAMPLE 5072	INDEX 7484 SAMPLE 5565	INDEX 7485 SAMPLE 6090
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MANN WOMBLE NO. 1	T. J. BLAKEMORE NO. 1	NUSBAUM
LOCATION	SEC. 27, BLK. 3-T, GH&H SUR.	SEC. 30, BLK. 4T, T&NO SUR.	SEC. 39, BLK. 4, T&NO SUR.
OWNER	J. M. HUBER CORP.	TEXAS CO.	HONOLULU OIL CORP.
COMPLETED	06/19/51	10/26/53	NOT GIVEN
SAMPLED	06/21/51	11/20/53	06/20/56
FORMATION	PENN-	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5314	7298	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1225	1627	2370
OPEN FLOW, MCFD	2286	6850	16000
COMPONENT, MOLE PCT			
METHANE	83.8	92.5	92.1
ETHANE	7.8	3.5	3.6
PROPANE	3.5	1.5	1.6
N-BUTANE	1.0	0.4	0.6
ISOBUTANE	0.5	0.2	0.0
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	2.3	1.1	1.6
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.2
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.13	0.14	0.08
HEATING VALUE*	1165	1073	1095
SPECIFIC GRAVITY	0.681	0.609	0.620

	INDEX 7486 SAMPLE 6142	INDEX 7487 SAMPLE 9899	INDEX 7488 SAMPLE 12853
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	NOT GIVEN	PERM-WHITE DOLOMITE	PERM-WHITE DOLOMITE
WELL NAME	S. B. LASATER C-1-17	H. T. COLLARD G. U. NO. 1-UC	HOOVER A NO. 2
LOCATION	SEC. 17, BLK. 2, WCRR SUR.	SEC. 189, BLK. 45, H&TC SUR.	SEC. 12, BLK. 3, SA&MG SUR.
OWNER	UNION OIL CO. OF CALIF.	TEXACO INC.	PHILLIPS PETROLEUM CO.
COMPLETED	08/14/56	11/28/64	05/17/71
SAMPLED	09/15/56	05/12/65	06/16/71
FORMATION	PENN-MORROW U	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7294	3434	3546
WELLHEAD PRESSURE,PSIG	1630	603	544
OPEN FLOW, MCFD	31700	3400	2040
COMPONENT, MOLE PCT			
METHANE	90.8	74.1	67.5
ETHANE	3.5	6.6	6.2
PROPANE	1.6	4.0	4.2
N-BUTANE	0.5	1.2	1.1
ISOBUTANE	0.3	0.5	0.8
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	1.7	11.9	18.4
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.16	0.74	0.78
HEATING VALUE*	1101	1065	999
SPECIFIC GRAVITY	0.634	0.716	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7489 SAMPLE 6088	INDEX 7490 SAMPLE 6165	INDEX 7491 SAMPLE 8947
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	PRAIRIE	PRAIRIE	SHAPLEY
WELL NAME	COY HOLT NO. 2	T. E. JONES NO. 1	HARRIS UNIT B
LOCATION	SEC. 140, BLK. 45, H&TC SUR.	SEC. 309, BLK. 2, GH&H SUR.	SEC. 9, BLK. P, H&GN SUR.
OWNER	SUN OIL CO.	SUN OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/14/56	09/21/56	01/09/63
SAMPLED	06/16/56	10/24/56	04/26/63
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7052	7190	6802
WELLHEAD PRESSURE,PSIG	2000	1475	1580
OPEN FLOW, MCFD	NOT GIVEN	2300	2310
COMPONENT, MOLE PCT			
METHANE	91.8	88.9	79.1
ETHANE	4.0	4.4	7.8
PROPANE	1.1	1.8	4.9
N-BUTANE	0.1	0.5	1.6
ISOBUTANE	0.1	0.2	0.5
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	1.7	3.1	4.2
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.15	0.17	0.20
HEATING VALUE*	1065	1081	1197
SPECIFIC GRAVITY	0.608	0.634	0.720

	INDEX 7492 SAMPLE 9633	INDEX 7493 SAMPLE 5790	INDEX 7494 SAMPLE 7294
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	SHAPLEY	SPEARMAN	SPEARMAN E
WELL NAME	HARRIET HRANOVIK NO. 1-XC	OIL DEV. CO. OF TEX. NO. 1	C.C. O'LOUGHLIN SR. TRUST 1
LOCATION	SEC. 24, BLK. P, H&GN RR SUR	SEC. 2, BLK. 4-T, T&NO SUR.	SEC. 20, BLK. 2, WC-RR SUR.
OWNER	GULF OIL CORP.	HUMBLE OIL & REFINING CO.	TEXACO INC.
COMPLETED	04/11/64	11/08/54	11/24/56
SAMPLED	11/09/64	03/10/55	11/30/59
FORMATION	PENN-MORROW B	MISS-	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6968	7650	7081
WELLHEAD PRESSURE,PSIG	1472	2150	402
OPEN FLOW, MCFD	1500	1500	675
COMPONENT, MOLE PCT			
METHANE	80.9	92.2	79.3
ETHANE	7.5	3.7	11.2
PROPANE	4.3	1.5	5.3
N-BUTANE	1.3	0.4	1.5
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.9	0.1	0.4
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	4.0	0.8	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.23	0.09	0.10
HEATING VALUE*	1167	1090	1245
SPECIFIC GRAVITY	0.699	0.616	0.714

	INDEX 7495 SAMPLE 7312	INDEX 7496 SAMPLE 14954	INDEX 7497 SAMPLE 6061
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	SPEARMAN E	SPEARMAN E	TWIN
WELL NAME	SISTERS OF ST. JOSEPH NO. 1	LASSTER NO. 1	STEELE NO. 1
LOCATION	SEC. 13, BLK. 2, WCRR SUR.	SEC. 15, BLK. 2, WCRR SUR.	SEC. 56, BLK. 45, H&TC SUR.
OWNER	TEXACO INC.	PARAMOUNT PRODUCING INC.	FULTON DEVELOPMENT CO.
COMPLETED	12/10/56	NOT GIVEN	03/03/55
SAMPLED	12/18/59	03/31/77	03/24/55
FORMATION	PENN-ATOKA	PENN-MORROW U	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7000	7334	5081
WELLHEAD PRESSURE,PSIG	427	293	1400
OPEN FLOW, MCFD	910	3900	37500
COMPONENT, MOLE PCT			
METHANE	78.3	91.3	86.8
ETHANE	14.5	3.8	6.3
PROPANE	4.5	1.6	2.9
N-BUTANE	1.7	0.5	1.1
ISOBUTANE	0.5	0.1	0.3
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.6	1.5	1.3
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.3	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.05	0.15	0.13
HEATING VALUE*	1305	1081	1159
SPECIFIC GRAVITY	0.752	0.621	0.663

	INDEX 7498 SAMPLE 6502	INDEX 7499 SAMPLE 5582	INDEX 7500 SAMPLE 5687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	TWIN	WILDCAT	WILDCAT
WELL NAME	OIL DEVELOPMENT NO. 1-44	E. GROVER GAS UNIT NO. 1	LOLA K. JACKSON NO. 4
LOCATION	SEC. 44, BLK. 45, H&TC SUR.	SEC. 111, BLK. 45, H&TC SUR.	SEC. 19, BLK. 2, SA&MG SUR.
OWNER	J.M. HUBER CORP. & C.E.AIKMAN	HUMBLE OIL & REFINING CO.	UNITED PRODUCING CO., INC.
COMPLETED	01/02/58	12/04/53	07/19/54
SAMPLED	02/04/58	12/11/53	09/10/54
FORMATION	PENN-MARMATON	PENN-STRAWN	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5888	6216	6586
WELLHEAD PRESSURE,PSIG	1907	2018	1450
OPEN FLOW, MCFD	1350	5700	14100
COMPONENT, MOLE PCT			
METHANE	87.2	90.8	84.5
ETHANE	6.4	4.7	7.0
PROPANE	2.8	1.3	3.5
N-BUTANE	0.9	0.4	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.4	1.2	2.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.20	0.13
HEATING VALUE*	1138	1175	1137
SPECIFIC GRAVITY	0.652	0.694	0.666

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ASSUMPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7501 SAMPLE 5874	INDEX 7502 SAMPLE 5875	INDEX 7503 SAMPLE 5876
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	RALSTON NO. 1	O"DONNELL NO. 1	BOYD NO. 1
LOCATION	SEC. 10, BLK. 2, SA&MG SUR.	SEC. 81, BLK. 45, H&TC SUR.	SEC. 5, BLK. 2, SA&MG SUR.
OWNER	SHARPLES OIL CORP.	SHARPLES OIL CORP.	SHARPLES OIL CORP.
COMPLETED	01/24/55	04/11/55	03/05/55
SAMPLED	07/14/55	07/14/55	07/14/55
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7312	7186	5324
WELLHEAD PRESSURE,PSIG	1800	1800	1400
OPEN FLOW, MCFD	12500	3500	109000
COMPONENT, MOLE PCT			
METHANE	90.3	90.1	89.8
ETHANE	3.9	3.7	3.6
PROPANE	1.7	1.6	2.1
N-BUTANE	0.5	0.6	0.8
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.0	2.5	2.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.18	0.20	0.14
HEATING VALUE*	1044	1083	1102
SPECIFIC GRAVITY	0.625	0.628	0.636

	INDEX 7504 SAMPLE 5886	INDEX 7505 SAMPLE 5958	INDEX 7506 SAMPLE 5963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STEELE NO. 57-1	BETTY NO. 1	STEELE NO. 1
LOCATION	SEC. 57, BLK. 45P, H&TC SUR.	SEC. 24, BLK. 1, CIF SUR.	SEC. 78, H&TC SUR.
OWNER	PRODUCERS CHEMICAL SERVICE	SHARPLES OIL CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	02/13/55	04/--/55	07/21/55
SAMPLED	07/25/55	10/29/55	11/03/55
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5157	5870	5364
WELLHEAD PRESSURE,PSIG	1490	1700	1380
OPEN FLOW, MCFD	3583	8500	3350
COMPONENT, MOLE PCT			
METHANE	85.9	96.5	85.9
ETHANE	5.9	0.1	6.4
PROPANE	3.1	0.1	3.3
N-BUTANE	1.2	0.1	1.0
ISOBUTANE	0.2	0.0	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.5	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	2.4	2.6	1.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.15	0.21	0.14
HEATING VALUE*	1144	986	1150
SPECIFIC GRAVITY	0.664	0.567	0.663

	INDEX 7507 SAMPLE 15833	INDEX 7508 SAMPLE 9084	INDEX 7509 SAMPLE 14375
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HARDEMAN	HARDIN
FIELD	WILLIAMS	CONLEY	BATSON
WELL NAME	MINDA "A" NO. 2	CONLEY A NO. 6	C. G. HOOKS NO. 5
LOCATION	SEC. 33, BLK. P, H&GN SUR.	SEC. 82, BLK. H, W&NW RR SUR	JOSE C. LOPEZ SUR. A-360
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.
COMPLETED	09/08/79	06/24/63	04/24/73
SAMPLED	11/09/79	09/15/63	05/19/75
FORMATION	PENN-MORROW	MISS-CHESTER	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	360	435	220
DEPTH, FEET	6768	7600	9192
WELLHEAD PRESSURE,PSIG	765	2225	1290
OPEN FLOW, MCFD	4200	3175	400
COMPONENT, MOLE PCT			
METHANE	87.8	75.9	68.2
ETHANE	3.7	12.0	4.5
PROPANE	2.3	5.3	2.8
N-BUTANE	0.7	1.5	0.6
ISOBUTANE	0.2	0.7	0.6
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	4.2	2.8	22.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.5
HELIUM	0.21	0.10	0.06
HEATING VALUE*	1073	1245	898
SPECIFIC GRAVITY	0.640	0.740	0.725

	INDEX 7510 SAMPLE 11177	INDEX 7511 SAMPLE 11178	INDEX 7512 SAMPLE 14553
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	BEECH CREEK	BEECH CREEK	BEECH CREEK
WELL NAME	H&TC FEE SEC. 189 NO. 9	H&TC FEE SEC. 189 NO. 9	ARCO FEE SEC. 189 NO. 1
LOCATION	SEC. 189, H&TC SUR. A300	SEC. 189, H&TC SUR. A300	H&TC RR CO. SUR. A-300
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	ROBERT MOSBACHER
COMPLETED	05/27/66	05/27/66	11/19/73
SAMPLED	10/17/67	10/17/67	12/18/75
FORMATION	EOCE-YEGUA 7-A	EOCE-YEGUA 2	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6615	6285	9388
WELLHEAD PRESSURE,PSIG	2343	2338	2749
OPEN FLOW, MCFD	28500	11300	4650
COMPONENT, MOLE PCT			
METHANE	85.9	89.1	81.0
ETHANE	5.8	5.1	7.7
PROPANE	2.4	2.2	6.0
N-BUTANE	0.7	0.7	1.2
ISOBUTANE	0.6	0.6	1.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	2.9	1.2	0.7
OXYGEN	0.5	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1111	1131	1229
SPECIFIC GRAVITY	0.658	0.646	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7513 SAMPLE 16086		INDEX 7514 SAMPLE 13096		INDEX 7515 SAMPLE 12379	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARDIN		HARDIN		HARDIN	
FIELD	BRADLEY S		DORSEY		ELLIOTT	
WELL NAME	ARCO BRADLEY FEE NO. 1		STERNENBERG NO. 4		F.P. ELLIOTT FEE NO. 5-L	
LOCATION	1.05 MI. NE OF SETH		GREENBERG DORSEY SUR.		F.P. ELLIOTT LEAGUE A-18	
OWNER	JAKE L. HAMON		WHITE SHIELD O & G CORP.		ATLANTIC RICHFIELD CO.	
COMPLETED	11/12/79		06/20/70		06/11/69	
SAMPLED	09/29/80		10/23/71		08/19/70	
FORMATION	EOCE-YEGUA		EOCE-YEGUA		EOCE-YEGUA W	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7773		7361		7318	
WELLHEAD PRESSURE,PSIG	2700		2512		1606	
OPEN FLOW, MCFD	2754		5300		3165	
COMPONENT, MOLE PCT						
METHANE	84.5	----------	88.9	----------	88.0	----------
ETHANE	4.3		5.6		5.7	
PROPANE	2.3	----------	2.5	----------	2.6	----------
N-BUTANE	0.6		0.6		0.7	
ISOBUTANE	0.7	----------	0.6	----------	0.7	----------
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.3	----------	0.2	----------	0.2	----------
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.4	----------	0.2	----------	0.3	----------
NITROGEN	6.2		1.1		1.1	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3	----------	0.2	----------	0.3	----------
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1082	----------	1129	----------	1149	----------
SPECIFIC GRAVITY	0.668		0.643		0.656	

	INDEX 7516 SAMPLE 11176		INDEX 7517 SAMPLE 12380		INDEX 7518 SAMPLE 4928	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARDIN		HARDIN		HARDIN	
FIELD	MCGILL		MCGILL		O. C. NELSON	
WELL NAME	A. HAMPTON FEE B NO. 1		H. MCGILL FEE NO. 1-U		O. C. NELSON NO. 1	
LOCATION	A. HAMPTON SUR. A-3		H. MCGILL SUR. A-38		O. C. NELSON LEAGUE NO. A-40	
OWNER	SINCLAIR OIL & GAS CO.		ATLANTIC RICHFIELD CO.		AMERICAN REPUBLICS CORP.	
COMPLETED	08/14/66		05/30/69		06/01/50	
SAMPLED	10/17/67		08/19/70		09/08/50	
FORMATION	OLIG-FRIO F-1		EOCE-YEGUA C-3		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7770		7250		7626	
WELLHEAD PRESSURE,PSIG	2340		2488		3576	
OPEN FLOW, MCFD	16400		12000		12000	
COMPONENT, MOLE PCT						
METHANE	88.5	----------	89.3	----------	88.4	----------
ETHANE	5.6		4.9		5.7	
PROPANE	2.2	----------	2.2	----------	2.7	----------
N-BUTANE	0.7		0.6		0.7	
ISOBUTANE	0.5	----------	0.6	----------	0.7	----------
N-PENTANE	0.3		0.3		0.2	
ISOPENTANE	0.2	----------	TRACE	----------	0.1	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3	----------	0.3	----------	0.3	----------
NITROGEN	1.1		1.2		0.6	
OXYGEN	TRACE	----------	0.0	----------	0.1	----------
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1	----------	0.1	----------	---	----------
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.4	----------	0.3	----------	0.4	----------
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1135	----------	1122	----------	1146	----------
SPECIFIC GRAVITY	0.649		0.641		0.653	

	INDEX 7519 SAMPLE 12005		INDEX 7520 SAMPLE 13389		INDEX 7521 SAMPLE 14520	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARDIN		HARDIN		HARDIN	
FIELD	PAVEY-KIRBY		SILSBEE N		SOUR LAKE	
WELL NAME	KIRBY LBR. CO. TR. 104A NO.1		KIRBY LUMBER CO. NO. 1		DISHMAN-LUCAS NO. 1	
LOCATION	F. HELFENSTEIN SUR. A-263		J. A. VICKERS SUR. A-52		ISAAC BRIDGE SUR. A-132	
OWNER	SHELL OIL CO.		COLINE OIL CO.		SUN OIL CO.	
COMPLETED	09/24/55		06/19/71		07/27/74	
SAMPLED	08/20/69		09/19/72		10/31/75	
FORMATION	EOCE-WILCOX		EOCE-YEGUA		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8446		6969		9777	
WELLHEAD PRESSURE,PSIG	4383		2357		1900	
OPEN FLOW, MCFD	3250		340000		174	
COMPONENT, MOLE PCT						
METHANE	84.8	----------	88.0	----------	87.0	----------
ETHANE	7.2		5.6		6.2	
PROPANE	3.3	----------	3.0	----------	3.5	----------
N-BUTANE	0.7		0.7		0.7	
ISOBUTANE	0.6	----------	0.9	----------	0.7	----------
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.1	----------	0.2	----------	0.4	----------
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2	----------	0.1	----------	0.1	----------
NITROGEN	0.9		0.8		0.3	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.7	----------	0.4	----------	0.9	----------
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1149	----------	1146	----------	1157	----------
SPECIFIC GRAVITY	0.677		0.653		0.663	

	INDEX 7522 SAMPLE 5127		INDEX 7523 SAMPLE 13843		INDEX 7524 SAMPLE 4608	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARDIN		HARDIN		HARDIN	
FIELD	VICKERS		VILLAGE MILLS N		VILLAGE MILLS W	
WELL NAME	J. A. VICKERS NO. 1		KIRBY LUMBER CO. NO. 2		CHERRY FEE NO. 1	
LOCATION	NOT GIVEN		THOMAS J. WATTON SUR. A-279		WILBUR CHERRY SURVEY	
OWNER	AMERICAN REPUBLICS CORP.		HOUSTON OILMINERALS CORP.		HOUSTON OIL CO.	
COMPLETED	05/26/51		03/03/72		07/28/48	
SAMPLED	11/26/51		12/--/73		10/31/48	
FORMATION	EOCE-YEGUA L		OLIG-FRIO 6500		EOCE-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7203		6520		7026	
WELLHEAD PRESSURE,PSIG	2540		2338		3105	
OPEN FLOW, MCFD	1500		11007		440000	
COMPONENT, MOLE PCT						
METHANE	86.9	----------	72.9	----------	31.9	----------
ETHANE	5.6		6.2		61.5	
PROPANE	3.1	----------	5.3	----------	---	----------
N-BUTANE	0.7		1.6		---	
ISOBUTANE	0.9	----------	1.9	----------	---	----------
N-PENTANE	0.3		0.4		---	
ISOPENTANE	TRACE	----------	0.7	----------	---	----------
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.3	----------	0.3	----------	---	----------
NITROGEN	1.6		8.5		5.5	
OXYGEN	0.1	----------	1.6	----------	0.5	----------
ARGON	TRACE		0.1		---	
HYDROGEN	0.0	----------	TRACE	----------	---	----------
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.5	----------	0.5	----------	0.6	----------
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1184	----------	1171	----------	1425	----------
SPECIFIC GRAVITY	0.665		0.772		0.890	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7525 SAMPLE 15130	INDEX 7526 SAMPLE 14497	INDEX 7527 SAMPLE 4615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	AMAREX	BAMMEL S	CLINTON
WELL NAME	BROWN ESTATE NO. 3	JOHN EHRHARDT NO. 2	A. S. MOODY NO. 2
LOCATION	W.M. LLOYD SUR. A-1342	SEC. 6, BLK. 4, WC&RRCO. SUR	REELS & TROBOUGH SURVEY
OWNER	AMAREX INC.	PETROLEUM CORP. OF TEXAS	STANOLIND OIL & GAS CO.
COMPLETED	01/17/76	02/12/73	08/01/48
SAMPLED	10/26/77	10/21/75	11/08/48
FORMATION	EOCE-YEGUA	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6994	6727	8000
WELLHEAD PRESSURE,PSIG	1050	1400	4814
OPEN FLOW, MCFD	1000	10000	11500
COMPONENT, MOLE PCT			
METHANE	91.5	90.1	88.2
ETHANE	4.5	5.1	10.9
PROPANE	1.7	1.9	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.2	1.1	0.0
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1100	1098	1089
SPECIFIC GRAVITY	0.623	0.627	0.616

	INDEX 7528 SAMPLE 12173	INDEX 7529 SAMPLE 13453	INDEX 7530 SAMPLE 13454
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	CLINTON N	DECKERS PRAIRIE S	DECKERS PRAIRIE S
WELL NAME	GOODRICH NO. 1	OTTO SEIDEL NO. 4	OTTO SEIDEL NO. 4
LOCATION	REELS & TROBOUGH SUR. A-59	JOHN H. EDWARDS SUR. A-20	JOHN H. EDWARDS SUR. A-20
OWNER	SCURLOCK OIL CO.	SALMON CORP.	SALMON CORP.
COMPLETED	02/20/68	01/21/72	01/21/71
SAMPLED	12/08/69	10/19/72	10/19/72
FORMATION	EOCE-YEGUA	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8461	1442	1716
WELLHEAD PRESSURE,PSIG	3651	512	696
OPEN FLOW, MCFD	5800	3800	170000
COMPONENT, MOLE PCT			
METHANE	91.3	98.5	98.8
ETHANE	3.9	0.1	0.0
PROPANE	1.8	0.1	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.8	1.3	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1104	1002	1001
SPECIFIC GRAVITY	0.628	0.561	0.559

	INDEX 7531 SAMPLE 4527	INDEX 7532 SAMPLE 4643	INDEX 7533 SAMPLE 4887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	DURKEE	DURKEE	DURKEE
WELL NAME	H. J. MOORE NO. 1	HOFER ET AL. NO. 1	BASH NO. 1
LOCATION	SEC. 17,BLK.4,J.E.DURKEE SUR.	BLK. 6, GEO. GREEN SUR.	GEO E. GREEN SUR. NO. 281
OWNER	UNION PRODUCING CO.	HOUSTON OIL CO. OF TEXAS	UNION PRODUCING CO.
COMPLETED	09/03/47	10/10/48	12/22/49
SAMPLED	04/23/48	01/06/49	05/18/50
FORMATION	EOCE-	EOCE-YEGUA	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7680	7190	7708
WELLHEAD PRESSURE,PSIG	2729	3270	2744
OPEN FLOW, MCFD	40000	12000	16300
COMPONENT, MOLE PCT			
METHANE	82.4	86.3	90.5
ETHANE	16.5	12.9	4.9
PROPANE	---	---	2.1
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	0.1	0.2	0.0
OXYGEN	0.3	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1130	1105	1129
SPECIFIC GRAVITY	0.645	0.624	0.638

	INDEX 7534 SAMPLE 11148	INDEX 7535 SAMPLE 4998	INDEX 7536 SAMPLE 13798
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	DURKEE N	FINEROCK	GREENS BAYOU
WELL NAME	MENDEL NO. 1	E. HOPE NORRIS	HCHSC NAV. DSTR. NO. 1
LOCATION	W. W. ANDERSON SUR. A-1630	IG&NRR CO. SUR. NO. 4	RICHARD&ROBERT VINCE SUR A76
OWNER	UNION PRODUCING CO.	TEXAS CO.	INEXCO OIL CO.
COMPLETED	01/03/66	10/11/50	02/20/72
SAMPLED	10/06/67	01/23/51	11/05/73
FORMATION	EOCE-GOODYKOONTZ	EOCE-	OLIG-FRIO & VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7355	7576	7024
WELLHEAD PRESSURE,PSIG	1950	3325	2687
OPEN FLOW, MCFD	9630	7000	15000
COMPONENT, MOLE PCT			
METHANE	90.5	91.8	79.3
ETHANE	5.2	4.0	9.7
PROPANE	1.8	1.8	5.7
N-BUTANE	0.5	0.5	1.5
ISOBUTANE	0.4	0.5	1.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.1	0.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.4	0.2	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.8	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1113	1099	1304
SPECIFIC GRAVITY	0.630	0.625	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7537 SAMPLE 11256	INDEX 7538 SAMPLE 11977	INDEX 7539 SAMPLE 2072
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	HIGHLANDS	HUFFSMITH	HUMBLE
WELL NAME	MAGEE ET AL, NO. 1	W. T. JONES NO. 2	B.F.WILLIAMS NO. 3
LOCATION	JOS. T. HARRELL SUR.A-330	J. DONNELLY SUR. A-223	SEC. 20 MI NW HOUSTON
OWNER	GULF OIL CORP.	TENNECO OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/22/66	12/11/67	08/28/29
SAMPLED	01/15/68	07/21/69	06/19/30
FORMATION	OLIG-VICKSBURG	EOCE-SID MOORE	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8046	5803	4162
WELLHEAD PRESSURE,PSIG	2904	1842	165
OPEN FLOW, MCFD	20000	35000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	91.7	76.6
ETHANE	3.5	3.6	22.0
PROPANE	1.7	1.5	---
N-BUTANE	0.6	0.4	---
ISOBUTANE	0.5	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.8	1.3	0.7
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.01	0.06	0.01
HEATING VALUE*	1107	1088	1170
SPECIFIC GRAVITY	0.627	0.620	0.671

	INDEX 7540 SAMPLE 11172	INDEX 7541 SAMPLE 12123	INDEX 7542 SAMPLE 13448
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	MILTON N	MILTON W	OLCOTT
WELL NAME	BUSCH GAS UNIT NO. 1	LONGMEADOW COUNTRY CLUB NO.1	FRIENDSWOOD GAS UNIT NO. 1
LOCATION	SEC. 5, WERR CO. SUR. A-926	J. M. DEMENT SUR. A-228	WILLIAM K. SMITH SUR. A-735
OWNER	TEXACO INC.	ROBERT MOSBACHER	HUMBLE OIL & REFINING CO.
COMPLETED	06/01/66	04/21/69	03/02/71
SAMPLED	10/13/67	11/22/69	10/12/72
FORMATION	EOCE-WILCOX	EOCE-WILCOX	TERT-MIOCENE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13000	10630	2440
WELLHEAD PRESSURE,PSIG	8780	990	930
OPEN FLOW, MCFD	31500	2900	4700
COMPONENT, MOLE PCT			
METHANE	86.8	89.9	99.0
ETHANE	5.9	4.2	0.1
PROPANE	1.8	1.8	TRACE
N-BUTANE	0.4	0.5	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.6	0.6	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.5	2.1	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1081	1083	1005
SPECIFIC GRAVITY	0.660	0.638	0.559

	INDEX 7543 SAMPLE 5128	INDEX 7544 SAMPLE 5129	INDEX 7545 SAMPLE 14251
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	PARADISE	PARADISE	RENEE
WELL NAME	HURT NO. 1-C	HURT NO. 1-C	KELLY BROCK B NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	RICHARD & VINCE SUR. A-76
OWNER	UNION PRODUCING CO.	UNION PRODUCING CO.	INEXCO OIL CO.
COMPLETED	07/10/51	07/10/51	07/30/74
SAMPLED	11/04/51	11/04/51	01/06/75
FORMATION	EOCE-	EOCE-	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7237	7237	8602
WELLHEAD PRESSURE,PSIG	1650	1650	2150
OPEN FLOW, MCFD	3000	3000	8740
COMPONENT, MOLE PCT			
METHANE	92.5	89.9	94.2
ETHANE	3.7	5.6	3.1
PROPANE	1.6	2.2	1.1
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.3	0.3	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.6	0.4	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1104	1120	1073
SPECIFIC GRAVITY	0.628	0.636	0.599

	INDEX 7546 SAMPLE 12392	INDEX 7547 SAMPLE 9597	INDEX 7548 SAMPLE 4880
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRISON
FIELD	TOMBALL	TOMBALL W	LANSING N
WELL NAME	TOMBALL GAS UNIT NO. 1	LILLIE TRESELER NO. 4	M. P. ISOM NO. 1
LOCATION	JOHN H. EDWARDS SUR.A-20	M. TEJERINA SUR.	A. MERCHANT SUR. NO. A-430
OWNER	HUMBLE OIL & REFINING CO.	TEXAS PACIFIC OIL CO.	ATLANTIC REFINING CO.
COMPLETED	08/19/69	05/19/61	08/05/49
SAMPLED	08/26/70	10/--/64	02/23/50
FORMATION	EOCE-COCKFIELD	OLIG-FRIO	CRET-RODESSA
GEOLOGIC PROVINCE CODE	220	220	260
DEPTH, FEET	2392	5525	6734
WELLHEAD PRESSURE,PSIG	950	1592	3196
OPEN FLOW, MCFD	18500	45490	16000
COMPONENT, MOLE PCT			
METHANE	99.0	92.5	92.5
ETHANE	0.0	4.3	4.1
PROPANE	TRACE	1.5	1.1
N-BUTANE	0.0	0.4	0.2
ISOBUTANE	0.0	0.3	0.4
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	0.6	0.3	0.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.2	0.7
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1003	1099	1076
SPECIFIC GRAVITY	0.559	0.615	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7549 SAMPLE 12436	INDEX 7550 SAMPLE 15346	INDEX 7551 SAMPLE 4136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	LANSING N	SCOTTSVILLE	WASKOM
WELL NAME	ISAM GAS UNIT NO. 1	YOUNG B GAS UNIT NO. 1	J. M. BRYSON ET AL. NO. 1
LOCATION	E. A. MERCHANT SUR.	P. DAUGHERTY SUR., A-5	3 MI. S OF WASKOM
OWNER	ATLANTIC RICHFIELD CO.	TEXAS OIL & GAS CORP.	MIDSTATES OIL CORP.
COMPLETED	08/05/49	11/10/76	03/13/46
SAMPLED	10/13/70	08/15/78	09/28/46
FORMATION	CRET-RODESSA	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6754	6274	5826
WELLHEAD PRESSURE, PSIG	300	950	1875
OPEN FLOW, MCFD	1100	2800	52000
COMPONENT, MOLE PCT			
METHANE	91.1	91.3	87.9
ETHANE	4.2	4.8	9.0
PROPANE	1.3	1.0	---
N-BUTANE	0.3	0.3	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	0.7	0.7	1.7
OXYGEN	0.0	TRACE	0.6
ARGON	0.0	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	1.0	0.8
HELIUM	0.02	0.01	0.03
HEATING VALUE*	1092	1077	1052
SPECIFIC GRAVITY	0.629	0.618	0.617

	INDEX 7552 SAMPLE 4138	INDEX 7553 SAMPLE 4933	INDEX 7554 SAMPLE 5442
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WASKOM	WASKOM	WASKOM
WELL NAME	J. M. BRYSON ET AL. NO. 1	M. DOWNS	ARKANSAS-LOUISIANA GAS CO.
LOCATION	2 MI. S OF WASKOM	EDWIN CARTER SUR.	D. C. MOORE, SUR. A-455
OWNER	MIDSTATES OIL CORP.	LA GLORIA CORP.	ARKANSAS-LOUISIANA CO.
COMPLETED	03/13/46	01/11/50	09/27/51
SAMPLED	09/28/46	08/21/50	05/06/53
FORMATION	CRET-PETTIT	CRET-TRAVIS PEAK	CRET-PETTIT U
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5576	6223	6050
WELLHEAD PRESSURE, PSIG	1325	2880	2292
OPEN FLOW, MCFD	3700	6750	12500
COMPONENT, MOLE PCT			
METHANE	90.4	90.2	89.2
ETHANE	8.9	5.0	5.2
PROPANE	---	1.3	1.6
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.5	0.4
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	0.2
HEXANES PLUS	---	0.4	0.7
NITROGEN	0.0	1.7	1.0
OXYGEN	0.0	0.1	0.1
ARGON	---	0.0	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	0.1	0.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1375	1100	1129
SPECIFIC GRAVITY	0.685	0.630	0.650

	INDEX 7555 SAMPLE 12460	INDEX 7556 SAMPLE 12486	INDEX 7557 SAMPLE 11588
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WASKOM	WASKOM	WHELAN
WELL NAME	BRYSON UNIT A-1 NO. B-1	DAVIS B-1	H. A. DUNN NO. 1
LOCATION	NOT GIVEN	R. H. ADAMS SUR.	B. HUMPHRIES SUR. A-306
OWNER	PENNZOIL PRODUCING CO.	ARKANSAS LOUISIANA GAS CO.	SAN JUAN EXPLORATION CO.
COMPLETED	01/11/56	12/24/40	11/18/67
SAMPLED	10/19/70	10/16/70	07/23/68
FORMATION	CRET-HILL	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	4800	5870	8046
WELLHEAD PRESSURE, PSIG	322	466	2922
OPEN FLOW, MCFD	1399	NOT GIVEN	7250
COMPONENT, MOLE PCT			
METHANE	87.9	90.3	89.4
ETHANE	3.7	4.6	4.1
PROPANE	1.3	1.4	0.9
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.3	0.4
NITROGEN	4.6	1.5	2.6
OXYGEN	0.5	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	1.6
HELIUM	0.04	0.07	0.02
HEATING VALUE*	1051	1088	1053
SPECIFIC GRAVITY	0.638	0.629	0.636

	INDEX 7558 SAMPLE 10017	INDEX 7559 SAMPLE 10018	INDEX 7560 SAMPLE 12498
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WOODLAWN	WOODLAWN	WOODLAWN
WELL NAME	LUCILLE W. MCELROY NO. 1	LUCILLE W. MCELROY NO. 1	SANDERS GAS UNIT NO. 2
LOCATION	JOEL B. CRAIN SUR. A-144	JOEL B. CRANE SUR. A-144	G. H. SANDERS LEASE
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	06/09/64	06/09/64	05/--/64
SAMPLED	07/29/65	07/28/65	10/26/70
FORMATION	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6514	6762	5614
WELLHEAD PRESSURE, PSIG	2335	2653	2350
OPEN FLOW, MCFD	11800	6200	273524
COMPONENT, MOLE PCT			
METHANE	91.4	91.8	91.7
ETHANE	3.5	3.4	4.0
PROPANE	0.8	0.8	1.2
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.2	0.1	0.4
N-PENTANE	0.4	0.2	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.5	0.3	0.4
NITROGEN	1.9	2.1	1.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.5
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1072	1049	1084
SPECIFIC GRAVITY	0.624	0.613	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7561 SAMPLE 12502	INDEX 7562 SAMPLE 14918	INDEX 7563 SAMPLE 540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARTLEY
FIELD	WOODLAWN	WOODLAWN	PANHANDLE W
WELL NAME	SANDERS NO. 1	WINSTON BROWN NO. 1	LYMAN & BALFOUR NO. 1
LOCATION	S. F. SPARKS SUR.	F. W. PUGH SUR., A-559	SEC. 10, BLK. 2, G&M SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	DYCO PETROLEUM CORP.	PRAIRIE OIL & GAS CO.
COMPLETED	12/--/50	09/21/75	10/--/20
SAMPLED	10/26/70	02/25/77	11/30/20
FORMATION	CRET-PETTIT	CRET-RODHILL	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	260	260	435
DEPTH, FEET	6378	5798	3302
WELLHEAD PRESSURE,PSIG	2480	2105	440
OPEN FLOW, MCFD	195000	3300	18500
COMPONENT, MOLE PCT			
METHANE	79.0	92.2	66.3
ETHANE	5.5	4.2	14.8
PROPANE	3.5	1.0	---
N-BUTANE	2.0	0.3	---
ISOBUTANE	1.7	0.2	---
N-PENTANE	1.6	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.5	TRACE	---
HEXANES PLUS	2.2	0.2	---
NITROGEN	2.8	0.9	16.2
OXYGEN	TRACE	0.0	1.0
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.1	0.0	---
CARBON DIOXIDE	0.9	0.6	0.8
HELIUM	0.02	0.02	0.70
HEATING VALUE*	1115	1075	977
SPECIFIC GRAVITY	0.786	0.612	0.704

	INDEX 7564 SAMPLE 1703	INDEX 7565 SAMPLE 1704	INDEX 7566 SAMPLE 1726
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-7	BIVINS A-8	BIVINS A-9
LOCATION	SEC. 7, BLK.25, EL&RR SUR.	SEC. 4, BLK.25, EL&RR SUR.	SEC. 6, BLK. 21
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/22/2A
SAMPLED	10/26/28	10/26/28	03/29/29
FORMATION	-LIME	-LIME	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2919	2896	3602
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	422
OPEN FLOW, MCFD	25800	47000	10500
COMPONENT, MOLE PCT			
METHANE	64.8	66.2	59.8
ETHANE	17.8	17.9	19.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.6	14.8	18.3
OXYGEN	0.3	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.2	1.1
HELIUM	0.94	0.81	1.01
HEATING VALUE*	975	991	955
SPECIFIC GRAVITY	0.712	0.703	0.735

	INDEX 7567 SAMPLE 1942	INDEX 7568 SAMPLE 2866	INDEX 7569 SAMPLE 2867
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-10	LEE BIVINS NO. A-9	BIVINS NO. A-10
LOCATION	SEC. 18, BLK. 2, G&M SUR	SEC. 9, BLK. 21, CSS SUR.	SEC. 18, BLK. 2, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	05/17/29	10/01/28	05/17/29
SAMPLED	03/06/30	08/21/41	08/21/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3334	3160	3285
WELLHEAD PRESSURE,PSIG	426	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2312	10500	2300
COMPONENT, MOLE PCT			
METHANE	63.2	65.6	65.3
ETHANE	15.6	15.7	12.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.1	15.8	19.5
OXYGEN	0.2	0.9	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.9	0.7
HELIUM	1.29	1.06	1.28
HEATING VALUE*	920	946	887
SPECIFIC GRAVITY	0.714	0.706	0.702

	INDEX 7570 SAMPLE 2878	INDEX 7571 SAMPLE 2886	INDEX 7572 SAMPLE 4640
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-22	W. K. GORDON NO. 1	BIVINS ESTATE NO. A-34
LOCATION	SEC. 13, BLK. 2, G&M SUR.	SEC. 2, BLK. 44, H&TC SUR.	SEC. 5, BLK 25, EL&RR SUR.
OWNER	CANADIAN RIVER GAS CO.	PHILLIPS PETROLEUM CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/12/37	12/29/39	06/21/4A
SAMPLED	08/21/41	08/22/41	12/08/4A
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3128	3260	3160
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	369
OPEN FLOW, MCFD	3550	34300	5500
COMPONENT, MOLE PCT			
METHANE	63.0	66.8	64.0
ETHANE	19.7	19.1	20.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.5	12.7	14.6
OXYGEN	0.4	0.0	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.7	0.6
HELIUM	0.88	0.68	0.81
HEATING VALUE*	991	1019	1010
SPECIFIC GRAVITY	0.719	0.705	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7573 SAMPLE 5078	INDEX 7574 SAMPLE 5093	INDEX 7575 SAMPLE 5102
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-71	BIVINS A-72	BIVINS NO. A-78
LOCATION	SEC. 9, BLK. 21	SEC. 14, BLK. 21, CSS	SEC. 20, B&HB SUR. NO. 2
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	04/04/51	NOT GIVEN	NOT GIVEN
SAMPLED	07/17/51	10/--/51	11/23/51
FORMATION	PERM-L	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3200	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	343	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.0	73.2	71.4
ETHANE	5.5	5.7	4.7
PROPANE	2.8	3.3	2.6
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	15.6	14.2	18.3
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.9	0.3
HELIUM	0.88	0.72	1.07
HEATING VALUE*	964	996	931
SPECIFIC GRAVITY	0.699	0.714	0.703

	INDEX 7576 SAMPLE 5409	INDEX 7577 SAMPLE 5426	INDEX 7578 SAMPLE 5467
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-90	BAY NO. 2	BIVINS A-93
LOCATION	SEC. 21, BLK. 21, CSS SUR.	SEC. 126, BLK. 44, H&TC SUR.	SEC. 15, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/15/53	11/11/52	05/07/53
SAMPLED	03/11/53	03/02/53	05/15/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3605	3530	3312
WELLHEAD PRESSURE, PSIG	291	233	312
OPEN FLOW, MCFD	12900	4509	5200
COMPONENT, MOLE PCT			
METHANE	73.7	75.3	73.8
ETHANE	5.5	6.2	5.5
PROPANE	3.1	3.8	3.0
N-BUTANE	0.8	1.1	1.1
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.4	11.2	14.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.8
HELIUM	0.75	0.48	0.78
HEATING VALUE*	996	1054	987
SPECIFIC GRAVITY	0.710	0.712	0.705

	INDEX 7579 SAMPLE 5470	INDEX 7580 SAMPLE 5759	INDEX 7581 SAMPLE 5761
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-97	BIVINS A-10	BIVINS A-9
LOCATION	SEC. 19, BLK. 2, G&M SUR.	SEC. 18, BLK. 2, G&M SUR.	SEC. 6, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/25/53	05/17/29	10/01/28
SAMPLED	05/15/53	02/16/55	01/26/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3245	3285	3160
WELLHEAD PRESSURE, PSIG	325	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4750	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.6	70.3	70.4
ETHANE	4.9	4.4	4.7
PROPANE	2.6	2.3	2.0
N-BUTANE	0.8	0.7	0.6
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.6	19.4	19.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.8
HELIUM	1.20	1.26	1.19
HEATING VALUE*	932	910	905
SPECIFIC GRAVITY	0.711	0.707	0.707

	INDEX 7582 SAMPLE 5766	INDEX 7583 SAMPLE 5768	INDEX 7584 SAMPLE 6230
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-125	BIVINS A-8	BIVINS A NO. 131
LOCATION	SEC. 20, BLK. 21, CSS SUR.	SEC. 4, BLK. 25, EL&RR SUR.	SEC. 8, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/29/54	07/31/28	09/23/55
SAMPLED	01/26/55	01/26/55	01/23/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3385	2896	3225
WELLHEAD PRESSURE, PSIG	266	269	304
OPEN FLOW, MCFD	10300	26756	760
COMPONENT, MOLE PCT			
METHANE	74.2	74.0	62.6
ETHANE	5.5	5.4	3.7
PROPANE	2.7	2.7	1.5
N-BUTANE	0.7	0.8	0.1
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.3	14.4	29.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.5
HELIUM	0.80	0.81	1.87
HEATING VALUE*	979	987	762
SPECIFIC GRAVITY	0.698	0.705	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7585 SAMPLE 6233		INDEX 7586 SAMPLE 6234		INDEX 7587 SAMPLE 6235	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARTLEY		HARTLEY		HARTLEY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A NO. 144		BIVINS A NO. 145		BIVINS A NO. 146	
LOCATION	SEC. 19, BLK. 2, G&M SUR.		SEC. 2, BLK. 21, CSS SUR.		SEC. 16, BLK. 21, CSS SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	07/09/56		07/13/56		08/09/56	
SAMPLED	01/23/57		01/23/57		03/20/57	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	3250		3190		3224	
WELLHEAD PRESSURE,PSIG	265		261		281	
OPEN FLOW, MCFD	5100		5500		6000	
COMPONENT, MOLE PCT						
METHANE	73.9		71.6		72.9	
ETHANE	5.7		4.8		5.2	
PROPANE	2.8		2.4		2.5	
N-BUTANE	0.6		0.6		0.6	
ISOBUTANE	0.5		0.3		0.3	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	14.2		18.0		16.5	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.7		0.7	
HELIUM	0.85		1.05		0.94	
HEATING VALUE*	942		922		945	
SPECIFIC GRAVITY	0.701		0.703		0.700	

	INDEX 7588 SAMPLE 6236		INDEX 7589 SAMPLE 6237		INDEX 7590 SAMPLE 6457	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARTLEY		HARTLEY		HARTLEY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A NO. 147		BIVINS A NO. 148		BIVINS NO. 1	
LOCATION	SEC. 8, BLK. 25, ELRR SUR.		SEC. 7, BLK. 21, CSS SUR.		SEC. 27, BLK. 21, CSS SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		FRANK STORM	
COMPLETED	07/28/56		08/17/56		12/--/57	
SAMPLED	01/23/57		01/23/57		12/26/57	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	3367		3325		3667	
WELLHEAD PRESSURE,PSIG	270		270		410	
OPEN FLOW, MCFD	570		6700		1000	
COMPONENT, MOLE PCT						
METHANE	73.8		67.4		73.4	
ETHANE	5.6		4.4		4.7	
PROPANE	3.0		2.1		2.0	
N-BUTANE	0.8		0.5		0.4	
ISOBUTANE	0.4		0.2		0.3	
N-PENTANE	0.2		0.1		0.0	
ISOPENTANE	0.1		0.1		0.3	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	14.6		22.9		17.4	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.6		TRACE	
HELIUM	0.85		1.50		1.20	
HEATING VALUE*	984		853		930	
SPECIFIC GRAVITY	0.705		0.709		0.689	

	INDEX 7591 SAMPLE 10669		INDEX 7592 SAMPLE 10670		INDEX 7593 SAMPLE 10671	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARTLEY		HARTLEY		HARTLEY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-8		BIVINS A-9		BIVINS A-7	
LOCATION	SEC. 8, BLK. 25, ELRR SUR.		SEC. 6, BLK. 21, CSS SUR.		SEC. 7, BLK. 25, ELRR SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	07/31/28		10/01/28		09/10/28	
SAMPLED	07/21/66		07/21/66		07/21/66	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	2896		3160		2919	
WELLHEAD PRESSURE,PSIG	155		154		212	
OPEN FLOW, MCFD	11559		1741		19619	
COMPONENT, MOLE PCT						
METHANE	72.2		68.2		70.8	
ETHANE	5.7		4.7		5.0	
PROPANE	3.3		2.5		2.9	
N-BUTANE	1.0		0.6		0.9	
ISOBUTANE	0.5		0.4		0.4	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.9		0.2		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	14.8		20.9		17.4	
OXYGEN	0.1		0.0		0.2	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.8		0.5	
HELIUM	0.84		1.37		1.06	
HEATING VALUE*	1001		895		956	
SPECIFIC GRAVITY	0.720		0.720		0.720	

	INDEX 7594 SAMPLE 10672		INDEX 7595 SAMPLE 11888		INDEX 7596 SAMPLE 11890	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HARTLEY		HARTLEY		HARTLEY	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-10		BIVINS A-76		BIVINS A-58	
LOCATION	SEC. 18, BLK. 2, G&M SUR.		SEC. 13, BLK. 21, CSS SUR.		SEC. 12, BLK. 2, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	05/17/29		07/22/51		06/14/69	
SAMPLED	07/21/66		05/21/69		05/21/69	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	3285		3250		2943	
WELLHEAD PRESSURE,PSIG	289		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	809		41148		14200	
COMPONENT, MOLE PCT						
METHANE	69.1		72.1		71.2	
ETHANE	5.8		6.0		5.8	
PROPANE	2.7		3.6		3.6	
N-BUTANE	1.0		1.1		1.1	
ISOBUTANE	0.8		0.7		0.7	
N-PENTANE	0.3		0.1		0.1	
ISOPENTANE	0.1		0.3		TRACE	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.1		0.3		0.2	
NITROGEN	19.6		14.0		15.1	
OXYGEN	0.0		0.1		0.1	
ARGON	0.1		TRACE		0.1	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.5		1.0	
HELIUM	1.30		0.68		0.81	
HEATING VALUE*	918		1072		1006	
SPECIFIC GRAVITY	0.729		0.729		0.730	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7597 SAMPLE 11891	INDEX 7598 SAMPLE 11892	INDEX 7599 SAMPLE 12670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-59	BIVINS A-61	NO. 1
LOCATION	SEC. 6, BLK. 25, EL&RR SUR.	SEC. 2, BLK. 25, EL&RR SUR.	E. OF HARTLEY
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	PARADOX PETROLEUM CO.
COMPLETED	07/06/50	06/03/50	NOT GIVEN
SAMPLED	05/21/69	05/21/69	02/13/71
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3180	3155	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1470	27000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.3	72.6	73.4
ETHANE	5.1	6.2	6.8
PROPANE	3.3	3.5	4.1
N-BUTANE	1.3	1.3	1.0
ISOBUTANE	0.8	0.4	0.6
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.1	0.2	0.7
CYCLOPENTANE	0.3	0.2	0.2
HEXANES PLUS	0.5	0.3	0.3
NITROGEN	14.0	13.3	11.2
OXYGEN	0.3	0.0	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	6.5	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.9
HELIUM	0.86	0.64	0.48
HEATING VALUE*	995	1044	1083
SPECIFIC GRAVITY	0.694	0.729	0.733

	INDEX 7600 SAMPLE 12671	INDEX 7601 SAMPLE 13263	INDEX 7602 SAMPLE 13628
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	NO. 2	BIVINS A-174	BIVINS A-175
LOCATION	6 MI. E OF HARTLEY	SEC. 6, BLK. 25, EL&RR SUR.	SEC. 8, BLK. 25, EL&RR SUR.
OWNER	PARADOX PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	05/13/72	NOT GIVEN
SAMPLED	02/13/71	05/13/72	06/15/73
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3000	3155	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	142
OPEN FLOW, MCFD	NOT GIVEN	735	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.1	72.5	70.8
ETHANE	6.0	5.7	5.0
PROPANE	3.4	3.3	3.1
N-BUTANE	0.7	1.0	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	14.9	15.2	17.5
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.3
HELIUM	0.02	0.99	1.14
HEATING VALUE*	991	1005	960
SPECIFIC GRAVITY	0.701	0.712	0.714

	INDEX 7603 SAMPLE 6205	INDEX 7604 SAMPLE 16144	INDEX 7605 SAMPLE 15941
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HEMPHILL	HEMPHILL
FIELD	WILDCAT	ALLISON PARK	ALPAR
WELL NAME	J. H. JOHNSON NO. 1	L. L. JONES 14 LEASE NO. 1	FEE 1-111
LOCATION	SEC. 375, BLK. 44, H&TC SUR.	SEC. 14, BLK.Z1, ACH&B&H&W	SEC. 111, BLK.41,H&TC SUR.
OWNER	STANOLIND OIL CO. OF TEXAS	KERR-MCGEE CORP.	SHELL OIL CO.
COMPLETED	12/31/56	03/31/80	04/01/79
SAMPLED	12/08/56	12/10/80	04/23/80
FORMATION	PERM-WICHITA-ALBANY	PENN-MORROW	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	435	360	360
DEPTH, FEET	3578	14918	7300
WELLHEAD PRESSURE,PSIG	400	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	15	9500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.6	96.9	83.1
ETHANE	4.3	0.6	7.9
PROPANE	1.4	0.1	4.2
N-BUTANE	0.5	TRACE	1.1
ISOBUTANE	0.1	TRACE	0.6
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.3	0.0	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	24.8	0.3	2.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.0	0.3
HELIUM	1.24	0.02	0.14
HEATING VALUE*	821	1000	1180
SPECIFIC GRAVITY	0.705	0.582	0.687

	INDEX 7606 SAMPLE 15942	INDEX 7607 SAMPLE 15926	INDEX 7608 SAMPLE 11737
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	ALPAR	BRISCOE	BUFFALO WALLOW
WELL NAME	FEE 1-111	S. G. SMITH NO. 1	HEFLEY NO. 1
LOCATION	SEC. 111,BLK.41,H&TC SUR.	SEC. 38, BLK. M1, H&GN SUR.	SEC. 28, BLK. M-1, H&GN SUR.
OWNER	SHELL OIL CO.	UNION OIL CO. OF CALIFORNIA	GULF OIL CORP.
COMPLETED	04/01/79	08/24/79	01/14/69
SAMPLED	04/23/80	03/25/80	01/14/69
FORMATION	PENN-TONKAWA	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8000	14438	19620
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6303	6596
OPEN FLOW, MCFD	NOT GIVEN	16500	390000
COMPONENT, MOLE PCT			
METHANE	81.4	95.6	89.8
ETHANE	7.5	1.4	0.1
PROPANE	5.0	0.2	TRACE
N-BUTANE	1.5	0.1	0.0
ISOBUTANE	0.7	0.1	0.0
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	2.4	0.5	1.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.8	8.7
HELIUM	0.09	0.02	TRACE
HEATING VALUE*	1207	1015	912
SPECIFIC GRAVITY	0.709	0.590	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7609 SAMPLE 11787	INDEX 7610 SAMPLE 12627	INDEX 7611 SAMPLE 12701
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BUFFALO WALLOW	BUFFALO WALLOW	BUFFALO WALLOW
WELL NAME	HEELEY NO. 1A-90	HEELEY NO. 1	CLIFFORD NO. 1
LOCATION	SEC. 90, BLK. M-1, H&GN SUR.	SEC. 91, BLK. M-1, H&GN SUR.	SEC.30, BLK.M-1,H&GN RR SUR.
OWNER	UNION OIL CO. OF CALIFORNIA	KANSAS NEBRASKA NAT. GAS CO.	GULF OIL CO. - U.S.
COMPLETED	08/--/68	07/01/70	12/28/70
SAMPLED	03/04/69	01/13/71	03/05/71
FORMATION	DEVO-HUNTON	PENN-MORROW L	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	15910	13916
WELLHEAD PRESSURE,PSIG	6524	8382	8808
OPEN FLOW, MCFD	70000	2105	58500
COMPONENT, MOLE PCT			
METHANE	90.3	95.7	95.7
ETHANE	0.1	0.5	0.8
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	0.3	1.8
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.3	3.3	1.6
HELIUM	0.03	0.03	0.02
HEATING VALUE*	917	981	987
SPECIFIC GRAVITY	0.641	0.591	0.659

	INDEX 7612 SAMPLE 12711	INDEX 7613 SAMPLE 14668	INDEX 7614 SAMPLE 16018
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BUFFALO WALLOW	BUFFALO WALLOW	CAMPBELL RANCH
WELL NAME	FILLINGIM NO. 2-20	WEEKS NO. 1-54	CAMPBELL NO. 1-14
LOCATION	SEC. 20, BLK. M-1, H&TC SUR.	SEC. 54, BLK. M1, H&GN SUR.	SEC. 14, BLK I, I&GN SUR.
OWNER	UNION OIL CO. OF CALIFORNIA	NORTHERN NATURAL GAS EXPL.	HOOVER & BRACKEN ENERGIES
COMPLETED	03/10/71	03/11/76	NOT GIVEN
SAMPLED	03/13/71	02/26/76	07/25/80
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13496	11271	9734
WELLHEAD PRESSURE,PSIG	7546	NOT GIVEN	2425
OPEN FLOW, MCFD	9000	21000	1042
COMPONENT, MOLE PCT			
METHANE	91.6	85.2	88.8
ETHANE	0.7	8.6	6.3
PROPANE	TRACE	3.5	2.2
N-BUTANE	0.1	0.7	0.5
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	4.6	0.8	0.4
OXYGEN	1.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.4	0.7
HELIUM	0.02	0.04	0.03
HEATING VALUE*	949	1161	1127
SPECIFIC GRAVITY	0.605	0.663	0.642

	INDEX 7615 SAMPLE 12206	INDEX 7616 SAMPLE 12207	INDEX 7617 SAMPLE 12935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN	CANADIAN	CANADIAN
WELL NAME	E.S.F. BRAINARD N NO. 1-T	E.S.F. BRAINARD N NO. 1-C	DAVID QUENTIN ISAACS NO. 1
LOCATION	SEC. 2, W.W. LANGHAM SUR.	SEC. 2, W.W. LANGHAM SUR.	JAMES CURTIS SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	11/14/69	11/18/69	05/17/71
SAMPLED	02/20/70	02/20/70	07/16/71
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12375	11082	12702
WELLHEAD PRESSURE,PSIG	4320	3983	5946
OPEN FLOW, MCFD	420	4000	4900
COMPONENT, MOLE PCT			
METHANE	95.9	89.6	96.5
ETHANE	0.6	5.1	0.3
PROPANE	0.1	1.3	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	0.2	0.0
HEXANES PLUS	0.0	0.6	0.0
NITROGEN	0.4	1.0	0.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	1.1	2.3
HELIUM	0.02	0.04	0.03
HEATING VALUE*	985	1105	986
SPECIFIC GRAVITY	0.586	0.640	0.583

	INDEX 7618 SAMPLE 13646	INDEX 7619 SAMPLE 11623	INDEX 7620 SAMPLE 13460
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN NE	CANADIAN NW	CANADIAN SE
WELL NAME	IMMEL "A" NO. 1	R. T. KELLY, ET AL. C NO. 1	MAY E. YOKLEY ET AL O NO. 1
LOCATION	SEC. 144, BLK.1, G+M SUR.	SEC. 106, BLK. 42, H&TC SUR.	SEC. 98, BLK. 42, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	04/30/73	05/04/67	07/17/72
SAMPLED	07/14/73	08/11/68	10/26/72
FORMATION	PENN-DOUGLAS	PENN-MORROW L	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7200	12235	7246
WELLHEAD PRESSURE,PSIG	1712	5904	1793
OPEN FLOW, MCFD	2750	14200	4250
COMPONENT, MOLE PCT			
METHANE	80.7	94.6	82.0
ETHANE	7.8	1.5	6.7
PROPANE	4.9	0.2	4.6
N-BUTANE	1.1	0.2	1.4
ISOBUTANE	0.4	0.0	0.9
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	3.7	0.6	3.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.9	0.3
HELIUM	0.15	0.03	0.18
HEATING VALUE*	1183	1045	1132
SPECIFIC GRAVITY	0.703	0.609	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7621 SAMPLE 14288	INDEX 7622 SAMPLE 14289	INDEX 7623 SAMPLE 15376
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN SE	CANADIAN SE	CANADIAN SE
WELL NAME	LOUISE HOOVER C NO. 1-229	LOUISE HOOVER C NO. 1-229	DODD NO. 1
LOCATION	SEC. 229, BLK. C, G&MMB&A SUR	SEC. 229, BLK. C, G&MMB&A SUR	SEC. 46, BLK. M1, H&GN SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	EARL L. SMITH & ASSOC.
COMPLETED	12/02/74	12/02/74	06/25/78
SAMPLED	03/07/75	03/07/75	09/15/78
FORMATION	PENN-DOUGLAS	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7606	10700	14456
WELLHEAD PRESSURE,PSIG	1782	2165	7683
OPEN FLOW, MCFD	5000	11500	7000
COMPONENT, MOLE PCT			
METHANE	88.0	85.8	95.7
ETHANE	6.3	8.1	1.4
PROPANE	2.5	3.0	0.2
N-BUTANE	0.5	0.7	0.1
ISOBUTANE	0.4	0.6	TRACE
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.3	0.6	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	1.6
HELIUM	0.08	0.03	0.02
HEATING VALUE*	1117	1154	1026
SPECIFIC GRAVITY	0.641	0.663	0.594

	INDEX 7624 SAMPLE 15064	INDEX 7625 SAMPLE 14610	INDEX 7626 SAMPLE 15741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN SW	CANADIAN W	CIRCLE DOT
WELL NAME	JENKIE CAMPBELL NO. 1	JOHN C. ISAACS JR. "J" NO. 2	NAPECO LOCKE NO. 1
LOCATION	SEC. 1, G.M. FROGGE SUR.	SEC. 2, BLK. A, LOUT SUR.	SEC. 85, BLK. M1, H&GN SUR.
OWNER	GULF OIL CO.-U.S.	DIAMOND SHAMROCK CORP.	NAPECO, INC.
COMPLETED	11/29/76	02/04/76	NOT GIVEN
SAMPLED	07/29/77	03/05/76	08/31/79
FORMATION	PERM-GRANITE WASH	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10081	13069	13982
WELLHEAD PRESSURE,PSIG	2512	4395	NOT GIVEN
OPEN FLOW, MCFD	12500	11800	5700
COMPONENT, MOLE PCT			
METHANE	81.4	95.5	95.3
ETHANE	10.8	1.0	1.9
PROPANE	4.1	0.1	0.4
N-BUTANE	0.9	TRACE	0.1
ISOBUTANE	0.4	TRACE	0.1
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.2	0.3	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	2.8	1.2
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1194	988	1026
SPECIFIC GRAVITY	0.690	0.587	0.590

	INDEX 7627 SAMPLE 8760	INDEX 7628 SAMPLE 10847	INDEX 7629 SAMPLE 12713
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	FELDMAN	FELDMAN	FELDMAN
WELL NAME	CHARLES G. NEWCOMER NO. 1-UT	MCQUIDDY B NO. 1	DETRIXHE NO. 1
LOCATION	SEC. 44, BLK. 42, H&TC SUR.	SEC. 3, BLK. 1, G&M SUR.	SEC. 52, BLK. 42, H&TC SUR.
OWNER	MOBIL OIL CO.	PHILLIPS PETROLEUM CO.	SAMEDAN OIL CORP.
COMPLETED	09/16/61	06/08/66	03/10/70
SAMPLED	11/07/62	01/23/67	03/12/71
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6972	7332	14549
WELLHEAD PRESSURE,PSIG	1606	1808	3905
OPEN FLOW, MCFD	4150	20500	4900
COMPONENT, MOLE PCT			
METHANE	79.9	82.1	95.4
ETHANE	7.6	9.3	0.1
PROPANE	5.0	4.4	0.1
N-BUTANE	1.3	1.1	0.0
ISOBUTANE	0.8	0.5	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.4	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	4.1	1.4	3.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	1.4
HELIUM	0.18	0.08	0.03
HEATING VALUE*	1177	1206	971
SPECIFIC GRAVITY	0.705	0.696	0.587

	INDEX 7630 SAMPLE 15481	INDEX 7631 SAMPLE 15550	INDEX 7632 SAMPLE 12700
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	GEM HEMPHILL	GEM HEMPHILL	HAMON LOCKE
WELL NAME	ORA MORRIS NO. 4	FORGEY 112 NO. 1	LOCKE CATTLE CO. NO. 2
LOCATION	SEC. 92, BLK 41, H&TC RR SUR	SEC. 112, BLK. 41, H&TC SUR.	SEC. 39, BLK. A-2, H&GN RR SUR.
OWNER	GULF OIL EXPL. & PROD. CO.	GULF OIL CORP.	JAKE L. HAMON
COMPLETED	08/03/78	08/27/78	02/12/71
SAMPLED	11/10/78	12/28/78	03/06/71
FORMATION	PENN-TONKAWA	PENN-DOUGLAS	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8299	7595	13080
WELLHEAD PRESSURE,PSIG	1715	1842	3888
OPEN FLOW, MCFD	4000	23000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.9	83.5	88.6
ETHANE	7.7	7.8	4.1
PROPANE	4.2	3.8	1.9
N-BUTANE	1.0	0.9	0.7
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.4	2.2	2.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.6
HELIUM	0.10	0.15	0.08
HEATING VALUE*	1169	1163	1095
SPECIFIC GRAVITY	0.685	0.677	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7633 SAMPLE 9263	INDEX 7634 SAMPLE 10356	INDEX 7635 SAMPLE 13538
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL	HEMPHILL
WELL NAME	HOBART NO. 1-67	TEXFELL 1-7	THORNE NO. 1
LOCATION	SEC. 67, BLK. A-2, H&GN SUR.	SEC. 7, BLK. 42, HT&C SUR.	SEC. 74, BLK. A-2, H+GN SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	KERR-MCGEE CORP.
COMPLETED	01/29/68	11/02/65	01/19/73
SAMPLED	03/19/68	01/13/66	02/21/73
FORMATION	PERM-GRANITE WASH	PENN-TONKAWA	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10907	8086	10500
WELLHEAD PRESSURE,PSIG	2985	2332	2700
OPEN FLOW, MCFD	23000	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.3	82.6	70.3
ETHANE	7.3	9.1	15.3
PROPANE	2.6	3.7	7.8
N-BUTANE	0.8	0.8	2.3
ISOBUTANE	0.3	0.6	1.1
N-PENTANE	0.2	0.3	0.6
ISOPENTANE	0.3	TRACE	0.6
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.4
NITROGEN	0.4	1.6	0.8
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.5
HELIUM	0.03	0.10	0.03
HEATING VALUE*	1146	1189	1379
SPECIFIC GRAVITY	0.652	0.690	0.802

	INDEX 7636 SAMPLE 13757	INDEX 7637 SAMPLE 14034	INDEX 7638 SAMPLE 14182
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL	HEMPHILL
WELL NAME	IDS-LITTLE NO. 1-30	GEORGE "A" NO. 1-45	FLOWERS-B NO. 1
LOCATION	SEC. 30, BLK.1, I+GN SUR.	SEC. 45, BLK.1, I&GN SUR.	SEC. 47, BLK. 1, I&GN SUR.
OWNER	MCCULLOCH OIL CORP.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	08/20/73	07/10/73	04/01/74
SAMPLED	10/11/73	06/26/74	10/23/74
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10470	10681	10912
WELLHEAD PRESSURE,PSIG	2750	2857	1200
OPEN FLOW, MCFD	2700	12800	1500
COMPONENT, MOLE PCT			
METHANE	81.3	83.3	86.1
ETHANE	10.8	9.0	7.8
PROPANE	4.2	3.2	3.0
N-BUTANE	0.9	0.8	0.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.1	1.3	0.7
OXYGEN	0.0	0.3	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.6
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1200	1154	1156
SPECIFIC GRAVITY	0.691	0.675	0.662

	INDEX 7639 SAMPLE 14444	INDEX 7640 SAMPLE 13803	INDEX 7641 SAMPLE 14866
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL	HIGGINS S
WELL NAME	ABRAHAM B NO. 1	W.R. HEXT NO. 1	WS&EC JONES ESTATE NO. 1
LOCATION	SEC. 26, BLK. 1, I&GN SUR.	SEC. 12, BLK. 43, H&TC SUR.	SEC. 4, BLK. 43, H&TC SUR.
OWNER	ANADARKO PRODUCTION CO.	DIAMOND SHAMROCK CORP.	ENSERCH EXPLORATION, INC.
COMPLETED	NOT GIVEN	08/30/73	06/16/75
SAMPLED	08/26/75	11/09/73	12/07/76
FORMATION	PERM-GRANITE WASH	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7580	11864
WELLHEAD PRESSURE,PSIG	1800	1713	4480
OPEN FLOW, MCFD	NOT GIVEN	3400	5000
COMPONENT, MOLE PCT			
METHANE	82.0	81.6	93.5
ETHANE	9.9	9.1	3.0
PROPANE	4.2	4.7	0.6
N-BUTANE	0.9	1.1	0.2
ISOBUTANE	0.6	0.7	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.1	1.8	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	1.8
HELIUM	0.03	0.11	0.03
HEATING VALUE*	1194	1203	1040
SPECIFIC GRAVITY	0.692	0.695	0.604

	INDEX 7642 SAMPLE 13858	INDEX 7643 SAMPLE 13343	INDEX 7644 SAMPLE 15839
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HOWE RANCH	HUMPHREYS	HUMPHRIES
WELL NAME	GENE HOWE NO. 1	MARGUERITE HUMPHREYS NO. 1	WRIGHT NO. 1
LOCATION	SEC. 5, BLK. 1, GAM SUR.	JAMES FORD SUR.	SEC. 122, BLK. 41, H&TC SUR.
OWNER	EL PASO NATURAL GAS CO.	GULF OIL CO.-U.S.	MOODY ENERGY CO.
COMPLETED	04/12/73	03/23/72	05/29/79
SAMPLED	01/07/74	08/02/72	11/23/79
FORMATION	DEVO-HUNTON	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17262	7286	7304
WELLHEAD PRESSURE,PSIG	5739	1775	1900
OPEN FLOW, MCFD	23000	4800	60000
COMPONENT, MOLE PCT			
METHANE	92.9	80.6	82.1
ETHANE	2.2	9.9	7.7
PROPANE	TRACE	5.0	4.5
N-BUTANE	0.0	1.3	1.2
ISOBUTANE	0.0	0.8	0.6
N-PENTANE	0.0	0.4	0.3
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	1.2	1.3	2.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	0.2	0.2
HELIUM	0.03	0.12	0.14
HEATING VALUE*	945	1228	1187
SPECIFIC GRAVITY	0.613	0.706	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7645 SAMPLE 13517	INDEX 7646 SAMPLE 13518	INDEX 7647 SAMPLE 7016
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	LOCKE CATTLE CO.	LOCKE CATTLE CO.	MATHERS
WELL NAME	LOCKE CATTLE CO. NO. 1	LOCKE CATTLE CO. NO. 1	FELOMAN NO. 1-A
LOCATION	SEC. 40, BLK. A-2, H+GN SUR.	SEC. 40, BLK. A-2, H+GN SUR.	SEC. 133, BLK. 42
OWNER	JAKE L. HAMON	JAKE L. HAMON	EL PASO NATURAL GAS CO.
COMPLETED	11/20/72	11/20/72	12/11/58
SAMPLED	01/26/73	01/26/73	03/30/59
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PENN-MORROW & MATHERS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4500	10500	9883
WELLHEAD PRESSURE,PSIG	1100	2380	NOT GIVEN
OPEN FLOW, MCFD	11600	3600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.5	86.0	81.4
ETHANE	5.9	7.7	9.5
PROPANE	2.6	3.1	4.3
N-BUTANE	0.3	0.7	1.3
ISOBUTANE	0.7	0.5	0.8
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	2.1	1.0	0.2
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	1.0
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1116	1152	1250
SPECIFIC GRAVITY	0.646	0.658	0.721

	INDEX 7648 SAMPLE 13043	INDEX 7649 SAMPLE 14801	INDEX 7650 SAMPLE 13374
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MATHERS	MATHERS	MATHERS RANCH
WELL NAME	HUMPHREYS NO. 1	MATHERS NO. 1	MATHERS NO. 9
LOCATION	SEC. 163, BLK. 41, T&TC SUR.	SEC. 132, BLK. 42, H&TC SUR.	SEC. 164, BLK. 41, H&TC SUR.
OWNER	PHILCON DEVELOPMENT CO.	NATURAL GAS ANADARKO, INC.	MCCULLOCH OIL CORP.
COMPLETED	03/--/71	02/12/76	01/--/72
SAMPLED	10/01/71	10/08/76	08/17/72
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7228	6249	7176
WELLHEAD PRESSURE,PSIG	1875	1563	NOT GIVEN
OPEN FLOW, MCFD	2550	6900	800
COMPONENT, MOLE PCT			
METHANE	81.2	76.2	80.4
ETHANE	9.2	10.5	9.5
PROPANE	4.9	6.1	4.3
N-BUTANE	1.2	1.6	1.2
ISOBUTANE	0.8	0.6	0.8
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	1.4	3.7	1.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.17	0.12
HEATING VALUE*	1235	1232	1224
SPECIFIC GRAVITY	0.712	0.736	0.711

	INDEX 7651 SAMPLE 13384	INDEX 7652 SAMPLE 13385	INDEX 7653 SAMPLE 9670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MATHERS RANCH	MATHERS RANCH	MCQUIDDY
WELL NAME	HUMPHREYS NO. 2	HUMPHREYS NO. 2	MCQUIDDY A NO. 1
LOCATION	SEC. 163, BLK. 41, H&TC SUR.	SEC. 163, BLK. 41, H&TC SUR.	JOHN GATES SUR.
OWNER	PHILCON DEVELOPMENT CO.	PHILCON DEVELOPMENT CO.	PHILLIPS PETROLEUM CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	10/12/64
SAMPLED	NOT GIVEN	09/08/72	12/17/64
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17245	16809	11845
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	6294
OPEN FLOW, MCFD	6100	NOT GIVEN	11400
COMPONENT, MOLE PCT			
METHANE	92.3	97.7	94.0
ETHANE	0.4	0.5	1.5
PROPANE	TRACE	0.1	0.6
N-BUTANE	0.0	TRACE	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.5
NITROGEN	1.2	0.7	1.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.1	1.0	1.3
HELIUM	0.03	0.03	0.02
HEATING VALUE*	942	1001	1048
SPECIFIC GRAVITY	0.621	0.571	0.611

	INDEX 7654 SAMPLE 9920	INDEX 7655 SAMPLE 10908	INDEX 7656 SAMPLE 13607
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MCQUIDDY	MENDOTA	MENDOTA
WELL NAME	MCQUIDDY A NO. 2	CAMPBELL-SANTA FE NO. 1	CAMPBELL NO. 2
LOCATION	JOHN GATES SUR.	SEC. 38, BLK. 1, I&GN SUR.	SEC. 9, BLK. 1 I&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	HUMBLE OIL & REFINING CO.	HOOVER & BRACKEN
COMPLETED	02/02/65	12/19/56	02/01/73
SAMPLED	06/13/65	04/03/67	06/06/73
FORMATION	PENN-DOUGLAS	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7228	11387	10000
WELLHEAD PRESSURE,PSIG	1781	4254	4000
OPEN FLOW, MCFD	5300	42000	80000
COMPONENT, MOLE PCT			
METHANE	83.0	89.3	91.6
ETHANE	8.6	7.1	4.9
PROPANE	3.7	1.5	0.9
N-BUTANE	0.9	0.2	0.1
ISOBUTANE	0.6	TRACE	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.8	0.2	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.3	1.7
HELIUM	0.09	0.04	0.03
HEATING VALUE*	1164	1090	1051
SPECIFIC GRAVITY	0.682	0.626	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7657 SAMPLE 15556		INDEX 7658 SAMPLE 13978		INDEX 7659 SAMPLE 15280	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HEMPHILL		HEMPHILL		HEMPHILL	
FIELD	MENDOTA		MENDOTA NW		MENDOTA NW	
WELL NAME	CAMPBELL NO. 1-13		LESLIE WEBB ET AL. NO. 1		MYRTLE FLOWERS NO. 2	
LOCATION	SEC. 13, BLK. 1, I&GN SUR.		SEC. 189, BLK.C, GMMBA SUR.		SEC. 61, BLK. 81, H&GN SUR.	
OWNER	HOOVER & BRACKEN		DIAMOND SHAMROCK CORP.		EXXON CO., U.S.A.	
COMPLETED	11/13/77		01/23/70		12/31/77	
SAMPLED	01/--/79		04/19/74		05/18/78	
FORMATION	PERM-GRANITE WASH		PENN-CHEROKEE		PERM-GRANITE WASH	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9810		10266		10372	
WELLHEAD PRESSURE,PSIG	1070		2114		2611	
OPEN FLOW, MCFD	7176		5000		14700	
COMPONENT, MOLE PCT						
METHANE	68.0	----------	82.4	----------	80.9	----------
ETHANE	16.9	----------	10.2	----------	9.5	----------
PROPANE	8.3	----------	4.0	----------	4.5	----------
N-BUTANE	2.6	----------	0.9	----------	1.5	----------
ISOBUTANE	1.1	----------	0.6	----------	0.7	----------
N-PENTANE	0.6	----------	0.1	----------	0.4	----------
ISOPENTANE	0.7	----------	0.2	----------	0.6	----------
CYCLOPENTANE	0.1	----------	TRACE	----------	0.2	----------
HEXANES PLUS	0.3	----------	0.1	----------	0.5	----------
NITROGEN	0.8		0.6		0.7	
OXYGEN	TRACE	----------	TRACE	----------	TRACE	----------
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4	----------	0.7	----------	0.4	----------
HELIUM	0.03		0.05		0.04	
HEATING VALUE*	1407	----------	1190	----------	1257	----------
SPECIFIC GRAVITY	0.818		0.684		0.721	

	INDEX 7660 SAMPLE 15317		INDEX 7661 SAMPLE 6320		INDEX 7662 SAMPLE 8886	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HEMPHILL		HEMPHILL		HEMPHILL	
FIELD	MENDOTA SE		NOT GIVEN		NOT GIVEN	
WELL NAME	CAMPBELL NO. 1		O. D. FELOMAN NO. 1		HOBART NO. 1-21	
LOCATION	SEC. 32, BLK. 1, I&GN SUR.		SEC. 43, BLK. 42, H&TC SUR.		SEC. 21, BLK. A-1, H&GN SUR.	
OWNER	EDWIN L. COX		MAGNOLIA PETROLEUM CO.		SHELL OIL CO.	
COMPLETED	12/05/77		04/27/57		09/06/62	
SAMPLED	07/05/78		05/06/57		03/11/63	
FORMATION	PENN-MORROW		PENN-TONKAWA		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	12263		7556		15240	
WELLHEAD PRESSURE,PSIG	3664		2090		7888	
OPEN FLOW, MCFD	8000		8000		3200	
COMPONENT, MOLE PCT						
METHANE	93.1	----------	82.6	----------	95.6	----------
ETHANE	3.5		9.4		0.5	
PROPANE	0.4	----------	4.1	----------	0.1	----------
N-BUTANE	0.1		0.9		0.0	
ISOBUTANE	TRACE	----------	0.6	----------	0.0	----------
N-PENTANE	TRACE		0.1		0.0	
ISOPENTANE	TRACE	----------	0.1	----------	0.0	----------
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1	----------	0.1	----------	0.0	----------
NITROGEN	1.0		1.6		0.2	
OXYGEN	0.1	----------	TRACE	----------	0.0	----------
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.5	----------	0.4	----------	3.0	----------
HELIUM	0.03		0.10		0.03	
HEATING VALUE*	1025	----------	1176	----------	980	----------
SPECIFIC GRAVITY	0.598		0.681		0.585	

	INDEX 7663 SAMPLE 13408		INDEX 7664 SAMPLE 14421		INDEX 7665 SAMPLE 14906	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HEMPHILL		HEMPHILL		HEMPHILL	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	WILLIAM O. NIX R NO. 1-89		ARRINGTON B NO. 1		RAMP NO. 1	
LOCATION	SEC. 89, BLK. 42, H&TC SUR.		SEC. 85, BLK. A-2, H&GN SUR.		SEC. 26, BLK. 41, H&TC SUR.	
OWNER	DIAMOND SHAMROCK CORP.		MCCULLOCH OIL CORP.		WESSELY ENERGY CORP.	
COMPLETED	08/07/72		NOT GIVEN		10/23/75	
SAMPLED	09/30/72		07/--/75		02/15/77	
FORMATION	PENN-DOUGLAS		PERM-GRANITE WASH		NOT GIVEN	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6604		10814		11729	
WELLHEAD PRESSURE,PSIG	1734		NOT GIVEN		7321	
OPEN FLOW, MCFD	10550		NOT GIVEN		6350	
COMPONENT, MOLE PCT						
METHANE	79.4	----------	84.2	----------	90.9	----------
ETHANE	7.9		8.7		5.8	
PROPANE	5.5	----------	3.7	----------	1.6	----------
N-BUTANE	1.5		0.9		0.3	
ISOBUTANE	0.9	----------	0.5	----------	0.4	----------
N-PENTANE	0.4		0.1		0.0	
ISOPENTANE	0.2	----------	0.4	----------	0.1	----------
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.3	----------	0.1	----------	TRACE	----------
NITROGEN	3.4		0.9		0.4	
OXYGEN	TRACE	----------	TRACE	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.4	----------	0.5	----------
HELIUM	0.18		0.03		0.02	
HEATING VALUE*	1214	----------	1178	----------	1094	----------
SPECIFIC GRAVITY	0.722		0.675		0.618	

	INDEX 7666 SAMPLE 14936		INDEX 7667 SAMPLE 10866		INDEX 7668 SAMPLE 14969	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HEMPHILL		HEMPHILL		HEMPHILL	
FIELD	PARSELL SE		RAMP		RAMP NE	
WELL NAME	MITCHELL UNIT NO. 1		M. C. PYEATT NO. 1		RAMP NO. 1	
LOCATION	SEC. 128, BLK. 42, H&TC SUR.		SEC. 51, BLK. A-1, H&GN SUR.		SEC. 26, BLK. 41, H&TC SUR.	
OWNER	PETRO-[illegible] INC.		SUN OIL CO.		WESSELY ENERGY CORP.	
COMPLETED	06/11/75		11/22/66		10/--/75	
SAMPLED	03/10/77		02/09/67		04/06/77	
FORMATION	PENN-MORROW U		PENN-		PERM-GRANITE WASH	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10303		11172		11725	
WELLHEAD PRESSURE,PSIG	3576		[illegible]		5885	
OPEN FLOW, MCFD	3100		[illegible]		6350	
COMPONENT, MOLE PCT						
METHANE	86.5	----------	66.5	----------	89.9	----------
ETHANE	7.9		12.6		6.8	
PROPANE	2.8	----------	8.4	----------	1.8	----------
N-BUTANE	0.6		4.3		0.4	
ISOBUTANE	0.6	----------	2.1	----------	0.3	----------
N-PENTANE	0.2		1.0		0.2	
ISOPENTANE	0.2	----------	2.1	----------	0.1	----------
CYCLOPENTANE	0.1		0.4		TRACE	
HEXANES PLUS	0.2	----------	1.1	----------	0.2	----------
NITROGEN	0.1		1.2		0.5	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.0	----------	0.1	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.1		0.0	
CARBON DIOXIDE	0.0	----------	0.7	----------	0.5	----------
HELIUM	0.08		0.02		0.02	
HEATING VALUE*	1159	----------	1117	----------	1112	----------
SPECIFIC GRAVITY	0.661		0.755		0.616	

* [illegible] BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7669 SAMPLE 15150	INDEX 7670 SAMPLE 15805	INDEX 7671 SAMPLE 14807
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	RED DEER CREEK	SNOOKS	VIKING
WELL NAME	ISAACS NO. 2-207	MATHERS NO. 1	SUMPTER "10" NO. 1
LOCATION	SEC. 207, BLK. C, GMMBA SUR.	SEC.132, BLK. 42, H&TC SUR.	SEC.10,BLK.Z-1,ACH&B&W&W SUR
OWNER	GULF ENERGY & MINERALS CO.	NATURAL GAS ANADARKO, INC.	HNG OIL CO.
COMPLETED	10/02/77	03/25/79	NOT GIVEN
SAMPLED	11/21/77	10/12/79	10/--/76
FORMATION	PENN-MORROW U	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11364	11188	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3194	5115	NOT GIVEN
OPEN FLOW, MCFD	3086	5300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.8	96.8	97.2
ETHANE	7.1	0.8	0.7
PROPANE	3.3	0.2	0.1
N-BUTANE	1.0	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.5	0.0	0.0
NITROGEN	0.5	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.9	1.8
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1198	1000	1000
SPECIFIC GRAVITY	0.693	0.581	0.577

	INDEX 7672 SAMPLE 12329	INDEX 7673 SAMPLE 11061	INDEX 7674 SAMPLE 8191
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	WASHITA CREEK	WASHITA RIVER PROSPECT	WILDCAT
WELL NAME	BOWERS G NO. 1	BRADSTREET NO. 1-89	BEACH & PINION NO.1 BRAINARD
LOCATION	SEC.253, BLK.C, G&MMB&A SUR.	SEC. 89, BLK.M-1,H&GNRR SUR.	SEC. 110, BLK. 42, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	UNION OIL CO. OF CALIF.	BEACH & PINION
COMPLETED	11/21/69	08/11/67	NOT GIVEN
SAMPLED	07/10/70	08/13/67	09/13/61
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	19746	11000
WELLHEAD PRESSURE,PSIG	7002	6600	6370
OPEN FLOW, MCFD	100000	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	90.6	89.1	91.8
ETHANE	0.1	0.1	4.5
PROPANE	TRACE	0.0	0.9
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	TRACE	0.2
NITROGEN	2.1	1.6	0.5
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.1	8.8	1.3
HELIUM	0.03	0.03	0.03
HEATING VALUE*	920	916	1070
SPECIFIC GRAVITY	0.633	0.653	0.616

	INDEX 7675 SAMPLE 12523	INDEX 7676 SAMPLE 13741	INDEX 7677 SAMPLE 13782
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MATHERS RANCH NO. 1	HOBART RANCH NO. 4	BURTON NO. 1
LOCATION	SEC. 1518, J. FLOWERS SUR.	SEC. 50, BLK. A-2 H&GN SUR.	SEC. 106, BLK. 41, H&TC SUR.
OWNER	MCCULLOCH OIL CORP.	EL PASO NATURAL GAS CO.	AMARILLO OIL CO.
COMPLETED	03/04/70	08/07/73	NOT GIVEN
SAMPLED	11/10/70	10/02/73	10/26/73
FORMATION	DEVO-HUNTON	PENN-MORROW U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16415	13234	12994
WELLHEAD PRESSURE,PSIG	5881	4533	3000
OPEN FLOW, MCFD	104000	2887	3247
COMPONENT, MOLE PCT			
METHANE	95.0	94.2	96.7
ETHANE	0.4	2.6	0.7
PROPANE	TRACE	0.3	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.9	0.6	0.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.6	1.8	2.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	970	1020	995
SPECIFIC GRAVITY	0.595	0.596	0.581

	INDEX 7678 SAMPLE 13965	INDEX 7679 SAMPLE 12467	INDEX 7680 SAMPLE 8389
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HENDERSON	HENDERSON
FIELD	WILDCAT	FRANKSTON	OPELIKA
WELL NAME	HENDERSON NO. 1-64	HUGH WHITE J NO. 1	ALLYN ESTATE B NO. 1
LOCATION	SEC. 64, BLK. 41, H&TC SUR.	M. GOLIHER SUR. A-9	NOT GIVEN
OWNER	MESA PETROLEUM CO.	CITIES SERVICE OIL CO.	LONE STAR PRODUCING CO.
COMPLETED	NOT GIVEN	01/--/68	08/11/61
SAMPLED	03/27/74	10/--/70	01/31/62
FORMATION	PENN-MORROW	CRET-JAMES	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	360	260	260
DEPTH, FEET	NOT GIVEN	10026	10651
WELLHEAD PRESSURE,PSIG	9035	1800	3400
OPEN FLOW, MCFD	NOT GIVEN	9000	1080
COMPONENT, MOLE PCT			
METHANE	94.7	57.0	96.0
ETHANE	0.4	16.4	1.3
PROPANE	TRACE	11.9	0.3
N-BUTANE	0.0	3.6	0.1
ISOBUTANE	0.0	3.7	TRACE
N-PENTANE	0.0	0.9	TRACE
ISOPENTANE	0.0	1.2	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	1.0	TRACE
NITROGEN	0.3	0.1	0.7
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.6	3.9	1.3
HELIUM	0.02	0.01	0.01
HEATING VALUE*	966	1571	1011
SPECIFIC GRAVITY	0.602	0.971	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7681 SAMPLE 12614	INDEX 7682 SAMPLE 12615	INDEX 7683 SAMPLE 12616
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HENDERSON	HENDERSON	HENDERSON
FIELD	OPELIKA	OPELIKA	OPELIKA
WELL NAME	C. H. ALLYN NO. 1-C	G.W.WOFFORD NO. 1	J. S. EDWARDS NO. 1
LOCATION	ADRIAN ANGLIN SOUTH SUR.	G. ACOSTA SUR.	J. GRAFF SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	12/29/70	12/29/70	12/29/70
FORMATION	CRET-RODESSA	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7450	9049	9574
WELLHEAD PRESSURE,PSIG	500	1150	600
OPEN FLOW, MCFD	37172	5400	400000
COMPONENT, MOLE PCT			
METHANE	82.9	90.5	85.5
ETHANE	4.3	2.8	3.9
PROPANE	1.7	0.8	1.5
N-BUTANE	0.5	0.2	0.5
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	4.6	3.2	5.4
OXYGEN	1.3	0.6	1.2
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.1	1.0
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1032	1022	1037
SPECIFIC GRAVITY	0.676	0.619	0.656

	INDEX 7684 SAMPLE 12610	INDEX 7685 SAMPLE 15258	INDEX 7686 SAMPLE 4790
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HENDERSON	HIDALGO	HIDALGO
FIELD	TRI-CITIES	ALAMO	ARROWHEAD
WELL NAME	TEXIE YOUNG B NO. 2	ELMER L. TYNER NO. 1	F. R. HARRERA NO. 1
LOCATION	JOSEPH RICE SUR.	LABLANCA GRANT A-57	EL RENADITS&SAN JOSE GRANTS
OWNER	LONE STAR PRODUCING CO.	AMOCO PRODUCTION CO.	SUN OIL CO.
COMPLETED	09/28/59	03/18/76	03/06/49
SAMPLED	12/29/70	04/13/78	06/16/49
FORMATION	CRET-TRAVIS PEAK	OLIG-FRIO	NOT GIVEN
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	9760	9333	4630
WELLHEAD PRESSURE,PSIG	630	900	2109
OPEN FLOW, MCFD	2503	2034	4800
COMPONENT, MOLE PCT			
METHANE	97.5	94.2	87.5
ETHANE	0.5	3.3	4.2
PROPANE	0.1	0.8	1.9
N-BUTANE	0.0	0.3	0.4
ISOBUTANE	0.0	0.4	0.6
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	0.9	0.4	4.3
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	0.1	0.1
HELIUM	0.02	TRACE	0.02
HEATING VALUE*	999	1081	1079
SPECIFIC GRAVITY	0.571	0.604	0.643

	INDEX 7687 SAMPLE 12045	INDEX 7688 SAMPLE 12046	INDEX 7689 SAMPLE 4803
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	ARROWHEAD	ARROWHEAD	DONNA
WELL NAME	BENTSEN BROTHERS B NO. 5	BENTSEN BROTHERS C NO. 1	JOHN JANCIK NO. 1
LOCATION	EL RENADITO GRANT A-68	EL RENADITO GRANT A-68	SANTA ANA GRANT NO. 72
OWNER	SUN OIL CO.	SUN OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	09/07/68	11/25/67	--/--/49
SAMPLED	09/19/69	09/19/69	11/24/49
FORMATION	OLIG-ECHOLS	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5919	11942	6556
WELLHEAD PRESSURE,PSIG	1648	7498	2542
OPEN FLOW, MCFD	6050	16000	68000
COMPONENT, MOLE PCT			
METHANE	91.6	87.2	93.7
ETHANE	4.1	5.9	3.6
PROPANE	1.7	1.9	0.9
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	1.0	1.6	0.5
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	2.0	0.2
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1097	1084	1076
SPECIFIC GRAVITY	0.618	0.650	0.607

	INDEX 7690 SAMPLE 4833	INDEX 7691 SAMPLE 10540	INDEX 7692 SAMPLE 13561
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	DONNA	EDINBURG S	ELSA S
WELL NAME	THOMAS UNIT NO. 1	WILLIAM E. BEANE NO. 1	HIDALGO-WILLACY NO. 1-U
LOCATION	SEC. 19, LOT 12, ALAMO SUBD.	1-1/2 MI. S OF EDINBURG	SEC 156 LLANO GRANDE GRT A54
OWNER	SINCLAIR OIL & GAS CO.	TENNECO OIL CO.	SUN OIL CO.
COMPLETED	10/18/49	NOT GIVEN	06/23/71
SAMPLED	01/04/50	04/26/66	03/05/73
FORMATION	OLIG-FRIO	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6551	NOT GIVEN	7170
WELLHEAD PRESSURE,PSIG	1900	7450	2866
OPEN FLOW, MCFD	19300	NOT GIVEN	5900
COMPONENT, MOLE PCT			
METHANE	91.2	91.0	95.2
ETHANE	5.6	4.2	2.7
PROPANE	1.0	1.3	0.6
N-BUTANE	0.2	0.4	0.1
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.6	0.2
NITROGEN	2.5	1.3	0.7
OXYGEN	0.6	0.4	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1047	1071	1003
SPECIFIC GRAVITY	0.615	0.628	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7693 SAMPLE 14256	INDEX 7694 SAMPLE 14257	INDEX 7695 SAMPLE 15514
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	ELSA S	ELSA S	HARGILL
WELL NAME	DIETRICH NO. 1	DIETRICH NO. 1	RIO FARMS NO. 2
LOCATION	LLANO GRANDE GRANT, A-54	LLANO GRANDE GRANT, A-54	LOT 6, SEC. 13, MTL&I SUBD.
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	ENERGY RESERVES GROUP
COMPLETED	04/30/73	04/30/73	09/24/77
SAMPLED	02/09/75	02/09/75	11/24/78
FORMATION	OLIG-FRIO F7400 SAND	OLIG-FRIO 7250 SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7384	7242	8860
WELLHEAD PRESSURE,PSIG	3168	2550	3650
OPEN FLOW, MCFD	7600	7600	4000
COMPONENT, MOLE PCT			
METHANE	95.8	95.8	96.2
ETHANE	2.6	2.6	2.2
PROPANE	0.5	0.5	0.3
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.6	0.6	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1045	1045	1023
SPECIFIC GRAVITY	0.583	0.583	0.578

	INDEX 7696 SAMPLE 5055	INDEX 7697 SAMPLE 12000	INDEX 7698 SAMPLE 13864
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	HIDALGO	HIDALGO	JAVELINA
WELL NAME	EL TEXANO LAND CO. NO. 1	SAVAGE B UNIT NO. 2	LANDA TRUST CO. NO. 8
LOCATION	PORCION 64, A-41	FRANCIS GUAJARDO PORCION A38	DAVID DAVIS SUR. A-135
OWNER	TEXAS CO.	UNION PRODUCING CO.	SHELL OIL CO.
COMPLETED	02/26/51	08/02/68	04/05/72
SAMPLED	06/22/51	08/18/69	01/14/73
FORMATION	OLIG-FRIO	EOCE-HACKNEY	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6240	6560	11282
WELLHEAD PRESSURE,PSIG	2899	600	7875
OPEN FLOW, MCFD	7200	400	53000
COMPONENT, MOLE PCT			
METHANE	92.9	92.3	89.7
ETHANE	3.8	3.5	6.0
PROPANE	1.1	1.2	1.9
N-BUTANE	0.2	0.3	0.4
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.7	0.3
NITROGEN	0.8	0.6	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1077	1112	1134
SPECIFIC GRAVITY	0.609	0.624	0.639

	INDEX 7699 SAMPLE 12587	INDEX 7700 SAMPLE 12588	INDEX 7701 SAMPLE 12589
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	JEFFRESS	JEFFRESS	JEFFRESS
WELL NAME	J. D. JEFFRESS ESTATE NO. 1	G. G. ZAMORA ST. OF TEX NO.1	PETER VAN SCHERPE JR. NO.2
LOCATION	H. KIRKBRIDE SUR. 488	W. D. PARCHMAN SUR. 883	M. CANO PORC. 45, A-58
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	04/14/69	09/15/69	05/15/69
SAMPLED	NOT GIVEN	12/--/70	12/--/70
FORMATION	OLIG-VICKSBURG U	OLIG-VICKSBURG T	OLIG-6300" SD.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11318	9694	6298
WELLHEAD PRESSURE,PSIG	4298	6215	3540
OPEN FLOW, MCFD	37A00	14000	9400
COMPONENT, MOLF PCT			
METHANE	88.6	90.6	54.5
ETHANE	5.9	5.6	3.4
PROPANE	1.8	1.8	1.2
N-BUTANE	0.2	0.4	0.5
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.9	0.6	20.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	8.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.1	10.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1086	1117	744
SPECIFIC GRAVITY	0.639	0.628	0.766

	INDEX 7702 SAMPLE 12564	INDEX 7703 SAMPLE 12566	INDEX 7704 SAMPLE 4374
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	LA BLANCA	LA BLANCA	LOS INDIOS
WELL NAME	LA BLANCA GAS UNIT NO. 26	LA BLANCA GAS UNIT H-26	RICHARD KING ESTATE NO. 3
LOCATION	LA BLANCA SUBDIVISION	LA BLANCA SUBDIVISION	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	CHICAGO CORP.
COMPLETED	01/26/69	01/26/69	06/11/47
SAMPLED	11/04/70	11/04/70	11/11/47
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7184	6587	8345
WELLHEAD PRESSURE,PSIG	1540	2628	3370
OPEN FLOW, MCFD	3300	26500	1325
COMPONENT, MOLF PCT			
METHANE	95.0	93.0	93.1
ETHANE	2.9	3.7	6.3
PROPANE	0.6	1.0	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.6	1.1	0.1
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1062	1073	1056
SPECIFIC GRAVITY	0.593	0.605	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7705 SAMPLE 4609	INDEX 7706 SAMPLE 13127	INDEX 7707 SAMPLE 5124
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	LOS INDIOS	LOS INDIOS	LOS TORRITOS
WELL NAME	GOLDSTON NO. 10	W. L. GOLDSTON NO. B-18	WILLIAM BREWSTER NO. 1
LOCATION	NOT GIVEN	SANTA ANITA GRANT A-63	NOT GIVEN
OWNER	CHICAGO CORP., ET AL.	CHAMPLIN PETROLEUM CO.	TAYLOR REFINING CO.
COMPLETED	03/19/48	03/06/71	05/16/51
SAMPLED	10/05/48	12/21/71	11/12/51
FORMATION	OLIG-FRIO	OLIG-FRIO UF-50	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6486	4216	6745
WELLHEAD PRESSURE,PSIG	2735	1790	3100
OPEN FLOW, MCFD	2800	10000	12000
COMPONENT, MOLE PCT			
METHANE	89.0	93.9	95.4
ETHANE	10.1	2.8	2.5
PROPANE	---	0.8	0.7
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.1
NITROGEN	0.5	1.4	0.7
OXYGEN	0.3	0.2	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1083	1062	1056
SPECIFIC GRAVITY	0.609	0.604	0.590

	INDEX 7708 SAMPLE 5006	INDEX 7709 SAMPLE 10681	INDEX 7710 SAMPLE 13862
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MCALLEN	MCALLEN	MCALLEN RANCH
WELL NAME	PEARL KEIRN NO. 1	MCALLEN F.W. NO. 39	A.A. MCALLEN NO. 32
LOCATION	LOT 12, BLK. 7, PORCION 64	LOT 2, BLK. 15, S&P SUBD.	SAN RAMON GRANT
OWNER	TAYLOR REFINING CO.	TENNECO OIL CO.	SHELL OIL CO.
COMPLETED	10/03/50	09/27/65	08/30/72
SAMPLED	02/09/51	07/26/66	01/14/73
FORMATION	OLIG-FRIO M	EOCE-MARKS	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8750	10432	2398
WELLHEAD PRESSURE,PSIG	3625	7705	9436
OPEN FLOW, MCFD	15000	30500	20500
COMPONENT, MOLE PCT			
METHANE	92.9	94.3	89.0
ETHANE	4.3	3.4	6.3
PROPANE	1.5	1.0	2.2
N-BUTANE	0.4	0.2	0.5
ISOBUTANE	0.2	0.3	0.8
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.0	0.4	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	TRACE	0.03	TRACE
HEATING VALUE*	1100	1074	1148
SPECIFIC GRAVITY	0.612	0.600	0.646

	INDEX 7711 SAMPLE 16090	INDEX 7712 SAMPLE 13863	INDEX 7713 SAMPLE 5862
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MCALLEN RANCH	MCCOOK E	MISSION W
WELL NAME	A. J. BEAULINE NO. 3	T.H. THESIS NO. 1	RUTH N. JARED ET AL. NO. 1
LOCATION	SANTA ANITA GRANT A-63	SEC. 6, LGE, 2, NEWMAN'S SUB	NOT GIVEN
OWNER	SUN GAS CO.	SHELL OIL CO.	HOUSTON OIL CO. OF TEXAS
COMPLETED	NOT GIVEN	03/04/72	05/29/55
SAMPLED	10/13/80	01/14/74	06/14/55
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13125	12081	8267
WELLHEAD PRESSURE,PSIG	NOT GIVEN	9140	3488
OPEN FLOW, MCFD	7000	63000	2350
COMPONENT, MOLE PCT			
METHANE	92.0	90.7	93.0
ETHANE	5.9	5.6	4.2
PROPANE	1.2	1.7	1.1
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.6	0.3	0.2
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1160	1117	1106
SPECIFIC GRAVITY	0.618	0.626	0.616

	INDEX 7714 SAMPLE 14581	INDEX 7715 SAMPLE 10168	INDEX 7716 SAMPLE 5309
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MONTE CHRISTO	MONTE CHRISTO E	PENITAS
WELL NAME	HAMMAN RANCH NO. 5	HAMMAN RANCH NO. 1	TEMPLE W. WEST NO. 1
LOCATION	SAN SALVADOR DEL TULE GRANT	SALVADOR DELTULE GRANT A-290	PORTIONS 73,74,75
OWNER	SHELL OIL CO.	TENNECO OIL CO.	HOUSTON OIL CO. OF TEXAS
COMPLETED	02/27/74	12/20/63	03/04/52
SAMPLED	02/07/76	09/28/65	08/04/52
FORMATION	OLIG-VICKSBURG	OLIG-FRIO	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9061	9500	5994
WELLHEAD PRESSURE,PSIG	4425	2800	2488
OPEN FLOW, MCFD	12700	140500	63000
COMPONENT, MOLE PCT			
METHANE	97.5	92.5	82.1
ETHANE	1.5	4.5	2.9
PROPANE	0.4	1.4	0.7
N-BUTANE	0.1	0.3	0.1
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.5	0.4	10.7
OXYGEN	0.0	0.0	2.5
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1035	1101	919
SPECIFIC GRAVITY	0.572	0.614	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7717 SAMPLE 5290	INDEX 7718 SAMPLE 13871	INDEX 7719 SAMPLE 7261
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	PHARR	SAL-DEL-REY	SANTA RITA
WELL NAME	LESTER DAWLEY UNIT NO. 1	H.SCHALEBEN NO. 1	STATE TRACT 10, NO. 1
LOCATION	LOT A, BLK. 13	NOT GIVEN	NOT GIVEN
OWNER	TAYLOR OIL & GAS CO.	GEORGE MITCHELL & ASSOC. INC	MOODY PROPERTIES
COMPLETED	05/25/52	09/16/71	03/18/59
SAMPLED	10/10/52	01/18/74	10/21/59
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9734	8031	6052
WELLHEAD PRESSURE,PSIG	7815	2940	2497
OPEN FLOW, MCFD	43500	7800	16200
COMPONENT, MOLE PCT			
METHANE	93.4	96.0	95.9
ETHANE	4.0	2.3	2.4
PROPANE	0.9	0.4	0.2
N-BUTANE	0.2	TRACE	TRACE
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	0.4	0.9	0.7
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1089	1036	1039
SPECIFIC GRAVITY	0.608	0.579	0.581

	INDEX 7720 SAMPLE 13147	INDEX 7721 SAMPLE 13148	INDEX 7722 SAMPLE 15453
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	SANTELLANA S	SANTELLANA S	SHEPHARD
WELL NAME	A. E. GUERRA NO. 5U	A. E. GUERRA NO. 5L	WESSLING NO. 1
LOCATION	SANTA ANITA GRANT A-63	SANTA ANITA GRANT A-63	LOT 260, KELLY'S SUBDIVISION
OWNER	TEXACO INC.	TEXACO INC.	EDWIN L. COX
COMPLETED	02/09/70	02/09/70	04/17/77
SAMPLED	02/10/72	02/10/72	10/25/78
FORMATION	OLIG-LF-3 SAND	OLIG-S-8	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7000	8500	7540
WELLHEAD PRESSURE,PSIG	1350	3160	2920
OPEN FLOW, MCFD	5013	5852	3100
COMPONENT, MOLE PCT			
METHANE	92.9	92.3	93.1
ETHANE	2.6	4.3	3.8
PROPANE	0.9	1.4	1.2
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	1.7	0.6	0.6
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1000	1105	1089
SPECIFIC GRAVITY	0.618	0.620	0.612

	INDEX 7723 SAMPLE 15454	INDEX 7724 SAMPLE 11185	INDEX 7725 SAMPLE 14916
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	SHEPHARD	SHEPHERD	WHITTED
WELL NAME	WESSLING NO. 1	HUSBAND UNIT NO. 2-LT	CAMPBELL UNIT NO. 1
LOCATION	LOT 260, KELLY'S SUBDIVISION	NARCISCO CAVASOS SUR. A-30	2 MI. N. MCALLEN
OWNER	EDWIN L. COX	UNION PRODUCING CO.	MCCORMICK OIL & GAS CORP.
COMPLETED	04/17/77	11/08/66	10/20/75
SAMPLED	10/25/78	10/23/67	02/21/77
FORMATION	OLIG-FRIO	EOCE-CRUTCHFIELD	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7307	6919	7226
WELLHEAD PRESSURE,PSIG	1550	1015	2232
OPEN FLOW, MCFD	1900	1160	3600
COMPONENT, MOLE PCT			
METHANE	92.9	93.5	93.7
ETHANE	3.6	3.6	3.3
PROPANE	1.4	0.9	1.0
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.6	0.5	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1089	1089	1081
SPECIFIC GRAVITY	0.611	0.609	0.605

	INDEX 7726 SAMPLE 4338	INDEX 7727 SAMPLE 4746	INDEX 7728 SAMPLE 15985
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	J. M. DOSS NO. 1	CARLSON UNIT NO. 1	BARBARA LIPS NO. 1
LOCATION	SEC. 41, XAVIER ZAMORA A-77	LOT 7, BLK. 1, MCCALL SUR.	15 MI. S. RACHAL
OWNER	TEXAS CO.	MAGNOLIA PETROLEUM CO.	HILLIARD OIL & GAS, INC.
COMPLETED	05/29/47	01/04/49	05/16/78
SAMPLED	07/17/47	05/20/49	06/18/80
FORMATION	NOT GIVEN	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3830	7580	15163
WELLHEAD PRESSURE,PSIG	1490	2954	12400
OPEN FLOW, MCFD	18000	15	10500
COMPONENT, MOLE PCT			
METHANE	90.6	93.5	89.8
ETHANE	6.2	3.8	2.9
PROPANE	---	1.1	1.4
N-BUTANE	---	0.3	0.7
ISOBUTANE	---	0.3	1.2
N-PENTANE	---	0.1	0.6
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.2	1.4
NITROGEN	1.9	0.5	0.1
OXYGEN	0.4	0.1	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.9	0.1	1.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1029	1078	1184
SPECIFIC GRAVITY	0.604	0.606	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7729 SAMPLE 9085		INDEX 7730 SAMPLE 9086		INDEX 7731 SAMPLE 10780	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HOCKLEY		HOCKLEY		HOOD	
FIELD	ANTON		ANTON		BLACK RANCH	
WELL NAME	AARON COHEN NO. 1		AARON COHEN NO. 1		BLACK RANCH NO. 1	
LOCATION	SEC.112,BLK.A, THOMPSON SUR.		SEC.112,BLK. A, THOMPSON SUR		JOHN SEALY SUR.	
OWNER	AARON COHEN ESTATE		AARON COHEN ESTATE		ESTATE OF JOHN R. BLACK	
COMPLETED	--/--/60		--/--/60		06/14/66	
SAMPLED	09/20/63		09/21/63		11/21/66	
FORMATION	TRIA-		TRIA-		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	430		430		415	
DEPTH, FEET	490		490		1295	
WELLHEAD PRESSURE,PSIG	42		42		600	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		12200	
COMPONENT, MOLE PCT						
METHANE	0.1	----------	0.1	----------	89.2	----------
ETHANE	TRACE		TRACE		3.9	
PROPANE	0.1	----------	0.0	----------	1.8	----------
N-BUTANE	0.0		0.0		0.6	
ISOBUTANE	TRACE	----------	0.0	----------	0.0	----------
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0	----------	0.0	----------	0.0	----------
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	TRACE	----------	0.0	----------	0.0	----------
NITROGEN	99.5		98.9		4.0	
OXYGEN	TRACE	----------	TRACE	----------	0.0	----------
ARGON	0.1		0.7		0.1	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE	----------	0.1	----------	0.1	----------
HELIUM	0.04		0.22		0.34	
HEATING VALUE*	4	----------	1	----------	1040	----------
SPECIFIC GRAVITY	0.966		0.969		0.618	

	INDEX 7732 SAMPLE 10781		INDEX 7733 SAMPLE 10782		INDEX 7734 SAMPLE 10783	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HOOD		HOOD		HOOD	
FIELD	BLACK RANCH		BLACK RANCH		BLACK RANCH	
WELL NAME	BLACK RANCH NO. 4		BLACK RANCH NO. 5		BLACK RANCH NO. 6	
LOCATION	J. W. ROBINSON SUR.		WM. MILSPAUGH SUR.		WM. MILLSPAUGH SUR.	
OWNER	ESTATE OF JOHN R. BLACK		ESTATE OF JOHN R. BLACK		ESTATE OF JOHN R. BLACK	
COMPLETED	08/25/66		08/25/66		09/29/66	
SAMPLED	11/21/66		11/21/66		11/21/66	
FORMATION	PENN-CONGLOMERATE		PENN-CONGLOMERATE		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	415		415		415	
DEPTH, FEET	1370		1304		802	
WELLHEAD PRESSURE,PSIG	523		410		330	
OPEN FLOW, MCFD	3100		5200		2000	
COMPONENT, MOLE PCT						
METHANE	86.8	----------	86.2	----------	88.4	----------
ETHANE	5.0		5.5		4.2	
PROPANE	2.5	----------	2.7	----------	2.0	----------
N-BUTANE	0.6		0.6		0.8	
ISOBUTANE	0.5	----------	0.4	----------	0.0	----------
N-PENTANE	0.1		0.2		0.0	
ISOPENTANE	0.0	----------	0.1	----------	0.0	----------
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1	----------	0.1	----------	0.0	----------
NITROGEN	4.0		3.8		4.1	
OXYGEN	0.0	----------	0.0	----------	0.1	----------
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.1	----------
HELIUM	0.22		0.24		0.25	
HEATING VALUE*	1040	----------	1093	----------	1050	----------
SPECIFIC GRAVITY	0.646		0.652		0.626	

	INDEX 7735 SAMPLE 15358		INDEX 7736 SAMPLE 15359		INDEX 7737 SAMPLE 15361	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HOOD		HOOD		HOOD	
FIELD	BRATTEN		BRATTEN		MCINTOSH	
WELL NAME	BRATTEN RANCH NO. 2		BRATTEN RANCH NO. 4		W. D. WILKERSON NO. 1	
LOCATION	T. STANBURY SUR..A-498		J. DOANE SUR. A-145		MCKINNEY&WILLIAMS SUR.A-411	
OWNER	GULF OIL EXPL. & PROD. CO.		GULF OIL EXPL. & PROD. CO.		GULF OIL EXPL. & PROD. CO.	
COMPLETED	08/16/77		05/16/77		04/27/77	
SAMPLED	08/25/78		08/25/78		08/25/78	
FORMATION	PENN-MARBLE FALLS		PENN-BIG SALINE		PENN-BIG SALINE	
GEOLOGIC PROVINCE CODE	415		415		415	
DEPTH, FEET	4760		4636		4864	
WELLHEAD PRESSURE,PSIG	1630		1478		1657	
OPEN FLOW, MCFD	2375		3450		7500	
COMPONENT, MOLE PCT						
METHANE	66.3	----------	72.6	----------	73.1	----------
ETHANE	14.5		13.0		12.2	
PROPANE	8.5	----------	7.1	----------	6.9	----------
N-BUTANE	2.9		1.8		2.0	
ISOBUTANE	1.7	----------	1.1	----------	1.2	----------
N-PENTANE	1.0		0.5		0.5	
ISOPENTANE	1.0	----------	0.5	----------	0.7	----------
CYCLOPENTANE	0.3		0.1		0.1	
HEXANES PLUS	1.1	----------	0.4	----------	0.4	----------
NITROGEN	2.2		2.2		2.5	
OXYGEN	0.1	----------	TRACE	----------	0.1	----------
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1	----------	0.1	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2	----------	0.3	----------	0.3	----------
HELIUM	0.12		0.09		0.09	
HEATING VALUE*	1460	----------	1316	----------	1322	----------
SPECIFIC GRAVITY	0.863		0.775		0.781	

	INDEX 7738 SAMPLE 12832		INDEX 7739 SAMPLE 6874		INDEX 7740 SAMPLE 11847	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HOPKINS		HOPKINS		HOPKINS	
FIELD	COMO		SULPHUR BLUFF		WILDCAT	
WELL NAME	DERMONT FOSTER NO. 5		BASSHAM NO. 1		C. M. MAYES UNIT NO. 1	
LOCATION	5 1/2 MI. S. OF COMO		NOT GIVEN		N.W. OF MT. VERNON	
OWNER	DELTA DRILLING CO.		GRELLING ESTATE ET AL.		COUCH OIL CO.	
COMPLETED	05/--/69		03/29/58		NOT GIVEN	
SAMPLED	10/--/70		11/19/58		04/26/69	
FORMATION	CRET-GLORY		JURA-SMACKOVER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	8006		9324		9098	
WELLHEAD PRESSURE,PSIG	1200		3150		3148	
OPEN FLOW, MCFD	460		14		127500	
COMPONENT, MOLE PCT						
METHANE	80.1	----------	54.4	----------	37.8	----------
ETHANE	7.2		5.7		3.2	
PROPANE	3.2	----------	2.1	----------	1.3	----------
N-BUTANE	0.8		0.7		0.7	
ISOBUTANE	1.0	----------	0.5	----------	0.4	----------
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2	----------	0.3	----------	0.4	----------
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2	----------	0.1	----------	TRACE	----------
NITROGEN	5.9		30.7		49.1	
OXYGEN	TRACE	----------	0.2	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1	----------	TRACE	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		0.3		0.0	
CARBON DIOXIDE	1.0	----------	4.7	----------	4.7	----------
HELIUM	0.03		0.10		0.12	
HEATING VALUE*	1112	----------	772	----------	537	----------
SPECIFIC GRAVITY	0.695		0.807		0.879	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7741 SAMPLE 14799	INDEX 7742 SAMPLE 12959	INDEX 7743 SAMPLE 3762
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOUSTON	HOUSTON	HOUSTON
FIELD	DECKER SWITCH	FT. TRINIDAD	GRAPELAND
WELL NAME	W. A. HOLCOMB NO. 1	CRAWLEY NO. 1	FORD NEWMAN NO. 1
LOCATION	REFUGIO VALENZUELA SUR.	I. LOPEZ SUR. A-50	J.O.J. PROCELLE SUR.
OWNER	TEXAS CRUDE OIL CO., INC.	MORAN CORP.	LONE STAR PRODUCING CO.
COMPLETED	10/30/74	02/16/70	01/16/42
SAMPLED	10/07/76	08/18/71	04/04/44
FORMATION	CRET-PETTIT	CRET-GLEN ROSE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10413	10454	5879
WELLHEAD PRESSURE,PSIG	5155	3725	2000
OPEN FLOW, MCFD	7729	6000	21000
COMPONENT, MOLE PCT			
METHANE	97.2	68.2	67.6
ETHANE	0.2	13.6	27.0
PROPANE	TRACE	8.7	---
N-BUTANE	0.0	2.5	---
ISOBUTANE	0.0	1.9	---
N-PENTANE	0.0	0.6	---
ISOPENTANE	0.0	0.4	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.4	---
NITROGEN	0.7	1.8	4.0
OXYGEN	TRACE	TRACE	0.5
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.7	1.9	0.9
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	988	1372	1169
SPECIFIC GRAVITY	0.574	0.831	0.716

	INDEX 7744 SAMPLE 3665	INDEX 7745 SAMPLE 13462	INDEX 7746 SAMPLE 14786
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOUSTON	HOUSTON	HOUSTON
FIELD	NAVARRO CROSSING	RUNNING DUKE	TRINITY
WELL NAME	H. O. DAILEY & F. E. TAYLOR	DALLAS D. PETERS NO. 1	SOUTHLAND PAPER MILLS NO. 1
LOCATION	J. G. THOMPSON LEAGUE	STEPHEN ROGERS SUR. A-75	S. P. GLENN SUR. A-472
OWNER	HUMBLE OIL & REFINING CO.	AMOCO PRODUCTION CO.	ARMOUR PROPERTIES
COMPLETED	06/24/38	01/26/71	01/30/75
SAMPLED	09/11/43	10/31/72	09/--/76
FORMATION	CRET-WOODBINE	CRET-RODESSA	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5851	9917	8562
WELLHEAD PRESSURE,PSIG	2240	4180	3262
OPEN FLOW, MCFD	24100	10300	15300
COMPONENT, MOLE PCT			
METHANE	92.8	94.7	79.6
ETHANE	6.3	1.3	3.4
PROPANE	---	0.4	0.9
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	0.1	0.6	12.3
OXYGEN	0.1	0.0	1.0
ARGON	---	0.0	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	2.4	2.2
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1053	1012	905
SPECIFIC GRAVITY	0.593	0.599	0.665

	INDEX 7747 SAMPLE 1319	INDEX 7748 SAMPLE 2062	INDEX 7749 SAMPLE 2060
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOWARD	HOWARD	HOWARD
FIELD	CHALK	CHALK	ROBERTS
WELL NAME	G. O. CHALK NO. 1	CHALK C. NO. 1	DORA ROBERTS NO. 7
LOCATION	NOT GIVEN	SEC. 140, BLK. 29, W&NG SUR.	SEC. 137, BLK. 29, W&NW SUR.
OWNER	MAGNOLIA PETROLEUM CO.	CONTINENTAL OIL CO.	CALIFORNIA CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/24/29
SAMPLED	11/11/26	06/18/30	06/14/30
FORMATION	PERM-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1580	1800	1798
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	25.2	39.1	60.1
ETHANE	65.1	52.5	28.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.0	7.5	11.0
OXYGEN	0.6	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	TRACE	0.05	0.03
HEATING VALUE*	1422	1337	1114
SPECIFIC GRAVITY	0.918	0.853	0.746

	INDEX 7750 SAMPLE 2061	INDEX 7751 SAMPLE 2064	INDEX 7752 SAMPLE 11704
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOWARD	HOWARD	HOWARD
FIELD	ROBERTS	SNYDER	SURFACE SAMPLE
WELL NAME	DORA ROBERTS NO. 8	M. H. DANIELS NO. 1	SAMPLE NO. 1
LOCATION	SEC. 137, BLK. 29, W&NW SUR.	SEC. 34, BLK. 30 T&P SUR.	BIG SPRING, TEXAS
OWNER	CALIFORNIA CO.	MAGNOLIA PETROLEUM CO.	PIONEER NATURAL GAS CO.
COMPLETED	11/19/29	08/20/25	NOT GIVEN
SAMPLED	06/16/30	06/18/30	12/13/68
FORMATION	NOT GIVEN	PENN-CLEARFORK	-SURFACE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2930	2640	0
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.3	19.1	6.4
ETHANE	21.7	77.2	0.0
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	11.6	2.9	90.7
OXYGEN	0.0	0.3	1.0
ARGON	---	---	1.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.5	0.5	0.9
HELIUM	0.08	0.02	TRACE
HEATING VALUE*	1050	1577	65
SPECIFIC GRAVITY	0.725	0.955	0.951

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7753 SAMPLE 7910	INDEX 7754 SAMPLE 13537	INDEX 7755 SAMPLE 7969
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUNT	HUTCHINSON	HANSFORD
FIELD	QUINLAN	BAR NINE	MATHEWS UNIT NO. 1
WELL NAME	P. R. PAUL NO. 1	W.D. PRICE NO. 2	SEC. 80, BLK. R, GB&CNG SUR.
LOCATION	NOT GIVEN	SEC. 1, BLK.3, RS&F SUR.	PAN AMERICAN PETROLEUM CORP.
OWNER	PAUL C. TEAS	GULF OIL CO.-U.S.	08/14/60
COMPLETED	03/20/61	12/30/71	05/17/61
SAMPLED	03/15/61	02/20/73	PENN-MORROW L
FORMATION	JURA-SMACKOVER	PERM-COUNCIL GROVE	440
GEOLOGIC PROVINCE CODE	260	440	8529
DEPTH, FEET	9012	3900	2017
WELLHEAD PRESSURE,PSIG	2965	653	6250
OPEN FLOW, MCFD	19000	2700	
COMPONENT, MOLE PCT			
METHANE	40.2	66.3	91.1
ETHANE	2.6	6.9	4.0
PROPANE	1.2	4.6	1.7
N-BUTANE	0.7	1.3	0.5
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	45.5	18.9	0.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	8.0	TRACE	0.5
HELIUM	0.10	0.24	0.10
HEATING VALUE*	578	1031	1097
SPECIFIC GRAVITY	0.888	0.765	0.625

	INDEX 7756 SAMPLE 5856	INDEX 7757 SAMPLE 6648	INDEX 7758 SAMPLE 6709
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	HUTCHINSON N	HUTCHINSON N	HUTCHINSON N
WELL NAME	T. I. HARBOUR NO. 1	B. M. HOLT NO. 1	B. M. HOLT NO. 1
LOCATION	SEC. 53, BLK. 5, T&NO SUR.	SEC. 51, BLK. 5, T&NO SUR.	SEC. 51, BLK. 5, T&NO SUR.
OWNER	TEXAS CO.	TEXAS CO.	TEXACO INC.
COMPLETED	11/24/54	12/05/57	12/05/57
SAMPLED	06/10/55	06/19/58	NOT GIVEN
FORMATION	PENN-LIME	PENN-CLEVELAND	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6082	5875	4926
WELLHEAD PRESSURE,PSIG	1592	1501	959
OPEN FLOW, MCFD	3532	5783	1138
COMPONENT, MOLE PCT			
METHANE	90.3	86.8	81.5
ETHANE	4.2	6.0	3.2
PROPANE	1.6	2.8	2.0
N-BUTANE	0.6	0.8	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.0	2.5	11.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.13	0.10	0.40
HEATING VALUE*	1094	1118	998
SPECIFIC GRAVITY	0.628	0.650	0.665

	INDEX 7759 SAMPLE 6556	INDEX 7760 SAMPLE 7215	INDEX 7761 SAMPLE 7871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	JOHN CREEK	JOHN CREEK	JOHN CREEK
WELL NAME	D. R. KIRK NO. 1	K. L. WEST ET AL UNIT NO. 1	JONES NO. 1
LOCATION	SEC. 77, BLK. R, GB&CNG SUR.	SEC.	SEC. 1, BBB&C SUR.
OWNER	SUN OIL CO.	SINCLAIR OIL & GAS CO. ET AL	PHILLIPS PETROLEUM CO.
COMPLETED	01/17/58	09/02/58	12/24/60
SAMPLED	04/15/58	09/15/59	02/23/61
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW U
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	8172	8130	7278
WELLHEAD PRESSURE,PSIG	1725	2073	2014
OPEN FLOW, MCFD	4400	3800	9995
COMPONENT, MOLE PCT			
METHANE	92.6	92.0	93.4
ETHANE	3.9	3.9	3.3
PROPANE	1.3	1.0	0.8
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.1	0.3	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.6	1.4	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1089	1073	1072
SPECIFIC GRAVITY	0.613	0.614	0.607

	INDEX 7762 SAMPLE 7971	INDEX 7763 SAMPLE 15998	INDEX 7764 SAMPLE 13512
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	LIPS	LIPS W	MORRIS NW
WELL NAME	MATHEWS UNIT NO. 1	PATTERSON GAS UNIT NO. 2	RASCOE WOMBLE NO. 1-7
LOCATION	SEC. 80, BLK. R, GB&CNG SUR.	SEC. 73, BLK. RGB&CNG SUR.	SEC. 7, BLK. 1, BBB&C RR SUR
OWNER	PAN AMERICAN PETROLEUM CORP.	SUN OIL CO.	MCCULLOCH OIL CORP.
COMPLETED	08/14/60	12/21/79	07/23/71
SAMPLED	05/17/61	07/05/80	01/22/72
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6618	6560	3056
WELLHEAD PRESSURE,PSIG	1437	1532	400
OPEN FLOW, MCFD	10000	8500	3800
COMPONENT, MOLE PCT			
METHANE	91.2	82.7	67.4
ETHANE	3.9	7.9	6.5
PROPANE	1.7	4.3	4.7
N-BUTANE	0.5	1.3	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.1	TRACE
NITROGEN	0.8	2.4	16.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.10	0.13	0.90
HEATING VALUE*	1110	1183	1006
SPECIFIC GRAVITY	0.630	0.690	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7765 SAMPLE 13511	INDEX 7766 SAMPLE 14009	INDEX 7767 SAMPLE 14039
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	MORRIS SW	MORRIS SW	MORSE SW
WELL NAME	HADLEY NO. 4-3	CUNNINGHAM NO. 1	BARNES "B" NO. 4
LOCATION	SEC. 3, BLK. HC, H&OB SUR.	SEC. 8, BLK. 1, BB&C SUR.	SEC. 5, BLK. 1, BBR&C SUR.
OWNER	MCCULLOCH OIL CORP.	MCCULLOCH OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	10/07/72	03/15/74	05/01/74
SAMPLED	01/22/73	05/15/74	07/08/74
FORMATION	PERM-WICHITA-ALBANY	PENN-MARMATON	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2948	5270	3012
WELLHEAD PRESSURE,PSIG	400	1200	378
OPEN FLOW, MCFD	2300	2800	2200
COMPONENT, MOLE PCT			
METHANE	71.8	72.7	70.4
ETHANE	8.2	6.6	8.1
PROPANE	5.0	4.0	4.5
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	12.4	13.8	14.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.56	0.34	0.75
HEATING VALUE*	1065	1059	1037
SPECIFIC GRAVITY	0.721	0.720	0.725

	INDEX 7768 SAMPLE 7296	INDEX 7769 SAMPLE 13577	INDEX 7770 SAMPLE 1392
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	NOT GIVEN	NOT GIVEN	PANHANDLE W
WELL NAME	EFFIE MAE MEADOWS NO. 1	JACKSON NO. A-1	INGERTON NO. 1
LOCATION	SEC. 31, M-21, TCRR SUR.	SEC. 71, BLK.R, B&B SUR.	SEC. 41, BLK. 47, H&TC SUR.
OWNER	CABOT CARBON CO.	LEAR PETROLEUM CORP.	AMARILLO OIL CO.
COMPLETED	09/22/59	NOT GIVEN	NOT GIVEN
SAMPLED	12/02/59	04/16/73	05/19/27
FORMATION	NOT GIVEN	PENN-MORROW L	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	5444	NOT GIVEN	1195
WELLHEAD PRESSURE,PSIG	1331	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	18200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	92.0	6.5
ETHANE	6.9	3.9	16.0
PROPANE	2.8	1.7	---
N-BUTANE	0.7	0.4	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	24.2	0.8	76.3
OXYGEN	TRACE	0.0	0.9
ARGON	0.1	0.0	---
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.50	0.09	0.22
HEATING VALUE*	899	1091	353
SPECIFIC GRAVITY	0.741	0.619	0.957

	INDEX 7771 SAMPLE 1410	INDEX 7772 SAMPLE 1412	INDEX 7773 SAMPLE 1542
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS B-5	INGERTON NO. 1	BIVINS B-4
LOCATION	SEC. 88, BLK. 46, H&TC SUR.	SEC. 41, BLK. 47, H&TC SUR.	SEC.13, BLK.Y-2, CB&CNG SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	03/16/27	07/05/27	10/--/25
SAMPLED	06/24/27	07/12/27	11/04/27
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2000	2550	2305
WELLHEAD PRESSURE,PSIG	408	190	425
OPEN FLOW, MCFD	70000	70000	81000
COMPONENT, MOLE PCT			
METHANE	63.5	56.0	68.6
ETHANE	24.5	29.4	20.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.8	12.4	9.5
OXYGEN	0.0	1.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.5	0.3
HELIUM	0.38	0.43	0.44
HEATING VALUE*	1042	1094	1069
SPECIFIC GRAVITY	0.726	0.762	0.700

	INDEX 7774 SAMPLE 1543	INDEX 7775 SAMPLE 1676	INDEX 7776 SAMPLE 1802
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS B-6	SANFORD NO. 1	INGERTON A-2
LOCATION	SEC. 90, BLK. 46, H&TC SUR.	SEC. 82, BLK. 46, H&TC SUR.	SEC. 41, BLK. 47, H&TC SUR.
OWNER	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.	AMARILLO OIL CO.
COMPLETED	09/16/27	NOT GIVEN	DRILL STEM TEST
SAMPLED	11/04/27	09/18/28	06/24/29
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	-SAND
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2175	NOT GIVEN	1280
WELLHEAD PRESSURE,PSIG	150	330	NOT GIVEN
OPEN FLOW, MCFD	60000	60000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	72.7	7.7
ETHANE	21.2	19.0	15.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.6	6.9	76.7
OXYGEN	0.3	0.6	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.44	0.39	0.25
HEATING VALUE*	1072	1077	350
SPECIFIC GRAVITY	0.701	0.681	0.947

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7777 SAMPLE 1884	INDEX 7778 SAMPLE 1921	INDEX 7779 SAMPLE 2081
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS B-1	JOHNSON A-1	JOHNSON NO. 1
LOCATION	SEC. 11, BLK. Y2, CR&CGN	SEC. 4, BLK. Y-2, TTRR SUR.	SEC. 6, BLK. 1, B&B SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CONTINENTAL OIL CO.
COMPLETED	03/18/24	05/10/24	10/19/26
SAMPLED	09/27/29	01/10/30	06/26/30
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2657	2265	3104
WELLHEAD PRESSURE,PSIG	429	415	390
OPEN FLOW, MCFD	33770	11000	70000
COMPONENT, MOLE PCT			
METHANE	73.5	71.2	66.7
ETHANE	15.2	19.0	21.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.6	8.7	10.0
OXYGEN	0.9	0.3	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.3	0.5
HELIUM	0.43	0.45	0.39
HEATING VALUE*	1017	1062	1066
SPECIFIC GRAVITY	0.678	0.687	0.710

	INDEX 7780 SAMPLE 2238	INDEX 7781 SAMPLE 2590	INDEX 7782 SAMPLE 3364
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	M. H. REED NO. 1	DUNAWAY A-2	BIVINS NO. F-1
LOCATION	MCDONALD SUR.	SEC. 5, BLK. Y-2, TTRR SUR.	SEC. 13, BLK. Y-2, TTRR SUR.
OWNER	PRAIRIE OIL & GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	11/01/30	10/18/32	NOT GIVEN
SAMPLED	10/31/30	01/20/33	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2465	2260	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	370	NOT GIVEN
OPEN FLOW, MCFD	14000	38000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	63.3	72.2
ETHANE	17.8	24.2	18.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.0	10.6	8.6
OXYGEN	0.1	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.5	0.2
HELIUM	0.44	0.45	0.48
HEATING VALUE*	1072	1075	1058
SPECIFIC GRAVITY	0.674	0.726	0.681

	INDEX 7783 SAMPLE 3375	INDEX 7784 SAMPLE 3376	INDEX 7785 SAMPLE 3377
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. B-1	DUNAWAY NO. B-1	BOST NO. C-1
LOCATION	SEC. 9, BLK. Y-2, TTRR SUR.	SEC. 5, BLK. Y-2, TTRR SUR.	SEC. 10, BLK. Y-2, TTRR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.0	72.2	70.4
ETHANE	18.6	18.2	18.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	8.8	10.2
OXYGEN	0.5	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.49	0.39	0.47
HEATING VALUE*	1042	1058	1039
SPECIFIC GRAVITY	0.691	0.762	0.689

	INDEX 7786 SAMPLE 3382	INDEX 7787 SAMPLE 3389	INDEX 7788 SAMPLE 3977
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. A-1	DUNAWAY NO. A-1	JOHNSON NO. A-1-G
LOCATION	SEC. 6, BLK. Y-2, TTRR SUR.	SEC. 5, BLK. Y-2, TTRR SUR.	SEC. 1, BLK. Y-2, TTRR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	TEXOMA NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/02/30
SAMPLED	NOT GIVEN	NOT GIVEN	12/22/44
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2305
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	18470
COMPONENT, MOLE PCT			
METHANE	70.6	71.6	75.0
ETHANE	19.5	18.3	16.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.9	8.8	7.6
OXYGEN	0.3	0.5	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.42	0.31	0.47
HEATING VALUE*	1045	1053	1047
SPECIFIC GRAVITY	0.689	0.685	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7789 SAMPLE 5332		INDEX 7790 SAMPLE 5356		INDEX 7791 SAMPLE 5358	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HUTCHINSON		HUTCHINSON		HUTCHINSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	STEWART NO. 29		C. C. WHITTENBURG A NO. 38		LOGAN NO. A-20	
LOCATION	SEC. 19, BLK. M-16, AB&M SUR		LOT 43, BLK. 3, WM. NEIL SUR		SEC. 135, BLK. 5-T, T&NO SUR	
OWNER	SHAMROCK OIL & GAS CORP.		CONTINENTAL OIL CO.		SHAMROCK OIL & GAS CORP.	
COMPLETED	09/05/52		10/01/52		10/15/52	
SAMPLED	11/20/52		12/12/52		12/13/52	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2870		2942		3120	
WELLHEAD PRESSURE,PSIG	262		241		302	
OPEN FLOW, MCFD	2317		758		241	
COMPONENT, MOLE PCT						
METHANE	76.3		75.0		74.7	
ETHANE	7.2		7.3		8.3	
PROPANE	4.4		4.7		4.6	
N-BUTANE	1.4		1.3		0.9	
ISOBUTANE	0.4		0.6		0.5	
N-PENTANE	0.4		0.3		0.3	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	8.8		9.9		9.9	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		TRACE	
CARBON DIOXIDE	0.4		0.1		0.1	
HELIUM	0.38		0.40		0.47	
HEATING VALUE*	1113		1104		1099	
SPECIFIC GRAVITY	0.717		0.719		0.716	

	INDEX 7792 SAMPLE 5359		INDEX 7793 SAMPLE 5382		INDEX 7794 SAMPLE 5861	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HUTCHINSON		HUTCHINSON		HUTCHINSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	NORTH AMERICAN NO. 2		BURNETT NO. 6		JOHNSON RANCH B NO. 24	
LOCATION	SEC. 85, T4S, H&TC SUR.		SEC. 127, BLK. 5, H&GN SUR.		SEC. 38, BLK. Y, A&B SUR.	
OWNER	FRANK C. HENDERSON TRUSTS		J. GORDON BURCH		SINCLAIR OIL & GAS CO.	
COMPLETED	08/10/52		08/01/51		02/08/55	
SAMPLED	12/17/52		02/03/53		06/17/55	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2350		3160		2284	
WELLHEAD PRESSURE,PSIG	174		183		145	
OPEN FLOW, MCFD	39000		1300		12500	
COMPONENT, MOLE PCT						
METHANE	77.2		77.0		77.4	
ETHANE	5.9		6.6		6.3	
PROPANE	3.6		4.5		3.8	
N-BUTANE	1.1		1.4		1.4	
ISOBUTANE	0.5		0.7		0.7	
N-PENTANE	0.3		0.4		0.4	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.3	
NITROGEN	10.1		8.2		8.7	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.4		0.5	
HELIUM	0.47		0.35		0.41	
HEATING VALUE*	1070		1121		1111	
SPECIFIC GRAVITY	0.704		0.716		0.717	

	INDEX 7795 SAMPLE 7036		INDEX 7796 SAMPLE 7037		INDEX 7797 SAMPLE 7042	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HUTCHINSON		HUTCHINSON		HUTCHINSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	DUKE HEIRS NO. 1		YAKE B NO. 1		CARVER A NO. 2	
LOCATION	SEC. 4, BLK. J, H&GN SUR.		SEC. 2, BLK. M-26, TC&RR SUR		SEC. 4, W. M. NEIL SUR.	
OWNER	PANHANDLE PRODUCING CO.		PANHANDLE PRODUCING CO.		J. M. HUBER CORP.	
COMPLETED	12/04/53		01/01/58		07/-/58	
SAMPLED	04/23/59		04/23/59		04/27/59	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3038		2742		2915	
WELLHEAD PRESSURE,PSIG	151		133		119	
OPEN FLOW, MCFD	2162		855		1215	
COMPONENT, MOLE PCT						
METHANE	73.2		75.1		75.2	
ETHANE	7.9		7.2		7.9	
PROPANE	5.6		4.8		4.7	
N-BUTANE	1.9		1.8		1.5	
ISOBUTANE	1.0		0.9		0.7	
N-PENTANE	0.3		0.4		0.3	
ISOPENTANE	0.4		0.4		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.3		0.2	
NITROGEN	8.5		8.2		8.6	
OXYGEN	0.2		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		TRACE	
CARBON DIOXIDE	0.1		0.2		0.2	
HELIUM	0.30		0.30		0.40	
HEATING VALUE*	1176		1159		1139	
SPECIFIC GRAVITY	0.751		0.738		0.729	

	INDEX 7798 SAMPLE 7043		INDEX 7799 SAMPLE 7504		INDEX 7800 SAMPLE 7768	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HUTCHINSON		HUTCHINSON		HUTCHINSON	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	HERRING A NO. 8		JATEN NO. 3		BIVINS A-160	
LOCATION	E. ALMAGUEI SUR.		SEC. 12, BLK. Y, M&C SUR.		SEC. 90, BLK. 46, H&TC SUR.	
OWNER	SKELLY OIL CO.		CREST EXPLORATION CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	NOT GIVEN		09/10/59		10/24/60	
SAMPLED	04/27/59		12/18/60		11/14/60	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY&GR. WASH	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2785		2682		2170	
WELLHEAD PRESSURE,PSIG	163		97		160	
OPEN FLOW, MCFD	540		1800		16400	
COMPONENT, MOLE PCT						
METHANE	73.0		76.3		77.0	
ETHANE	8.6		6.8		6.4	
PROPANE	5.1		5.5		3.8	
N-BUTANE	1.5		1.5		1.3	
ISOBUTANE	0.7		0.5		0.8	
N-PENTANE	0.3		0.4		0.3	
ISOPENTANE	0.2		0.2		0.4	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.3		0.2	
NITROGEN	9.9		7.7		8.9	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.4	
HELIUM	0.30		0.40		0.40	
HEATING VALUE*	1141		1150		1108	
SPECIFIC GRAVITY	0.741		0.726		0.715	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7801 SAMPLE 7769	INDEX 7802 SAMPLE 8196	INDEX 7803 SAMPLE 8199
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-161	BOST NO. 3-R	BOST NO. 1R
LOCATION	SEC. 13, BLK. Y-2, GB&CG SUR	SEC. 1, BLK. Y-2, TT&RR SUR.	SEC. 11, BLK. Y-2, TT&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/28/60	NOT GIVEN	NOT GIVEN
SAMPLED	11/00/60	09/13/61	09/13/61
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-TUBB	PERM-TUBB
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2280	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	196	0	27
OPEN FLOW, MCFD	22300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.0	72.8	80.7
ETHANE	6.3	5.6	6.4
PROPANE	3.6	2.2	2.6
N-BUTANE	1.2	0.5	0.6
ISOBUTANE	0.8	0.2	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	9.3	17.1	8.7
OXYGEN	TRACE	0.6	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.1
HELIUM	0.50	0.13	0.15
HEATING VALUE*	1098	932	1043
SPECIFIC GRAVITY	0.713	0.700	0.667

	INDEX 7804 SAMPLE 8861	INDEX 7805 SAMPLE 10029	INDEX 7806 SAMPLE 10756
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. C-3	BOST D-2	JOHNSON NO. A-3
LOCATION	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 1, BS&F SUR.	SEC. 4, Y-2, TTRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/09/62	07/25/65	10/07/66
SAMPLED	02/14/63	08/05/65	10/10/66
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY&GR. WASH	-DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2340	2404	2265
WELLHEAD PRESSURE,PSIG	172	149	126
OPEN FLOW, MCFD	25200	55000	30500
COMPONENT, MOLE PCT			
METHANE	76.8	76.1	75.7
ETHANE	6.2	6.4	6.3
PROPANE	3.6	4.0	5.1
N-BUTANE	1.3	1.4	0.2
ISOBUTANE	0.6	0.8	1.9
N-PENTANE	0.8	0.2	0.6
ISOPENTANE	0.3	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	9.5	9.4	9.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.50	0.44	0.44
HEATING VALUE*	1096	1113	1127
SPECIFIC GRAVITY	0.712	0.723	0.727

	INDEX 7807 SAMPLE 15135	INDEX 7808 SAMPLE 7341	INDEX 7809 SAMPLE 7448
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	FISCHER NO. 1	BIVINS NO. C-1	BIVINS A-2
LOCATION	SEC. 2, OL&CC SUR.	SEC. 13, GB&CNGRR SUR.	SEC. 90, BLK. 46, H&TC SUR.
OWNER	REX FULLER	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/29/71	01/15/60	--/--/25
SAMPLED	01/11/72	01/19/60	03/17/60
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3012	1602	1470
WELLHEAD PRESSURE,PSIG	392	NOT GIVEN	408
OPEN FLOW, MCFD	7100	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	68.1	81.1	81.7
ETHANE	7.6	6.6	6.7
PROPANE	3.7	2.4	2.5
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	1.3	0.2	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	18.3	8.2	7.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.91	0.10	0.10
HEATING VALUE*	957	1048	1057
SPECIFIC GRAVITY	0.721	0.664	0.663

	INDEX 7810 SAMPLE 7748	INDEX 7811 SAMPLE 7749	INDEX 7812 SAMPLE 7751
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	EVELYN NO. 2	INGERTON A NO. 3	JAY NO. 2
LOCATION	SEC. 42, BLK. 47, H&TC SUR.	SEC. 41, BLK. 47, H&TC SUR.	SEC. 40, BLK. 47, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	10/10/60	10/31/60	10/31/60
SAMPLED	11/01/60	11/01/60	11/01/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1530	1552	1622
WELLHEAD PRESSURE,PSIG	346	367	376
OPEN FLOW, MCFD	13500	4400	5200
COMPONENT, MOLE PCT			
METHANE	80.3	80.7	79.9
ETHANE	7.2	6.9	7.0
PROPANE	2.6	2.6	3.0
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.1	8.0	8.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.20	0.20
HEATING VALUE*	1058	1059	1069
SPECIFIC GRAVITY	0.670	0.670	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7813 SAMPLE 7767	INDEX 7814 SAMPLE 7795	INDEX 7815 SAMPLE 7800
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-160	BOST A 1R	BOST B-1R
LOCATION	SEC. 90, BLK. 46, H&TC SUR.	SEC. 14, BLK. Y2, GB&CNG SUR	SEC. 9, BLK. Y-2, TTRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	NOT GIVEN	11/--/60	12/12/60
SAMPLED	11/14/60	12/13/60	12/19/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1483	1766	1577
WELLHEAD PRESSURE,PSIG	405	365	377
OPEN FLOW, MCFD	8100	12250	4700
COMPONENT, MOLE PCT			
METHANE	82.0	81.5	82.6
ETHANE	6.6	6.8	6.7
PROPANE	2.3	2.6	1.7
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.5	7.6	7.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1053	1059	1044
SPECIFIC GRAVITY	0.661	0.665	0.656

	INDEX 7816 SAMPLE 7801	INDEX 7817 SAMPLE 7878	INDEX 7818 SAMPLE 7883
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS B-1R	SNOW NO. 9	SNOW NO. 10
LOCATION	SEC. 91, BLK. 46, H&TC SUR.	SEC.57, BLK. M-23, TC&RR SUR	SEC. 46, BLK. 47, H&TC SUR.
OWNER	ANADARKO PRODUCTION CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/12/60	12/08/60	12/12/60
SAMPLED	12/19/60	02/02/61	03/02/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1524	1539	1537
WELLHEAD PRESSURE,PSIG	403	391	392
OPEN FLOW, MCFD	9800	12600	13700
COMPONENT, MOLE PCT			
METHANE	81.6	80.5	81.9
ETHANE	6.9	7.0	6.8
PROPANE	2.6	2.6	2.4
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.5	8.3	7.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1057	1053	1053
SPECIFIC GRAVITY	0.662	0.667	0.661

	INDEX 7819 SAMPLE 7884	INDEX 7820 SAMPLE 7887	INDEX 7821 SAMPLE 7888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	SNOW NO. 9	REDCAVE B NO. 1	JOHNSON EB NO. 1
LOCATION	SEC. 57, BLK. M-23,TC&RR SUR	SEC. 80, BLK. 46, H&TC SUR.	SEC. 3, BLK. 1, B&B SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/08/60	02/16/61	02/24/61
SAMPLED	03/02/61	03/09/61	03/09/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1539	1569	1579
WELLHEAD PRESSURE,PSIG	395	339	375
OPEN FLOW, MCFD	12600	5420	710
COMPONENT, MOLE PCT			
METHANE	81.4	81.4	83.3
ETHANE	7.1	6.2	5.5
PROPANE	2.7	2.6	1.9
N-BUTANE	0.6	0.7	0.4
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	7.2	7.9	7.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.20	0.20
HEATING VALUE*	1066	1063	1043
SPECIFIC GRAVITY	0.666	0.671	0.655

	INDEX 7822 SAMPLE 7903	INDEX 7823 SAMPLE 7904	INDEX 7824 SAMPLE 8232
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	SNOW NO. 12	SNOW NO. 11	KERMICLE NO. 2
LOCATION	SEC. 3, J. POITEVENT SUR.	E. L. SNOW SUR.	LULA KERMICLE SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/02/61	02/01/61	08/15/61
SAMPLED	03/16/61	03/16/61	10/10/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1688	1737	1256
WELLHEAD PRESSURE,PSIG	404	371	398
OPEN FLOW, MCFD	6000	3450	13425
COMPONENT, MOLE PCT			
METHANE	81.3	82.0	81.6
ETHANE	7.0	6.7	6.5
PROPANE	2.4	2.5	2.6
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.8	7.3	7.7
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.20	0.15
HEATING VALUE*	1048	1057	1055
SPECIFIC GRAVITY	0.660	0.659	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7825 SAMPLE 8426	INDEX 7826 SAMPLE 8427	INDEX 7827 SAMPLE 8454
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BOST NO. 1R	BIVINS NO. 7R	BOST 3 R
LOCATION	SEC. 10, T-2, T&RR SUR.	SEC. 11, BLK. Y-2, GR&CNGSUR	SEC. 9, BLK. Y-2, TTRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/25/61	10/23/61	10/25/61
SAMPLED	03/02/62	03/02/62	03/14/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1646	1628	1606
WELLHEAD PRESSURE,PSIG	324	341	345
OPEN FLOW, MCFD	1250	4350	1800
COMPONENT, MOLE PCT			
METHANE	81.5	80.7	81.9
ETHANE	6.9	6.7	6.3
PROPANE	2.7	2.8	2.5
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	7.7	7.7	7.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.15	0.15	0.16
HEATING VALUE*	1059	1076	1052
SPECIFIC GRAVITY	0.665	0.676	0.664

	INDEX 7828 SAMPLE 8457	INDEX 7829 SAMPLE 8856	INDEX 7830 SAMPLE 9297
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BOST NO. 2 R	BIVINS NO. 8R	BIVINS NO. 18R
LOCATION	SEC. 6, BLK. Y-2, TTRR SUR.	SEC. 88, BLK. 46, H&TC SUR.	SEC. 13, BLK. Y-2, TTRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/23/61	08/27/62	09/20/63
SAMPLED	03/14/62	02/14/63	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1558	1580	1610
WELLHEAD PRESSURE,PSIG	341	334	307
OPEN FLOW, MCFD	4800	7500	4700
COMPONENT, MOLE PCT			
METHANE	81.7	82.0	81.7
ETHANE	6.4	6.4	6.6
PROPANE	2.5	2.7	2.4
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.9	7.4	7.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.10	0.15
HEATING VALUE*	1051	1060	1053
SPECIFIC GRAVITY	0.664	0.664	0.663

	INDEX 7831 SAMPLE 9299	INDEX 7832 SAMPLE 9301	INDEX 7833 SAMPLE 9312
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	DUNAWAY NO. 1R	JOHNSON NO. 1R	BIVINS NO. 17R
LOCATION	SEC. 5, BLK. Y-2, TTRR SUR.	SEC. 3, BLK. Y-2, TTRR SUR.	SEC. 90, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/15/63	09/13/63	11/18/63
SAMPLED	04/14/64	04/14/64	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1612	1611	1552
WELLHEAD PRESSURE,PSIG	305	363	310
OPEN FLOW, MCFD	4100	4900	5300
COMPONENT, MOLE PCT			
METHANE	82.1	82.0	82.2
ETHANE	6.1	6.5	6.4
PROPANE	2.2	2.5	2.4
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.1	7.6	7.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.15	0.15	0.15
HEATING VALUE*	1043	1053	1050
SPECIFIC GRAVITY	0.661	0.660	0.660

	INDEX 7834 SAMPLE 9800	INDEX 7835 SAMPLE 12273	INDEX 7836 SAMPLE 12274
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	SHIRLEY	SHIRLEY
WELL NAME	JOHNSON 2-R	JENKINS NO. 1	JARVIS NO. 1
LOCATION	SEC. 3, BLK Y-2, TTRR SUR.	SEC. 118, BLK. 5-T,T+NO SUR.	SEC. 83, BLK. 5-T, TANO SUR.
OWNER	COLORADO INTERSTATE GAS CO.	BLAIK OIL CO.	BLAIK OIL CO.
COMPLETED	08/20/64	10/04/68	03/03/69
SAMPLED	03/16/65	06/01/70	06/01/70
FORMATION	PERM-RED CAVE	PENN-CLEVELAND	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1612	4015	5392
WELLHEAD PRESSURE,PSIG	321	770	1200
OPEN FLOW, MCFD	2750	1639	4054
COMPONENT, MOLE PCT			
METHANE	81.8	88.4	85.5
ETHANE	6.2	4.3	3.9
PROPANE	2.8	2.3	2.5
N-BUTANE	2.6	0.7	0.7
ISOBUTANE	1.3	0.4	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.0	3.0	6.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.15	0.13	0.22
HEATING VALUE*	1046	1071	1055
SPECIFIC GRAVITY	0.663	0.648	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7837 SAMPLE 12690	INDEX 7838 SAMPLE 15033	INDEX 7839 SAMPLE 11250
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	IRION	IRION
FIELD	BROOKS	BURNT ROCK	DOVE CREEK
WELL NAME	BROOKS NO. 1	SHEEN "3061" NO. 1	WINTERBOTHAM D NO. 1
LOCATION	NOT GIVEN	SEC.3061,BLK,28,H&TCRR SUR.	SEC. 27, BLK. 21, H&TC SUR.
OWNER	CENARD OIL & GAS CO.	UNION TEXAS PETROLEUM	SKELLY OIL CO.
COMPLETED	NOT GIVEN	08/03/76	04/14/66
SAMPLED	02/--/71	06/23/77	12/28/67
FORMATION	PENN-CANYON NO. 3	PENN-CANYON	PENN-CANYON C
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	6559	6432
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1695	2190
OPEN FLOW, MCFD	NOT GIVEN	3512	3100
COMPONENT, MOLE PCT			
METHANE	75.4	39.3	74.4
ETHANE	9.8	5.7	9.7
PROPANE	5.3	4.3	4.9
N-BUTANE	1.2	1.4	1.3
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.4	0.7
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	6.4	2.6	7.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	45.4	0.4
HELIUM	0.13	0.06	0.14
HEATING VALUE*	1177	720	1177
SPECIFIC GRAVITY	0.731	1.125	0.741

	INDEX 7840 SAMPLE 11251	INDEX 7841 SAMPLE 15076	INDEX 7842 SAMPLE 14886
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	IRION	IRION
FIELD	DOVE CREEK	ELA SUGG	SPRAYBERRY
WELL NAME	WINTERBOTHAM D NO. 1	ELA C. SUGG "G" NO. 6	ELA C. SUGG G NO. 6
LOCATION	SEC. 27, BLK. 21, H&TC SUR.	SEC.103,BLK. 14, H&TC SUR.	SEC.103, BLK. 14, H&TC SUR.
OWNER	SKELLY OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	03/14/66	06/16/76	06/16/76
SAMPLED	12/28/67	07/08/77	01/25/77
FORMATION	PENN-CANYON D	PERM-WICHITA ALBANY	PERM-WICHITA ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6473	7814	7900
WELLHEAD PRESSURE,PSIG	2245	2160	2150
OPEN FLOW, MCFD	4600	9100	9000
COMPONENT, MOLE PCT			
METHANE	75.6	75.8	71.4
ETHANE	9.4	12.2	12.3
PROPANE	4.1	4.6	6.6
N-BUTANE	1.1	1.2	1.8
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	7.7	3.9	4.7
OXYGEN	0.0	0.3	0.6
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.4
HELIUM	0.16	0.07	0.07
HEATING VALUE*	1140	1194	1257
SPECIFIC GRAVITY	0.722	0.726	0.772

	INDEX 7843 SAMPLE 6010	INDEX 7844 SAMPLE 4019	INDEX 7845 SAMPLE 1790
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	IRION	JACK
FIELD	SUGG	TANKERSLEY	BRYSON
WELL NAME	ELLA SUGG A-NO. 1	TANKERSLAY EST. NO. 2	BRYSON NO. 2
LOCATION	SEC. 95, BLK. 14, H&TC SUR.	SEC. 10, GC&SF SUR.	ISAAC HUGHSON SUR.
OWNER	SUNRAY MID-CONTINENT OIL CO.	SHELL OIL CO.	PRAIRIE OIL & GAS CO.
COMPLETED	10/19/55	NOT GIVEN	04/19/29
SAMPLED	01/31/56	05/08/45	06/07/29
FORMATION	PERM-CLEARFORK	PENN-STRAWN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	420
DEPTH, FEET	4535	7198	3150
WELLHEAD PRESSURE,PSIG	550	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12300
COMPONENT, MOLE PCT			
METHANE	74.6	54.2	70.9
ETHANE	8.7	28.5	20.1
PROPANE	7.7	---	---
N-BUTANE	2.4	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.9	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.5	---	---
NITROGEN	4.0	15.5	8.6
OXYGEN	TRACE	0.6	0.2
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	1.1	0.2
HELIUM	0.08	0.07	0.24
HEATING VALUE*	1294	1060	1078
SPECIFIC GRAVITY	0.771	0.773	0.693

	INDEX 7846 SAMPLE 5289	INDEX 7847 SAMPLE 5364	INDEX 7848 SAMPLE 11938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	BRYSON S	BRYSON S	CAMPSEY
WELL NAME	CALLIE THOMASON NO. 1	MARY FIELDS NO. 1	WOOD CAMPSEY NO. 1
LOCATION	SMITH SUR.	BROWN SUR. NO. A72	W. BECK SUR. A2007
OWNER	BRYSON PIPELINE & REF. CO.	O. P. LEONARD	GEORGE MITCHELL & ASSOC. INC
COMPLETED	05/18/52	NOT GIVEN	10/10/68
SAMPLED	10/06/52	07/14/52	06/13/69
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-ATOKA CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	1801	NOT GIVEN	5374
WELLHEAD PRESSURE,PSIG	700	630	1916
OPEN FLOW, MCFD	8000	15000	7000
COMPONENT, MOLE PCT			
METHANE	75.6	75.8	78.9
ETHANE	4.8	4.8	8.4
PROPANE	3.2	3.3	5.1
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	14.2	14.1	4.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.33	0.34	0.15
HEATING VALUE*	1000	999	1204
SPECIFIC GRAVITY	0.698	0.695	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7849 SAMPLE 4187		INDEX 7850 SAMPLE 12831		INDEX 7851 SAMPLE 12832	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	CHERRYHOMES		CRAFTON W		CRAFTON W	
WELL NAME	T. H. CHERRYHOMES NO. C-1		ROY CHERRYHOMES NO. 7		ROY CHERRYHOMES NO. E-3	
LOCATION	FLORIDA PAYNE SUR. A-1564		3 MI. NE OF CUNDIFF		3 MI. NE OF CUNDIFF	
OWNER	CONTINENTAL OIL CO.		AMERICAN DRILLING CORP.		AMERICAN DRILLING CORP.	
COMPLETED	08/15/46		08/26/66		07/05/69	
SAMPLED	12/05/46		05/17/71		05/17/71	
FORMATION	PENN-		PENN-CADDO		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	4476		5358		5374	
WELLHEAD PRESSURE,PSIG	1250		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	768		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	73.5		76.6		73.1	
ETHANE	20.9		7.9		10.8	
PROPANE	---		5.9		6.9	
N-BUTANE	---		1.6		1.9	
ISOBUTANE	---		0.9		0.9	
N-PENTANE	---		0.3		0.5	
ISOPENTANE	---		0.6		0.6	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.2		0.3	
NITROGEN	4.9		5.4		3.9	
OXYGEN	0.1		0.1		0.4	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.4		0.2		0.4	
HELIUM	0.22		0.09		0.11	
HEATING VALUE*	1119		1207		1274	
SPECIFIC GRAVITY	0.682		0.739		0.771	

	INDEX 7852 SAMPLE 12656		INDEX 7853 SAMPLE 5885		INDEX 7854 SAMPLE 12292	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	DARNER-HAMMON		DEES		DUNES	
WELL NAME	H. FRANKLIN		SHAWN NO. A-1		JOLLY A NO. 1	
LOCATION	BLK. 41, HENDERSON SCH. LAND		PLEASANT FOLAND SUR.NO.A-497		SEC. 2 C.H. BONNER SUR.A1364	
OWNER	HAMMON PROPERTIES		F. KIRK JOHNSON		RIDDLE & GOTTLIEB	
COMPLETED	08/--/60		03/28/55		03/25/69	
SAMPLED	02/05/71		07/25/55		06/12/70	
FORMATION	PENN-CADDO		PENN-MARBLE FALLS		PENN-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	4253		5355		5804	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1900		830	
OPEN FLOW, MCFD	95		10000		1920	
COMPONENT, MOLE PCT						
METHANE	78.8		81.0		79.1	
ETHANE	8.5		8.4		8.6	
PROPANE	5.8		4.6		5.5	
N-BUTANE	1.7		1.4		1.3	
ISOBUTANE	0.7		0.6		0.8	
N-PENTANE	0.5		0.3		0.4	
ISOPENTANE	0.3		0.5		0.2	
CYCLOPENTANE	0.2		0.2		0.1	
HEXANES PLUS	0.3		0.3		0.2	
NITROGEN	2.6		2.2		3.5	
OXYGEN	0.2		TRACE		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.1	
HELIUM	0.10		0.09		0.15	
HEATING VALUE*	1239		1215		1209	
SPECIFIC GRAVITY	0.732		0.708		0.717	

	INDEX 7855 SAMPLE 12830		INDEX 7856 SAMPLE 13074		INDEX 7857 SAMPLE 14185	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	JACK COUNTY REGULAR		JACK COUNTY REGULAR		JACK COUNTY REGULAR	
WELL NAME	ROY CHERRYHOMES NO. C-5		RIDDLE NO. 1		E.M. CROFT NO. 1	
LOCATION	3 MI. NE OF CUNDIFF		BLK. 29, WOOD CSL SUR.		SEC. 2731, TE&L SUR. A-649	
OWNER	AMERICAN DRILLING CORP.		NATOL PETROLEUM CORP.		MCMAHON-BULLINGTON	
COMPLETED	01/31/65		07/10/70		11/23/73	
SAMPLED	05/17/71		10/09/71		10/23/74	
FORMATION	PENN-CONGLOMERATE		PENN-BEND CONGLOMERATE		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5311		5680		4490	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		865		1600	
OPEN FLOW, MCFD	NOT GIVEN		8000		3400	
COMPONENT, MOLE PCT						
METHANE	72.8		73.1		77.2	
ETHANE	8.3		9.5		8.3	
PROPANE	4.5		6.3		6.1	
N-BUTANE	4.6		1.3		1.8	
ISOBUTANE	2.6		0.8		0.9	
N-PENTANE	0.0		0.5		0.4	
ISOPENTANE	2.4		0.1		0.5	
CYCLOPENTANE	0.2		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.3	
NITROGEN	6.0		7.3		3.9	
OXYGEN	0.0		0.9		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.1		0.3	
HELIUM	0.09		0.11		0.14	
HEATING VALUE*	1285		1176		1238	
SPECIFIC GRAVITY	0.805		0.747		0.742	

	INDEX 7858 SAMPLE 15066		INDEX 7859 SAMPLE 12607		INDEX 7860 SAMPLE 13719	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	JAMESBORO S		KEN-RICH		KRAMBERGER	
WELL NAME	M. E. RICHARDS "16" NO. 1		L. A. WORTHINGTON NO. 12		MARY E. LINDSEY NO. 1	
LOCATION	JAMES ANDERS SUR. A-16		J. W. BUCKNER SUR. A-33		1 MI. WRIGHT SUR. A-898	
OWNER	SOUTHWESTERN GAS PIPELINE		GEORGE MITCHELL & ASSOC. INC		GEORGE MITCHELL & ASSOC. INC	
COMPLETED	01/12/76		NOT GIVEN		12/13/72	
SAMPLED	07/--/77		12/22/70		09/17/73	
FORMATION	PENN-CONGLOMERATE		PENN-CADDO CONGLOMERATE		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5234		5050		5239	
WELLHEAD PRESSURE,PSIG	2005		547		1415	
OPEN FLOW, MCFD	2400		33		11750	
COMPONENT, MOLE PCT						
METHANE	79.1		76.1		80.2	
ETHANE	8.7		9.4		8.4	
PROPANE	4.8		6.6		4.6	
N-BUTANE	1.4		1.8		1.2	
ISOBUTANE	0.5		0.8		0.6	
N-PENTANE	0.4		0.3		0.3	
ISOPENTANE	0.2		0.7		0.4	
CYCLOPENTANE	0.1		0.2		0.2	
HEXANES PLUS	0.2		0.4		0.4	
NITROGEN	4.4		3.4		2.3	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.3		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.14		0.10		0.14	
HEATING VALUE*	1185		1262		1201	
SPECIFIC GRAVITY	0.713		0.756		0.711	

* DRY AT 14.65 PSIA AND 60 DEG. F. AND 1 ATM. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7861 SAMPLE 3700		INDEX 7862 SAMPLE 12557		INDEX 7863 SAMPLE 4863	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	L. N. WOLFE		MEANDER W		NEW	
WELL NAME	NO. 1		DAVIS C NO. 3		S. CASTLEBERRY	
LOCATION	SEC. 3341, TE&L SUR.		NOT GIVEN		J. J. STEPHENS SUR. ABS. 535	
OWNER	SHELL OIL CO.		BURK ROYALTY CO.		K B OIL CO. & L.H. SIMPSON	
COMPLETED	02/18/43		01/08/61		11/19/49	
SAMPLED	11/24/43		12/01/70		03/16/50	
FORMATION	PENN-CADDO		PENN-ATOKA		NOT GIVEN	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	4345		5600		5316	
WELLHEAD PRESSURE,PSIG	1975		1260		1500	
OPEN FLOW, MCFD	500		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	61.8		79.9		81.1	
ETHANE	33.9		8.2		8.2	
PROPANE	---		5.1		4.3	
N-BUTANE	---		1.2		1.1	
ISOBUTANE	---		0.6		0.6	
N-PENTANE	---		0.3		0.3	
ISOPENTANE	---		0.3		TRACE	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.3		0.3	
NITROGEN	3.5		3.3		3.4	
OXYGEN	0.4		0.1		0.1	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		TRACE		TRACE	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.3		0.3		0.3	
HELIUM	0.13		0.17		0.16	
HEATING VALUE*	1234		1194		1169	
SPECIFIC GRAVITY	0.741		0.710		0.695	

	INDEX 7864 SAMPLE 12555		INDEX 7865 SAMPLE 4829		INDEX 7866 SAMPLE 12570	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	NEWPORT SE		NOT GIVEN		PERRIN N	
WELL NAME	S. B. FLINT NO. 1		G. W. FOWLER NO. 1		KEITH-TURNER NO. 1	
LOCATION	1 MI. SE OF NEWPORT		NOT GIVEN		T. C. ARGO SUR. A-1899	
OWNER	E. C. JOHNSTON CO.		MID-CONTINENT PETROLEUM CORP		PETROLEUM CORP. OF TEXAS	
COMPLETED	NOT GIVEN		11/--/49		NOT GIVEN	
SAMPLED	11/29/70		12/29/49		12/01/70	
FORMATION	PENN-ATOKA		-CONGLOMERATE		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	NOT GIVEN		5500		5034	
WELLHEAD PRESSURE,PSIG	600		2500		685	
OPEN FLOW, MCFD	200		NOT GIVEN		180	
COMPONENT, MOLE PCT						
METHANE	74.8		80.8		80.3	
ETHANE	9.7		7.8		8.8	
PROPANE	6.6		4.2		4.7	
N-BUTANE	1.8		1.4		1.1	
ISOBUTANE	0.7		0.6		0.7	
N-PENTANE	0.4		0.6		0.3	
ISOPENTANE	0.4		0.0		0.4	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.5		0.2	
NITROGEN	3.6		3.1		3.0	
OXYGEN	TRACE		0.2		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	1.1		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.3		0.6		0.2	
HELIUM	0.16		0.12		0.12	
HEATING VALUE*	1244		1192		1198	
SPECIFIC GRAVITY	0.743		0.710		0.706	

	INDEX 7867 SAMPLE 12559		INDEX 7868 SAMPLE 12561		INDEX 7869 SAMPLE 4128	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	RIGGS N		RISCH SE		WILDCAT	
WELL NAME	NORTH RIGGS TRACT 1 NO. 2		C. G. WORKMAN		W. H. HEATH NO. 1	
LOCATION	F. SANDERS SUR. A-1001		SEC.49,BLK.1,HENDERSON SUR.		4 MI. ENE OF PERRIN	
OWNER	GULF OIL CO. - U.S.		PETROLEUM CORP. OF TEXAS		CONTINENTAL OIL CO.	
COMPLETED	04/14/53		NOT GIVEN		--/--/46	
SAMPLED	11/30/70		12/01/70		10/07/46	
FORMATION	PENN-CONGLOMERATE		PENN-CADDO CONGLOMERATE		PENN-	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5054		4349		4432	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		450		1740	
OPEN FLOW, MCFD	NOT GIVEN		364		1450	
COMPONENT, MOLE PCT						
METHANE	75.9		67.8		64.9	
ETHANE	8.5		12.2		30.5	
PROPANE	6.6		9.9		---	
N-BUTANE	2.3		3.0		---	
ISOBUTANE	1.4		2.0		---	
N-PENTANE	0.9		0.9		---	
ISOPENTANE	0.3		0.7		---	
CYCLOPENTANE	0.6		0.3		---	
HEXANES PLUS	1.3		0.8		---	
NITROGEN	1.7		2.1		3.6	
OXYGEN	TRACE		TRACE		0.5	
ARGON	0.0		0.0		---	
HYDROGEN	TRACE		TRACE		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		0.3		0.4	
HELIUM	0.09		0.07		0.14	
HEATING VALUE*	1358		1451		1204	
SPECIFIC GRAVITY	0.794		0.858		0.727	

	INDEX 7870 SAMPLE 4889		INDEX 7871 SAMPLE 5018		INDEX 7872 SAMPLE 5407	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACK	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	HATTIE MAE WRIGHT NO. 1		J. W. CAMPBELL A NO. 2		CHERRY-HOLMES F-1	
LOCATION	J. W. BATES SUR. NO. A-47		NOT GIVEN		I. WAMPLER SUR. A-2180	
OWNER	ROSSER & PENDLE,INC. ET AL.		MID-CONTINENT PETROLEUM CORP		RUSSELL MAGUIRE	
COMPLETED	02/18/50		08/05/50		12/22/52	
SAMPLED	05/19/50		03/07/51		03/04/53	
FORMATION	PENN-MARBLE FALLS		-CONGLOMERATE		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	4674		5300		5033	
WELLHEAD PRESSURE,PSIG	1560		2700		1500	
OPEN FLOW, MCFD	7500		4700		4500	
COMPONENT, MOLE PCT						
METHANE	84.3		83.3		83.0	
ETHANE	6.7		7.9		6.4	
PROPANE	4.0		3.7		3.9	
N-BUTANE	1.1		1.0		0.9	
ISOBUTANE	0.4		0.4		0.7	
N-PENTANE	0.3		0.3		0.1	
ISOPENTANE	TRACE		TRACE		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.4		0.2		0.2	
NITROGEN	2.3		2.6		3.9	
OXYGEN	0.1		0.1		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	---		0.1		TRACE	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.3		0.4	
HELIUM	0.18		0.13		0.19	
HEATING VALUE*	1164		1151		1137	
SPECIFIC GRAVITY	0.679		0.676		0.681	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7873 SAMPLE 3804		INDEX 7874 SAMPLE 12560		INDEX 7875 SAMPLE 12006	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACK		JACK		JACKSON	
FIELD	WOLFF		WORSHAM-STEED		APPLING	
WELL NAME	L. N. WOLFE NO. 2		GRACE-KELSAY NO. 1		STATE TRACT 225 NO. 1	
LOCATION	G. S. NEWMAN SUR. A-1148		B. F. TERRY SUR. A-611		CARANCAHUA BAY	
OWNER	SHELL OIL CO.		PETROLEUM CORP. OF TEXAS		CROWN CENTRAL PETR. CORP.	
COMPLETED	03/03/44		NOT GIVEN		02/05/68	
SAMPLED	04/21/44		12/01/70		08/20/69	
FORMATION	PENN-ATOKA		NOT GIVEN		EOCE-PETERSON	
GEOLOGIC PROVINCE CODE	420		420		220	
DEPTH, FEET	4928		4356		8307	
WELLHEAD PRESSURE,PSIG	1979		90		1700	
OPEN FLOW, MCFD	8000		80		6400	
COMPONENT, MOLE PCT						
METHANE	66.8		76.7		82.1	
ETHANE	26.8		9.2		6.7	
PROPANE	---		7.2		3.1	
N-BUTANE	---		1.7		0.7	
ISOBUTANE	---		1.0		0.9	
N-PENTANE	---		0.6		0.3	
ISOPENTANE	---		TRACE		0.2	
CYCLOPENTANE	---		0.2		0.1	
HEXANES PLUS	---		0.4		0.4	
NITROGEN	5.7		2.4		4.2	
OXYGEN	0.8		TRACE		0.8	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.1		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.4	
HELIUM	0.10		0.11		0.01	
HEATING VALUE*	1157		1274		1132	
SPECIFIC GRAVITY	0.714		0.751		0.689	

	INDEX 7876 SAMPLE 16025		INDEX 7877 SAMPLE 15446		INDEX 7878 SAMPLE 12618	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	APPLING		CARANCAHUA E		CORDELE W	
WELL NAME	FLOYD APPLING NO. 1		R. B. TRULL NO. 2		YAUSSI B NO. 7	
LOCATION	JOHN R. WICKHAM SUR. A-274		PATRICK GREEN SUR. A-25		J. G. WHITE SUR. A-278	
OWNER	DAVIS OIL CO.		DOW CHEMICAL CO.		CORDELE OPERATING CO.	
COMPLETED	06/--/78		10/22/76		12/02/70	
SAMPLED	08/01/80		10/19/78		12/30/70	
FORMATION	OLIG-FRIO		MIOC-		MIOC-KERN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9832		1873		3123	
WELLHEAD PRESSURE,PSIG	1400		410		1228	
OPEN FLOW, MCFD	2060		8600		17000	
COMPONENT, MOLE PCT						
METHANE	82.4		91.6		99.2	
ETHANE	4.4		3.6		0.0	
PROPANE	1.9		1.7		TRACE	
N-BUTANE	0.5		0.4		0.0	
ISOBUTANE	1.0		0.7		0.0	
N-PENTANE	0.2		0.1		0.0	
ISOPENTANE	0.3		0.3		0.0	
CYCLOPENTANE	0.1		0.3		0.0	
HEXANES PLUS	0.3		0.5		0.0	
NITROGEN	6.5		0.7		0.4	
OXYGEN	1.6		TRACE		0.0	
ARGON	0.1		0.0		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.1		0.4	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1054		1128		1005	
SPECIFIC GRAVITY	0.682		0.635		0.560	

	INDEX 7879 SAMPLE 12619		INDEX 7880 SAMPLE 4748		INDEX 7881 SAMPLE 12549	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	CORDELE W		CORDELLE E		GANADO	
WELL NAME	KERR ACKLEY NO. 4		E. CIHAL NO. 1		ROSS GAS UNIT NO. 3	
LOCATION	A. BAKER SUR. A-96		SEC. 5, BLK. 2, I&GN SUR.		NOT GIVEN	
OWNER	CORDELE OPERATING CO.		P. B. RUTHERFORD		TEXACO INC.	
COMPLETED	02/20/70		03/13/49		02/08/62	
SAMPLED	12/30/70		05/23/49		11/19/70	
FORMATION	MIOC-2250 FT. STRAY		MIOC-CATAHOULA		MIOC-3800 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2259		2763		3838	
WELLHEAD PRESSURE,PSIG	970		1400		1105	
OPEN FLOW, MCFD	880		93000		54200	
COMPONENT, MOLE PCT						
METHANE	99.5		98.7		98.8	
ETHANE	0.0		0.2		0.0	
PROPANE	TRACE		0.2		0.1	
N-BUTANE	0.0		0.2		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.1		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		TRACE		0.0	
HEXANES PLUS	0.0		0.2		0.0	
NITROGEN	0.5		0.4		1.0	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE		0.0		TRACE	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1008		1028		1004	
SPECIFIC GRAVITY	0.556		0.569		0.559	

	INDEX 7882 SAMPLE 13929		INDEX 7883 SAMPLE 15186		INDEX 7884 SAMPLE 13876	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	GANADO		GANADO NW		GANADO W	
WELL NAME	BERTHA COPSEY NO. 3		C. F. SPENCER ESTATE NO. 4		MINTA DOLESH B NO. 4	
LOCATION	GEORGE SOUTHERLAND SUR. A-75		A. B. WILLIAMS SUR. A-270		A. ROGERS SUR. A-65	
OWNER	R. H. FASELKE		MILLICAN OIL CO.		CLINTON OIL CO.	
COMPLETED	12/28/72		08/05/75		08/31/73	
SAMPLED	02/26/74		01/04/78		01/28/74	
FORMATION	OLIG-FRIO		MIOC-CATAHOULA		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5678		3160		4756	
WELLHEAD PRESSURE,PSIG	1963		1248		440	
OPEN FLOW, MCFD	8400		34000		3600	
COMPONENT, MOLE PCT						
METHANE	98.9		98.8		95.2	
ETHANE	0.1		0.1		2.8	
PROPANE	0.1		0.1		0.7	
N-BUTANE	0.0		TRACE		0.1	
ISOBUTANE	0.0		TRACE		0.2	
N-PENTANE	0.0		0.1		TRACE	
ISOPENTANE	0.0		0.0		0.1	
CYCLOPENTANE	0.0		0.1		TRACE	
HEXANES PLUS	0.0		0.1		TRACE	
NITROGEN	1.0		0.4		0.2	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.6	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1006		1018		1047	
SPECIFIC GRAVITY	0.561		0.567		0.598	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7885 SAMPLE 14751	INDEX 7886 SAMPLE 4996	INDEX 7887 SAMPLE 15581
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	HARMONY	KOOP BEND	LA WARD N
WELL NAME	MAGGIE BRANCH NO. 26-H	FRANCIS-KOOP NO. 1	T. A. GRAVES NO. 5
LOCATION	G.F.&M.T. SIMONS SUR., A-291	NOT GIVEN	PATRICK SCOTT SUR. A-69
OWNER	INTERCOASTAL OPERATING CO.	J. M. HURER CORP.	PETRO-LEWIS CORP.
COMPLETED	07/07/73	07/05/50	03/03/77
SAMPLED	09/07/76	02/01/51	03/19/79
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6490	6260	5856
WELLHEAD PRESSURE,PSIG	900	NOT GIVEN	2000
OPEN FLOW, MCFD	1200	9000	9400
COMPONENT, MOLE PCT			
METHANE	94.1	94.3	94.2
ETHANE	3.1	3.2	3.2
PROPANE	1.1	1.2	0.8
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.4	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1078	1070	1084
SPECIFIC GRAVITY	0.604	0.595	0.605

	INDEX 7888 SAMPLE 15582	INDEX 7889 SAMPLE 3811	INDEX 7890 SAMPLE 3997
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	LA WARD N	LAWARD N	LOLITA
WELL NAME	T. A. GRAVES NO. 5	J. A. GRAVES	T. J. MAYS NO. 1
LOCATION	PATRICK SCOTT SUR. A-69	NOT GIVEN	NOT GIVEN
OWNER	PETRO-LEWIS CORP.	BARNSDALL OIL CO.	LOUIS CROUCH
COMPLETED	03/03/77	02/10/43	04/06/44
SAMPLED	NOT GIVEN	04/14/44	03/20/45
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6092	5091	5830
WELLHEAD PRESSURE,PSIG	2125	2120	2065
OPEN FLOW, MCFD	19500	20000	6500
COMPONENT, MOLE PCT			
METHANE	93.8	93.0	89.9
ETHANE	2.9	3.1	9.4
PROPANE	1.2	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	3.5	0.2
OXYGEN	TRACE	0.4	0.4
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.01	0.00	0.00
HEATING VALUE*	1076	998	1079
SPECIFIC GRAVITY	0.605	0.586	0.605

	INDEX 7891 SAMPLE 10125	INDEX 7892 SAMPLE 3877	INDEX 7893 SAMPLE 15400
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MAUDE B. TRAYLOR N	MAYO	MCDANIEL
WELL NAME	W. L. TRAYLOR NO. 2	LELA STONER NO. 2	WILLIAM BORCHERS NO. 3
LOCATION	HUGH MCGUFFIN SUR. A-43	W. H. ROBERTSON SUR.	20 MI. EAST OF VICTORIA
OWNER	SUPERIOR OIL CO.	LOUIS CROUCH	DIXEL RESOURCES, INC.
COMPLETED	11/12/53	01/06/44	NOT GIVEN
SAMPLED	09/15/65	06/24/44	10/05/78
FORMATION	OLIG-FRIO JO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9210	5500	3600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7904	17000	320
COMPONENT, MOLE PCT			
METHANE	87.5	96.3	97.8
ETHANE	6.9	3.2	0.2
PROPANE	2.2	---	TRACE
N-BUTANE	0.5	---	TRACE
ISOBUTANE	0.6	---	TRACE
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.4	---	0.1
NITROGEN	0.7	0.0	1.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.5	0.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1141	1033	1004
SPECIFIC GRAVITY	0.655	0.575	0.568

	INDEX 7894 SAMPLE 15401	INDEX 7895 SAMPLE 15402	INDEX 7896 SAMPLE 15403
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCDANIEL	MCDANIEL	MCDANIEL
WELL NAME	WILLIAM BORCHERS NO. 2	WILLIAM BORCHERS NO. 1-C	WILLIAM BORCHERS NO. 1-T
LOCATION	THOMAS BRIDGES SUR. A-94	THOMAS BRIDGES SUR. A-94	THOMAS BRIDGES SUR. A-94
OWNER	DIXEL RESOURCES, INC.	DIXEL RESOURCES, INC.	DIXEL RESOURCES, INC.
COMPLETED	06/28/77	03/23/77	03/23/77
SAMPLED	10/05/78	10/05/78	10/05/78
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2833	2900	3330
WELLHEAD PRESSURE,PSIG	1250	1240	1200
OPEN FLOW, MCFD	23000	310	1800
COMPONENT, MOLE PCT			
METHANE	96.7	98.5	97.4
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	2.2	0.8	1.6
OXYGEN	0.3	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	986	1000	994
SPECIFIC GRAVITY	0.571	0.562	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7897 SAMPLE 12571		INDEX 7898 SAMPLE 12572		INDEX 7899 SAMPLE 15181	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	MOODY RANCH		MOODY RANCH		SANDY CREEK	
WELL NAME	W. L. MOODY, JR. NO. 10		W. L. MOODY JR. NO. 10		W. B. FOWLER NO. 5	
LOCATION	NANCY A. MCFARLAND SUR. A-42		NANCY A. MCFARLAND SUR. A-42		S.C.A. ROGERS SUR. A-65	
OWNER	CROWN CENTRAL PETROLEUM CORP		CROWN CENTRAL PETROLEUM CORP		FRED W. SHIELD	
COMPLETED	11/09/69		11/09/69		07/06/75	
SAMPLED	12/--/70		12/--/70		01/05/76	
FORMATION	OLIG-FRIO 7500 FT.		OLIG-FRIO 7500 FT.		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7230		7230		4705	
WELLHEAD PRESSURE,PSIG	2600		2600		1800	
OPEN FLOW, MCFD	43000		43000		13500	
COMPONENT, MOLE PCT						
METHANE	88.5		90.3		97.5	
ETHANE	5.6		5.5		1.1	
PROPANE	1.9		1.8		0.3	
N-BUTANE	0.6		0.6		0.1	
ISOBUTANE	0.9		0.8		0.0	
N-PENTANE	0.1		0.3		0.1	
ISOPENTANE	0.3		0.1		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	3.5		1.8		0.2	
OXYGEN	0.0		0.3		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.4	
HELIUM	0.02		TRACE		0.01	
HEATING VALUE*	1042		1108		1036	
SPECIFIC GRAVITY	0.736		0.639		0.577	

	INDEX 7900 SAMPLE 9577		INDEX 7901 SAMPLE 3886		INDEX 7902 SAMPLE 9590	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	SWAN LAKE		TEXANA		WEST RANCH	
WELL NAME	G.T. BROOKING NO. 20		M. K. SIMONS NO. 2		WEST RANCH A NO. 383-U	
LOCATION	JOSIAH T. BELL SUR. A-7		NOT GIVEN		RAMOS MUSQUEZ SUR. A-59	
OWNER	SOUTHERN MINERALS CORP.		GULF OIL CORP.		MOBIL OIL CORP., INC.	
COMPLETED	08/12/51		06/12/42		06/08/63	
SAMPLED	10/01/64		08/17/44		10/05/64	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8430		5705		6024	
WELLHEAD PRESSURE,PSIG	1350		NOT GIVEN		2187	
OPEN FLOW, MCFD	7310		700		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.3		89.3		87.8	
ETHANE	4.2		9.3		4.7	
PROPANE	2.1		---		2.6	
N-BUTANE	0.8		---		1.1	
ISOBUTANE	0.8		---		1.1	
N-PENTANE	0.2		---		0.3	
ISOPENTANE	0.4		---		0.8	
CYCLOPENTANE	0.1		---		0.3	
HEXANES PLUS	0.3		---		0.7	
NITROGEN	0.3		1.1		0.3	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		---		0.0	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.5		0.3		0.3	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1143		1071		1209	
SPECIFIC GRAVITY	0.647		0.608		0.685	

	INDEX 7903 SAMPLE 14576		INDEX 7904 SAMPLE 12014		INDEX 7905 SAMPLE 12015	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	WEST RANCH		WEST RANCH S		WEST RANCH S	
WELL NAME	WEST RANCH UNIT 2 NO. 1		WEST RANCH NO. 464-C		WEST RANCH NO. 464-T	
LOCATION	R. MOSQUEZ GR. A-59		RAMON MUSQUEZ GRANT A-59		RAMON MUSQUEZ GRANT A-59	
OWNER	MOBIL OIL CO.		MOBIL OIL CORP.		MOBIL OIL CORP.	
COMPLETED	12/11/73		10/10/68		09/26/68	
SAMPLED	02/02/76		08/28/69		08/28/69	
FORMATION	MIOC-H		OLIG-GRETA		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9175		5307		7054	
WELLHEAD PRESSURE,PSIG	1360		1969		1000	
OPEN FLOW, MCFD	2200		21000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	98.9		95.0		90.8	
ETHANE	0.1		2.6		4.6	
PROPANE	TRACE		0.5		2.1	
N-BUTANE	0.0		0.5		0.4	
ISOBUTANE	0.0		0.0		0.5	
N-PENTANE	0.0		TRACE		0.1	
ISOPENTANE	0.0		0.3		0.2	
CYCLOPENTANE	0.0		TRACE		0.1	
HEXANES PLUS	0.0		0.2		0.2	
NITROGEN	0.8		0.5		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.3		0.1	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1004		1062		1114	
SPECIFIC GRAVITY	0.559		0.595		0.628	

	INDEX 7906 SAMPLE 13114		INDEX 7907 SAMPLE 13115		INDEX 7908 SAMPLE 13860	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	JACKSON		JACKSON		JACKSON	
FIELD	WEST RANCH S		WEST RANCH S		WESTHOFF RANCH	
WELL NAME	WEST RANCH UNIT 2 NO.1		WEST RANCH UNIT 2 NO. 1		A.E. WESTHOFF NO. 6	
LOCATION	R. MOSQUEZ GRANT A-59		R. MOSQUEZ GRANT A-59		THOMAS MENEFEE SUR. A-52	
OWNER	MOBIL OIL CO.		MOBIL OIL CORP.		HASSIE HUNT TRUST	
COMPLETED	12/16/71		12/16/71		05/25/72	
SAMPLED	12/20/71		12/14/71		01/14/74	
FORMATION	MIOC-E		MIOC-D		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8820		8759		6728	
WELLHEAD PRESSURE,PSIG	1419		1315		2190	
OPEN FLOW, MCFD	64000		19800		6546	
COMPONENT, MOLE PCT						
METHANE	99.1		99.2		94.1	
ETHANE	0.1		0.1		3.3	
PROPANE	0.1		TRACE		1.2	
N-BUTANE	0.0		0.0		0.2	
ISOBUTANE	0.0		0.0		0.4	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	0.7		0.7		0.2	
OXYGEN	0.0		0.2		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.3	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1006		1007		1074	
SPECIFIC GRAVITY	0.559		0.558		0.600	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7909 SAMPLE 15480	INDEX 7910 SAMPLE 4958	INDEX 7911 SAMPLE 4959
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	WESTHOFF RANCH	WILDCAT	WILDCAT
WELL NAME	MCDOWELL NO. 2	VIRGINIA B. WILEY	VIRGINIA B. WILEY
LOCATION	THOMAS MENEFEE LEAGUE, A-52	NESTOR CLAY SUR. NO. 13	NESTOR CLAY SUR. NO. 13
OWNER	HOLLY ENERGY CORP.	JAKE L. HAMON & EDWIN L. COX	JAKE L. HAMON & EDWIN L. COX
COMPLETED	07/24/77	08/19/50	08/19/50
SAMPLED	11/08/78	11/07/50	11/07/50
FORMATION	OLIG-FRIO	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4943	5450	5450
WELLHEAD PRESSURE,PSIG	1528	NOT GIVEN	1375
OPEN FLOW, MCFD	3200	5500	5500
COMPONENT, MOLE PCT			
METHANE	98.2	97.0	94.8
ETHANE	1.0	1.9	2.8
PROPANE	0.1	0.3	0.7
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.3	0.6
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.3	0.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1021	1035	1049
SPECIFIC GRAVITY	0.562	0.578	0.594

	INDEX 7912 SAMPLE 9148	INDEX 7913 SAMPLE 11305	INDEX 7914 SAMPLE 12354
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JASPER	JEFFERSON	JEFFERSON
FIELD	BUNA	AMELIA	ANGELINA
WELL NAME	NO. 1	R.J. PEVETO NO. 15-H	W. J. CRAWFORD NO. 3
LOCATION	SEC. 82, H&TC RR SUR.	C. WILLIAMS SUR. A-59	SEC. 161, T+NO SUR. A-373
OWNER	SINCLAIR OIL & GAS CO.	HUMBLE OIL & REFINING CO.	BELCO PETROLEUM CORP.
COMPLETED	05/08/62	09/16/66	04/08/69
SAMPLED	10/24/63	02/21/68	08/11/70
FORMATION	EOCE-WILCOX 1ST	MIOC-	OLIG-MARG TEX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11089	3279	10670
WELLHEAD PRESSURE,PSIG	5522	1235	900
OPEN FLOW, MCFD	35700	22300	1000
COMPONENT, MOLE PCT			
METHANE	82.7	94.3	95.1
ETHANE	8.4	3.1	2.3
PROPANE	4.3	0.6	0.5
N-BUTANE	1.3	0.2	TRACE
ISOBUTANE	0.6	TRACE	0.2
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.5	0.4	0.0
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.4	0.7	0.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	0.6
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1208	1076	1034
SPECIFIC GRAVITY	0.703	0.603	0.587

	INDEX 7915 SAMPLE 12356	INDEX 7916 SAMPLE 12357	INDEX 7917 SAMPLE 13081
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	ANGELINA	ANGELINA	BEAUMONT W
WELL NAME	BELCO FEE NO. 1 (L.T.)	BELCO FEE NO. 1 (U.T.)	KEITH & DOWLEN NO. 24U
LOCATION	L. A. CASEY SUR. A-942	L. A. CASEY SUR. A-942	H. WILLIAMS SUR. A-80
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	AMOCO PRODUCTION CO.
COMPLETED	06/14/69	06/14/69	10/20/70
SAMPLED	08/11/70	08/11/70	10/--/71
FORMATION	OLIG-NODOSARIA 3RD	OLIG-NODOSARIA 2ND	OLIG-NODOSARIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13010	12000	7257
WELLHEAD PRESSURE,PSIG	5500	3500	2523
OPEN FLOW, MCFD	2968	2019	3600
COMPONENT, MOLE PCT			
METHANE	88.8	87.9	92.8
ETHANE	4.4	4.3	2.1
PROPANE	2.0	2.2	1.8
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.6	0.7	0.8
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.5
NITROGEN	1.7	2.1	0.6
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.9	0.1
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1100	1106	1131
SPECIFIC GRAVITY	0.646	0.653	0.636

	INDEX 7918 SAMPLE 11960	INDEX 7919 SAMPLE 11961	INDEX 7920 SAMPLE 4765
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	BIG HILL	BIG HILL	BIG HILL N
WELL NAME	GEORGE L. ANDERSON NO. 3	GEORGE L. ANDERSON NO. 1	C. E. BYRNE NO. 1
LOCATION	SEC. 173, T&NO RR SUR. A-341	SEC. 173, T&NO RR SUR. A-341	SEC. 147, T&NO SUR.
OWNER	HOUSTON NAT. GAS PROD. CO.	HOUSTON NAT. GAS PROD. CO.	MCCARTHY OIL & GAS CORP.
COMPLETED	12/22/67	12/11/64	07/18/49
SAMPLED	07/08/69	07/08/69	10/17/49
FORMATION	OLIG-HACKBERRY NO. 7	OLIG-HACKBERRY NO. 5	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8674	8562	8108
WELLHEAD PRESSURE,PSIG	1539	1220	3121
OPEN FLOW, MCFD	1150	446	122000
COMPONENT, MOLE PCT			
METHANE	96.3	94.5	94.0
ETHANE	2.0	2.9	3.6
PROPANE	0.4	0.6	1.1
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.6	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.8	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1038	1042	1075
SPECIFIC GRAVITY	0.581	0.592	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7921 SAMPLE 14225	INDEX 7922 SAMPLE 14893	INDEX 7923 SAMPLE 14894
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	FANNETT	GILBERT RANCH	GILBERT RANCH
WELL NAME	JUNKER SPENCER #A# NO. 58	GILBERT ESTATE NO. 1	GILBERT ESTATE NO. 1
LOCATION	W. H. SMITH SUR. A-198	JOHN RICORD SUR. A-189	JOHN RICORD SUR. A-189
OWNER	GULF OIL CO. - U.S.	KILROY CO. OF TEXAS, INC.	KILROY CO. OF TEXAS, INC.
COMPLETED	05/04/73	11/15/74	11/15/74
SAMPLED	11/14/74	01/30/77	01/30/77
FORMATION	OLIG-FRIO	OLIG-NODOSARIA	OLIG-NODOSARIA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7234	8754	8632
WELLHEAD PRESSURE,PSIG	703	2501	2251
OPEN FLOW, MCFD	5032	10406	25304
COMPONENT, MOLE PCT			
METHANE	93.3	93.4	93.3
ETHANE	3.5	3.4	3.4
PROPANE	1.2	1.3	1.3
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1086	1087	1089
SPECIFIC GRAVITY	0.611	0.609	0.611

	INDEX 7924 SAMPLE 13104	INDEX 7925 SAMPLE 15829	INDEX 7926 SAMPLE 10900
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	GOLDEN TRIANGLE	GUM ISLAND W	HIGH ISLAND
WELL NAME	PAN AMERICAN FEE NO. 1	HERBERT BROUSSARD "A" NO. 2	BLOCK 160 UNIT 60-1
LOCATION	ELIZA WILLIAMS SUR. A-498	A. HOTCHKISS SUR. A-31	DEN AREA
OWNER	PRUDENTIAL DRILLING CO.	DOW CHEMICAL U.S.A.	SHELL OIL CO., ET AL.
COMPLETED	03/25/70	07/--/77	06/23/61
SAMPLED	09/25/71	11/06/79	03/07/67
FORMATION	OLIG-HACKBERRY	OLIG-HACKBERRY	MIOC-F
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10952	10211	8444
WELLHEAD PRESSURE,PSIG	4500	6407	3365
OPEN FLOW, MCFD	23000	9500	43500
COMPONENT, MOLE PCT			
METHANE	97.3	86.4	94.2
ETHANE	1.2	7.5	2.5
PROPANE	0.3	3.2	0.6
N-BUTANE	0.0	0.7	0.2
ISOBUTANE	0.0	0.8	0.3
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	0.4	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	1.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1015	1170	1064
SPECIFIC GRAVITY	0.573	0.664	0.608

	INDEX 7927 SAMPLE 13494	INDEX 7928 SAMPLE 13495	INDEX 7929 SAMPLE 12359
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HIGH ISLAND	HIGH ISLAND	HIGH ISLAND 129, E
WELL NAME	TEXAS BLOCK 14-L NO. 1	TEXAS BLOCK 14-L NO. 1	OCS G-1848 WELL NO. 2
LOCATION	TEXAS BLOCK 14-L OFFSHORE	TEXAS BLOCK 14-L OFFSHORE	BLK. 129, E HIGH ISLAND AREA
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	SUN OIL CO.
COMPLETED	11/30/71	11/30/71	09/11/69
SAMPLED	12/20/72	12/20/72	08/13/70
FORMATION	MIOC-	MIOC-	MIOC-J SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9426	10077	11208
WELLHEAD PRESSURE,PSIG	3590	5405	8450
OPEN FLOW, MCFD	14700	122000	82596
COMPONENT, MOLE PCT			
METHANE	94.5	93.0	93.8
ETHANE	3.1	3.1	2.9
PROPANE	0.8	0.8	0.9
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.4	1.8	0.4
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	1.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1060	1037	1057
SPECIFIC GRAVITY	0.596	0.599	0.607

	INDEX 7930 SAMPLE 11990	INDEX 7931 SAMPLE 13801	INDEX 7932 SAMPLE 13802
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HIGH ISLAND BLK. 10-L	HIGH ISLAND BLK. 24-L	HIGH ISLAND BLK. 24-L
WELL NAME	TEXAS GULF TRACT 10 NO. A-5	STATE LEASE 59456 NO. C-3	STATE LEASE 59456 NO. C-3U
LOCATION	STATE TRACT 10-L	BLK. 24L, HIGH ISLAND	BLK. 24L, HIGH ISLAND
OWNER	MOBIL OIL CORP.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	01/07/68	05/22/72	05/22/72
SAMPLED	09/01/69	11/05/73	11/05/73
FORMATION	MIOC-A-2 SAND	MIOC-J SERIES	MIOC-JS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6239	10965	10810
WELLHEAD PRESSURE,PSIG	3000	6015	6260
OPEN FLOW, MCFD	15180	31700	37300
COMPONENT, MOLE PCT			
METHANE	96.7	96.0	96.1
ETHANE	1.9	1.5	1.6
PROPANE	0.2	0.4	0.4
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.6	0.5	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.4	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1023	1017	1029
SPECIFIC GRAVITY	0.572	0.585	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7933 SAMPLE 12358	INDEX 7934 SAMPLE 13044	INDEX 7935 SAMPLE 13045
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HIGH ISLAND BLOCK 24-L	HIGH ISLAND BLOCK 52	HIGH ISLAND BLOCK 52
WELL NAME	BLOCK 24-L NO. 5	FEDERAL NO. A6UT	FEDERAL NO. A-6
LOCATION	STATE LEASE NO. 59455	FEDERAL BLOCK 53 OFFSHORE	FEDERAL BLOCK 53 OFFSHORE
OWNER	ATLANTIC RICHFIELD CO.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	04/30/69	10/29/69	10/29/69
SAMPLED	08/13/70	09/28/71	09/28/71
FORMATION	MIOC-	OLIG-FRIO M54C	OLIG-FRIO M56C
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8048	8530	9728
WELLHEAD PRESSURE,PSIG	3165	2975	3000
OPEN FLOW, MCFD	33000	11500	43000
COMPONENT, MOLE PCT			
METHANE	94.3	92.6	93.2
ETHANE	3.0	3.4	3.4
PROPANE	0.9	1.4	1.2
N-BUTANE	0.2	0.4	0.4
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.5	0.4
NITROGEN	0.4	0.3	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1082	1111	1100
SPECIFIC GRAVITY	0.603	0.625	0.618

	INDEX 7936 SAMPLE 5007	INDEX 7937 SAMPLE 11191	INDEX 7938 SAMPLE 12577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HILDEBRANDT BAYOU	HILDEBRANDT BAYOU	HILLEBRANDT BAYOU
WELL NAME	AUBEY NO. 1	BORDAGES-STATE GAS UNIT NO.1	BROUSSARD TRUST ET AL. NO. 1
LOCATION	JOHN J. FRENCH SUR.	E. D. CHINNETH SUR. A-104	BLK. 5;JOHN MCNABB SUR.A-174
OWNER	SUN OIL CO.	TEXACO INC.	JAMES F. MORSE & CO.
COMPLETED	NOT GIVEN	03/24/66	11/17/48
SAMPLED	01/24/51	10/27/67	12/12/70
FORMATION	OLIG-FRIO	OLIG-HILDEBRANDT BAYOU	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8370	9630	7719
WELLHEAD PRESSURE,PSIG	2863	4900	2350
OPEN FLOW, MCFD	27000	20665	74580
COMPONENT, MOLE PCT			
METHANE	89.8	89.5	86.9
ETHANE	4.4	5.8	5.1
PROPANE	2.5	2.1	2.6
N-BUTANE	0.7	0.6	0.8
ISOBUTANE	0.9	0.4	1.1
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.3	0.7
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.3	0.2	1.1
NITROGEN	0.5	0.5	0.8
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1142	1130	1221
SPECIFIC GRAVITY	0.649	0.640	0.694

	INDEX 7939 SAMPLE 13626	INDEX 7940 SAMPLE 10107	INDEX 7941 SAMPLE 12003
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	MARRS MCLEAN	MCFADDIN RANCH	NOME
WELL NAME	J.E. ATE NO. 1	MCFADDEN RANCH NO. 1	ED PAGGI NO. 3-U
LOCATION	HENRY WILLIAMS SUR.,A-662	NANCY E. ROGERS SUR. A-803	J. W. KIRBY SUR. A-584
OWNER	CHEVRON OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/12/71	11/18/64	10/03/68
SAMPLED	06/08/73	09/02/65	08/20/69
FORMATION	OLIG-NODOSARIA	MIOC-	OLIG-NOME
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11158	8422	6908
WELLHEAD PRESSURE,PSIG	1500	3285	2458
OPEN FLOW, MCFD	1500	160000	16800
COMPONENT, MOLE PCT			
METHANE	92.6	97.1	90.2
ETHANE	3.2	1.6	3.6
PROPANE	1.5	0.3	1.6
N-BUTANE	0.3	TRACE	0.7
ISOBUTANE	0.5	0.0	1.5
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.4
NITROGEN	0.8	0.6	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1044	1020	1149
SPECIFIC GRAVITY	0.616	0.570	0.652

	INDEX 7942 SAMPLE 12004	INDEX 7943 SAMPLE 7564	INDEX 7944 SAMPLE 14615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	NOME	PORT ARTHUR	STOWELL
WELL NAME	ED PAGGI NO. 3-L	DOORNBOS NO. 1	W. M. STOEGER NO. 2
LOCATION	J. W. KIRBY SUR. A-584	NOT GIVEN	E. LOPEZ SUR. A-37
OWNER	SHELL OIL CO.	KILROY CO. OF TEXAS, INC.	HNG OIL CO.
COMPLETED	10/03/69	04/--/59	08/14/74
SAMPLED	08/20/69	05/27/60	03/19/76
FORMATION	OLIG-FRIO	OLIG-HACKBERRY	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6933	11058	8104
WELLHEAD PRESSURE,PSIG	2305	6500	2730
OPEN FLOW, MCFD	8600	210000	2930
COMPONENT, MOLE PCT			
METHANE	90.7	89.5	94.6
ETHANE	3.8	6.5	3.2
PROPANE	1.5	2.3	0.8
N-BUTANE	0.5	0.3	0.2
ISOBUTANE	1.3	0.5	0.3
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	1.0	0.3	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1132	1114	1063
SPECIFIC GRAVITY	0.641	0.627	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7945 SAMPLE 7428	INDEX 7946 SAMPLE 4437	INDEX 7947 SAMPLE 4346
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JIM HOGG	JIM HOGG
FIELD	TAYLOR BAYOU S	A. K. EAST	ALLEN
WELL NAME	J. WILBERT NO. 1	A. K. EAST NO. 1	JOHN ALLEN NO. 1
LOCATION	NOT GIVEN	SEC. 14;ANTONIO YSAQUINO GR.	BLK. 10, SEC. 29, H&GNRR SUR
OWNER	TENNESSEE GAS TRANSMISSION	TEXAS CO.	CAM CORP.
COMPLETED	09/02/59	07/29/47	05/13/47
SAMPLED	03/01/60	01/15/48	08/29/47
FORMATION	OLIG-MARGINULINA & FRIO	EOCE-JACKSON	TERT-2900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8006	3953	2937
WELLHEAD PRESSURE,PSIG	2500	1420	NOT GIVEN
OPEN FLOW, MCFD	11200	NOT GIVEN	2900
COMPONENT, MOLE PCT			
METHANE	95.1	82.2	90.8
ETHANE	2.5	16.6	5.5
PROPANE	0.9	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.1	0.4	2.6
OXYGEN	0.0	0.3	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.8
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1077	1130	1018
SPECIFIC GRAVITY	0.599	0.644	0.602

	INDEX 7948 SAMPLE 3728	INDEX 7949 SAMPLE 5162	INDEX 7950 SAMPLE 15525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM HOGG
FIELD	ARMSTRONG	JONES F	KELSEY DEEP
WELL NAME	ROY YAEGER NO. 3	A. C. JONES NO. 47	MRS. A. M. K. BASS NO. 32-F
LOCATION	SEC. 222	AQUA NUEVO DE ABAJO GRANT	LA BLANCA GRANT
OWNER	TEXAS CO.	SUN OIL CO.	EXXON CO., U.S.A.
COMPLETED	01/15/44	09/05/51	02/04/77
SAMPLED	03/16/44	01/21/52	11/21/78
FORMATION	-STRAND LINE STRUCTURE	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2869	4990	5910
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1969	2337
OPEN FLOW, MCFD	6000	5650	2528
COMPONENT, MOLE PCT			
METHANE	98.6	95.0	89.7
ETHANE	---	2.5	4.6
PROPANE	---	0.9	2.0
N-BUTANE	---	0.2	0.8
ISOBUTANE	---	0.2	1.0
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.0	0.5
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.4
NITROGEN	0.0	0.6	0.2
OXYGEN	1.1	0.1	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	999	1057	1167
SPECIFIC GRAVITY	0.563	0.593	0.653

	INDEX 7951 SAMPLE 15526	INDEX 7952 SAMPLE 6483	INDEX 7953 SAMPLE 7921
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM HOGG
FIELD	KELSEY DEEP	STROMAN	THOMPSONVILLE NE
WELL NAME	MRS. A. M. K. BASS NO. 32-D	NO. 3	YEAGER-ARMSTRONG NO. 1
LOCATION	LA BLANCA GRANT	SUR. NO. 299	NOT GIVEN
OWNER	EXXON CO., U.S.A.	W. L. COTTON	COASTAL STATES GAS PROD. CO.
COMPLETED	02/02/77	04/06/57	10/22/60
SAMPLED	11/21/78	01/26/58	03/20/61
FORMATION	OLIG-FRIO	EOCE-JACKSON L	EOCE-WINNANT 1ST
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6638	3578	9670
WELLHEAD PRESSURE,PSIG	3688	1100	5910
OPEN FLOW, MCFD	5308	3000	95000
COMPONENT, MOLE PCT			
METHANE	92.7	96.6	90.2
ETHANE	3.9	1.8	3.1
PROPANE	1.5	0.1	1.1
N-BUTANE	0.4	TRACE	0.1
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	0.2	0.5	TRACE
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	5.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1099	1038	1005
SPECIFIC GRAVITY	0.614	0.580	0.635

	INDEX 7954 SAMPLE 7922	INDEX 7955 SAMPLE 4975	INDEX 7956 SAMPLE 6498
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM WELLS	JIM WELLS
FIELD	THOMPSONVILLE NE	ALFRED	AMARGOSA
WELL NAME	R. LOPEZ NO. 1	ED C. ADAMS NO. 1	SHAEFFER RANCH A NO. 6
LOCATION	NOT GIVEN	JUAN HERNANDEZ SUR. 10	SA & MGER A-478 SUR.
OWNER	COASTAL STATES GAS PROD. CO.	TEXAS CO.	TIDEWATER OIL CO.
COMPLETED	10/22/60	05/27/50	09/17/57
SAMPLED	03/20/61	12/05/50	02/07/58
FORMATION	EOCE-WINNANT 1ST	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9724	2500	2745
WELLHEAD PRESSURE,PSIG	5900	1150	1140
OPEN FLOW, MCFD	66000	8300	5700
COMPONENT, MOLE PCT			
METHANE	91.2	97.7	95.0
ETHANE	3.3	0.1	0.6
PROPANE	1.6	---	TRACE
N-BUTANE	0.1	---	0.1
ISOBUTANE	0.3	---	0.0
N-PENTANE	TRACE	---	0.3
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	0.1	1.8	1.6
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.1	---	0.0
CARBON DIOXIDE	3.0	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1011	996	1064
SPECIFIC GRAVITY	0.626	0.584	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7957 SAMPLE 6499	INDEX 7958 SAMPLE 14295	INDEX 7959 SAMPLE 5100
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	AMARGOSA	EL PAR	EMBLETON
WELL NAME	SHAFFER RANCH A NO. 3	KING RANCH MORGAN NO. M-34	R. V. EMBLETON NO. 1
LOCATION	J. WELLS A-527 SUR.	SANTA GERTRUDIS GRANT	NOT GIVEN
OWNER	TIDEWATER OIL CO.	EXXON CO., U.S.A.	W. EARL ROWE
COMPLETED	01/10/57	05/27/73	05/23/51
SAMPLED	02/07/58	03/14/75	11/03/51
FORMATION	OLIG-MARGINULINA	NOT GIVEN	OLIG-HETEROSTEGINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2266	4449	3400
WELLHEAD PRESSURE,PSIG	735	NOT GIVEN	1430
OPEN FLOW, MCFD	39500	NOT GIVEN	9800
COMPONENT, MOLE PCT			
METHANE	96.0	93.3	98.0
ETHANE	0.5	4.0	0.5
PROPANE	TRACE	1.4	0.2
N-BUTANE	TRACE	0.2	TRACE
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.1	0.6	0.9
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	990	1079	1016
SPECIFIC GRAVITY	0.573	0.603	0.568

	INDEX 7960 SAMPLE 6497	INDEX 7961 SAMPLE 4802	INDEX 7962 SAMPLE 15441
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	FREEBORN	HALDEMAN S	HOELSCHER
WELL NAME	FREEBORN TRUSTEE NO. 3	A. H. HENDERSON NO. 1	HOELSCHER NO. 1
LOCATION	J. T. WHITE A-529 SUR.	LOTS 5&12, HALDEMAN SUBD. 43	10 MI. NE ALICE
OWNER	GETTY OIL CO.	SINCLAIR OIL & GAS CO.	DINERO OIL CO.
COMPLETED	04/06/57	NOT GIVEN	12/31/76
SAMPLED	02/07/58	11/23/49	10/13/78
FORMATION	EOCE-PETTUS	OLIG-ZONE 21-B	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5344	5321	5500
WELLHEAD PRESSURE,PSIG	2600	2077	1050
OPEN FLOW, MCFD	6600	12000	8000
COMPONENT, MOLE PCT			
METHANE	89.3	92.9	91.5
ETHANE	5.2	3.5	4.5
PROPANE	2.6	1.5	1.7
N-BUTANE	0.7	0.5	0.4
ISOBUTANE	0.8	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.0	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.1	0.4	0.3
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1157	1102	1105
SPECIFIC GRAVITY	0.651	0.619	0.622

	INDEX 7963 SAMPLE 10555	INDEX 7964 SAMPLE 4922	INDEX 7965 SAMPLE 4894
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	LA GLORIA N	MAGNOLIA CITY	MAGNOLIA CITY N
WELL NAME	SEELIGSON UNIT NO. 1	REYNOLDS & RICHARDSON NO. 1	V. A. BERGH NO. 2
LOCATION	SEC. 11, SEELIGSON RANCH	SEC. 210	LOT 7, ADAMS&STAPLES SUBD.
OWNER	SAMEDAN OIL CORP.	HICKOK& REYNOLDS ROYALTY CO.	FRANK W. MICHAUX
COMPLETED	11/27/65	06/19/50	12/06/49
SAMPLED	05/09/66	09/14/50	05/29/50
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6900	3927	3433
WELLHEAD PRESSURE,PSIG	3150	NOT GIVEN	1429
OPEN FLOW, MCFD	88	12	26000
COMPONENT, MOLE PCT			
METHANE	96.0	97.3	98.3
ETHANE	1.8	0.6	0.3
PROPANE	0.7	0.4	0.1
N-BUTANE	0.2	0.3	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	0.6	0.6	0.7
OXYGEN	0.2	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1050	1049	1019
SPECIFIC GRAVITY	0.587	0.584	0.567

	INDEX 7966 SAMPLE 12487	INDEX 7967 SAMPLE 12488	INDEX 7968 SAMPLE 12489
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	MAGNOLIA CITY N	MAGNOLIA CITY N	MAGNOLIA CITY N
WELL NAME	NINA ADAMS NO. 25F	NINA ADAMS NO. 19	NINA ADAMS NO. 25D
LOCATION	MARCELLINO LOPEZ SUR. A-281	MARCELLINO LOPEZ SUR. A-281	MARCELLINO LOPEZ SUR. A-281
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	07/08/69	11/27/68	02/04/69
SAMPLED	10/27/70	10/27/70	10/27/70
FORMATION	OLIG-D-60	OLIG-D-80	OLIG-E-25
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3607	3801	4252
WELLHEAD PRESSURE,PSIG	795	1550	960
OPEN FLOW, MCFD	1700	2180	11600
COMPONENT, MOLE PCT			
METHANE	99.4	98.9	93.1
ETHANE	0.1	0.2	0.5
PROPANE	TRACE	0.1	0.0
N-BUTANE	0.0	0.0	0.7
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.3	0.6	3.8
OXYGEN	0.0	0.0	0.9
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1009	1008	1006
SPECIFIC GRAVITY	0.555	0.559	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7969 SAMPLE 4115	INDEX 7970 SAMPLE 4329	INDEX 7971 SAMPLE 12078
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	MAGNOLIA CITY W	NOT GIVEN	NOT GIVEN
WELL NAME	WM. F. FILTER NO. 1	S. B. ALLEY NO. 1	INGRAM-CLEMENSEN UNIT NO. 1
LOCATION	6 MI. SE OF ALICE	5 MI. S OF ALICE	BENTONVILLE AREA
OWNER	RALPH E. FAIR, INC.	SOUTHERN MINERALS CORP.	MERIDIAN EXPLORATION CO.
COMPLETED	06/23/46	03/21/47	08/05/69
SAMPLED	10/02/46	06/06/47	10/07/69
FORMATION	OLIG-FRIO U	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3785	3577	5445
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1590	1750
OPEN FLOW, MCFD	6230	12500	25000
COMPONENT, MOLE PCT			
METHANE	98.0	98.9	91.6
ETHANE	0.2	0.3	3.8
PROPANE	---	---	1.5
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	1.2	0.5	0.8
OXYGEN	0.2	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	996	1007	1119
SPECIFIC GRAVITY	0.565	0.560	0.629

	INDEX 7972 SAMPLE 4083	INDEX 7973 SAMPLE 4692	INDEX 7974 SAMPLE 4565
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	ORANGE GROVE	PALITO BLANCO	PREMONT
WELL NAME	SCHUENEMANN NO. 1	ZELLA C. FOSTER NO. 1	THIRKILL NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 77, SKRK SUR. A-457
OWNER	ATLANTIC REFINING CO.	TEXAS CO.	BARNSDALL OIL CO.
COMPLETED	09/28/44	10/04/48	02/10/48
SAMPLED	05/30/45	01/27/49	10/01/48
FORMATION	OLIG-VICKSBURG	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5060	4450	4421
WELLHEAD PRESSURE,PSIG	1715	1860	2048
OPEN FLOW, MCFD	5800	11800	13200
COMPONENT, MOLE PCT			
METHANE	93.3	92.2	87.4
ETHANE	6.4	4.5	11.6
PROPANE	---	1.8	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	TRACE	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.2	---
NITROGEN	0.0	TRACE	0.6
OXYGEN	0.0	0.1	0.3
ARGON	---	0.0	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1060	1112	1093
SPECIFIC GRAVITY	0.589	0.615	0.617

	INDEX 7975 SAMPLE 6500	INDEX 7976 SAMPLE 2478	INDEX 7977 SAMPLE 3822
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	ROWENA	SANDIA	SEELIGSON
WELL NAME	SHAEFFER RANCH A NO. 2	WADE NO. 1	P. CANALES NO. 22
LOCATION	THOMAS GARCIA SUR. NO. A-167	LOT 2, W. H. BODE SUB-DIV.	NOT GIVEN
OWNER	TIDEWATER OIL CO.	LARCOO GAS & PETROLEUM CO.	SUN OIL CO.
COMPLETED	08/13/56	11/26/30	12/07/43
SAMPLED	02/07/58	02/19/32	04/25/44
FORMATION	EOCE-HOCKLEY	OLIG-MARINE U	OLIG-ZONE 15
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4975	2910	5375
WELLHEAD PRESSURE,PSIG	1900	1350	2195
OPEN FLOW, MCFD	4150	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	86.9	95.0	84.0
ETHANE	6.2	0.0	12.5
PROPANE	2.6	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	1.0	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.4	---	---
HEXANES PLUS	1.1	---	---
NITROGEN	0.0	3.9	3.1
OXYGEN	TRACE	1.1	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.0	---
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1230	962	1075
SPECIFIC GRAVITY	0.693	0.577	0.631

	INDEX 7978 SAMPLE 3823	INDEX 7979 SAMPLE 13120	INDEX 7980 SAMPLE 15230
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	SEELIGSON	SEELIGSON	SEELIGSON
WELL NAME	J. W. MILLER NO. 16	P. CANALES NO. 57	SELLIGSON UNIT NO. 1-241
LOCATION	SEC. 66, R.P. HALOEMAN SURD.	BS & F SUR. NO. 63	5 MI. NE OF PREMONT
OWNER	SUN OIL CO.	SUN OIL CO.	SUN PRODUCTION CO.
COMPLETED	11/21/43	09/04/70	09/03/76
SAMPLED	04/25/44	12/21/71	03/15/78
FORMATION	OLIG-ZONE 16	OLIG-SEG 2.22-G-4	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4752	7400	4276
WELLHEAD PRESSURE,PSIG	1975	4930	1495
OPEN FLOW, MCFD	4000	65354	3977
COMPONENT, MOLE PCT			
METHANE	86.8	89.8	89.2
ETHANE	9.0	5.1	4.5
PROPANE	---	2.0	2.0
N-BUTANE	---	0.6	0.5
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.7
CYCLOPENTANE	---	TRACE	0.6
HEXANES PLUS	---	0.3	1.1
NITROGEN	5.0	0.7	0.2
OXYGEN	0.4	0.0	0.0
ARGON	0.3	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.6	0.0
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1222	1119	1201
SPECIFIC GRAVITY	0.625	0.638	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7981 SAMPLE 15241	INDEX 7982 SAMPLE 3860	INDEX 7983 SAMPLE 12024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	SEELIGSON	SELLER	STRATTON
WELL NAME	SEELIGSON UNIT NO. 1-241	JOE SELLER NO. 1	KING RANCH STRATTON A-17F
LOCATION	5 MI. NE OF PREMONT	2 1/2 MI. SW OF ALICE	PASO ANCHO DE ARRIBA GRANT
OWNER	SUN PRODUCTION CO.	HIGHLAND OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/03/76	05/--/44	01/17/68
SAMPLED	03/15/78	08/07/44	08/31/69
FORMATION	OLIG-FRIO	NOT GIVEN	OLIG-4300 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4788	4954	4320
WELLHEAD PRESSURE,PSIG	1490	NOT GIVEN	1648
OPEN FLOW, MCFD	3444	5400	9170
COMPONENT, MOLE PCT			
METHANE	96.0	87.4	95.1
ETHANE	2.8	8.9	2.2
PROPANE	0.3	---	0.7
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.1	---	0.2
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.3	2.1	1.0
OXYGEN	TRACE	0.9	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.7	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1050	1045	1057
SPECIFIC GRAVITY	0.583	0.619	0.593

	INDEX 7984 SAMPLE 12025	INDEX 7985 SAMPLE 12026	INDEX 7986 SAMPLE 14292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	STRATTON	STRATTON	T. C. B.
WELL NAME	KING RANCH STRATTON A-17H	KING RANCH STRATTON A-17	TIJERINA NO. J-120
LOCATION	PASO ANCHO DE ARRIBA GRANT	PASO ANCHO DE ARRIBA GRANT	ALICE G. KING SUR. 240
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.
COMPLETED	01/13/68	06/13/61	12/16/74
SAMPLED	08/31/69	08/31/69	03/14/75
FORMATION	OLIG-O-35 SAND	OLIG-5300 FT. SAND	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5521	5224	8375
WELLHEAD PRESSURE,PSIG	1434	1440	5191
OPEN FLOW, MCFD	2300	13600	12200
COMPONENT, MOLE PCT			
METHANE	90.0	90.3	68.7
ETHANE	4.8	4.5	13.3
PROPANE	2.0	2.0	8.4
N-BUTANE	0.6	0.4	2.0
ISOBUTANE	0.6	0.7	2.2
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.3	0.4
NITROGEN	0.7	0.7	2.6
OXYGEN	TRACE	0.0	0.6
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.6
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1141	1126	1356
SPECIFIC GRAVITY	0.642	0.633	0.816

	INDEX 7987 SAMPLE 14297	INDEX 7988 SAMPLE 13146	INDEX 7989 SAMPLE 14590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	T. C. B.	TCB	TOM GRAHAM
WELL NAME	TIJERINA NO. J-120	H. C. TIJERINA NO. 82	KULCHAK NO. 1
LOCATION	A. G. KING SUR. 240, A-267	AB+M SUR. NO. 359	LA VACA GRANT A-166
OWNER	EXXON CO., U.S.A.	TEXACO INC.	CAYMAN EXPLORATION CORP.
COMPLETED	12/16/74	09/04/70	02/05/74
SAMPLED	03/14/75	02/04/72	02/24/76
FORMATION	OLIG-VICKSBURG	OLIG-TIJERINA 2-A	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7970	7188	5136
WELLHEAD PRESSURE,PSIG	5092	1500	870
OPEN FLOW, MCFD	11000	2080	2650
COMPONENT, MOLE PCT			
METHANE	90.0	90.6	93.1
ETHANE	5.4	4.8	3.5
PROPANE	2.1	2.1	1.5
N-BUTANE	0.4	0.7	0.4
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.2	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1123	1137	1090
SPECIFIC GRAVITY	0.634	0.639	0.610

	INDEX 7990 SAMPLE 3742	INDEX 7991 SAMPLE 3831	INDEX 7992 SAMPLE 3820
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	WADE CITY	WILDCAT	WILSON
WELL NAME	STRAUBE NO. 1	ALMOND NO. 1	M. DE GARZA NO. 1-A
LOCATION	WADE CITY	SEC. 13, S.A.M.G., A-471	NOT GIVEN
OWNER	REPUBLIC NATURAL GAS CO.	H. F. WILCOX OIL & GAS CO.	SAM E. WILSON, JR.
COMPLETED	01/12/43	03/08/44	03/21/43
SAMPLED	03/28/44	05/06/44	04/30/44
FORMATION	OLIG-FRIO BASAL	NOT GIVEN	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4799	3222	7921
WELLHEAD PRESSURE,PSIG	1550	1300	4450
OPEN FLOW, MCFD	32000	5000	100
COMPONENT, MOLE PCT			
METHANE	94.4	93.2	76.2
ETHANE	3.5	2.2	20.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.5	4.1	1.9
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1019	984	1146
SPECIFIC GRAVITY	0.582	0.585	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7993 SAMPLE 3825	INDEX 7994 SAMPLE 13132	INDEX 7995 SAMPLE 3761
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	KARNES	KARNES
FIELD	WILSON	ATKINSON	BURNELL
WELL NAME	MINTEN NO. 1	ATKINSON GU NO. 2-2	VON ROEDER NO. 1-W
LOCATION	NOT GIVEN	KARNES COUNTY LAND SUR.A-169	NOT GIVEN
OWNER	SAM F. WILSON, JR.	HUMBLE OIL & REFINING CO.	AMERICAN LIBERTY OIL CO.
COMPLETED	02/25/44	06/22/71	02/06/43
SAMPLED	04/30/44	01/--/72	NOT GIVEN
FORMATION	OLIG-FRIO	EOCE-CARIZZO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7300	4250	6740
WELLHEAD PRESSURE,PSIG	3500	300	2500
OPEN FLOW, MCFD	20	4761	45000
COMPONENT, MOLE PCT			
METHANE	86.0	90.5	81.6
ETHANE	10.6	4.2	15.4
PROPANE	0.0	2.1	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	2.9	1.1	---
OXYGEN	0.4	0.1	1.1
ARGON	---	0.0	0.0
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.6	---
HELIUM	0.00	TRACE	1.5
HEATING VALUE*	1061	1103	0.00
SPECIFIC GRAVITY	0.622	0.633	1103
			0.648

	INDEX 7996 SAMPLE 3887	INDEX 7997 SAMPLE 11592	INDEX 7998 SAMPLE 8561
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KARNES
FIELD	BURNELL	HONDO CREEK W	HYSAW
WELL NAME	T. I. SPIELHAGEN NO. 1	J. W. NICHOLS ET AL. NO. 1	TOM CLARK NO. 1
LOCATION	1/2 MI. NE OF BURNELL	CARLOS MARTINEZ SUR. A-6	M. W. BUTLER A-438 SUR.
OWNER	STANOLIND OIL & GAS CO.	DIAMOND SHAMROCK CORP.	VIKING DRILLING CO., ET AL.
COMPLETED	04/07/44	03/15/67	10/09/61
SAMPLED	07/06/44	07/27/68	05/11/62
FORMATION	EOCE-WILCOX	EOCE-LULING	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6750	6201	11068
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1825	3750
OPEN FLOW, MCFD	36000	13600	3700
COMPONENT, MOLE PCT			
METHANE	59.4	88.0	98.6
ETHANE	38.4	5.4	0.1
PROPANE	---	2.3	TRACE
N-BUTANE	---	0.6	TRACE
ISOBUTANE	---	0.4	TRACE
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.4	TRACE
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.3	TRACE
NITROGEN	0.0	0.6	0.9
OXYGEN	0.5	0.1	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.2
CARBON DIOXIDE	1.7	1.4	0.02
HELIUM	0.01	0.01	1001
HEATING VALUE*	1290	1130	0.559
SPECIFIC GRAVITY	0.764	0.658	

	INDEX 7999 SAMPLE 14911	INDEX 8000 SAMPLE 14570	INDEX 8001 SAMPLE 5158
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KARNES
FIELD	KENEDY	KENEDY SW	PARGMANN
WELL NAME	ESTELLE ROLF NO. 1	MCDOWELL NO. 1	MARY PARGMANN NO. 1
LOCATION	CARLOS MARTINEZ GR. A-6	CARLOS MARTINEZ GRANT A-6	VICTOR BLANCO SUR. NO. A-3
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	HARRIGAN & FOHS
COMPLETED	10/18/74	05/10/74	08/29/51
SAMPLED	02/15/77	01/27/76	01/29/52
FORMATION	CRET-EDWARDS	CRET-SLIGO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13065	15655	7158
WELLHEAD PRESSURE,PSIG	4957	11010	2500
OPEN FLOW, MCFD	8850	16500	32400
COMPONENT, MOLE PCT			
METHANE	89.8	91.5	87.0
ETHANE	1.6	0.1	5.6
PROPANE	0.4	TRACE	3.1
N-BUTANE	0.2	0.0	0.7
ISOBUTANE	0.1	0.0	0.6
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.3
NITROGEN	0.4	0.9	0.9
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	7.4	7.4	0.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	973	929	1141
SPECIFIC GRAVITY	0.652	0.630	0.660

	INDEX 8002 SAMPLE 15456	INDEX 8003 SAMPLE 14910	INDEX 8004 SAMPLE 15178
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KENEDY
FIELD	POWER E	SPEARY	CABAZAS
WELL NAME	GAUS A NO. 1	B. B. TIPS NO. 1	YTURRIA L & C CO. NO. 37
LOCATION	VICTOR BLANCO SUR., A-3	CARLOS MARTINEZ SUR., A-6	SAN JUAN DE CARRICITOS GRANT
OWNER	CITIES SERVICE CO.	GENERAL CRUDE OIL CO.	TEXACO INC.
COMPLETED	06/25/76	10/18/75	04/06/76
SAMPLED	10/19/76	02/15/77	NOT GIVEN
FORMATION	OLIG-HACKNEY	CRET-EDWARDS	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9710	13450	6040
WELLHEAD PRESSURE,PSIG	3450	5865	2397
OPEN FLOW, MCFD	5400	5800	15147
COMPONENT, MOLE PCT			
METHANE	85.1	87.8	95.8
ETHANE	5.8	3.3	1.4
PROPANE	3.4	0.9	0.2
N-BUTANE	1.1	0.4	0.1
ISOBUTANE	0.8	0.2	TRACE
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.4	TRACE	2.0
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	2.4	6.9	0.01
HELIUM	TRACE	TRACE	1014
HEATING VALUE*	1162	1015	0.580
SPECIFIC GRAVITY	0.691	0.667	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8005 SAMPLE 14294	INDEX 8006 SAMPLE 13111	INDEX 8007 SAMPLE 4930
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	CALAMORIA	EL PAISTLE DEEP	JULIAN
WELL NAME	SAN JOSE DELA PARRA NO. 2	JOHN F. KENNEDY, JR.NO.7	SANTAFE RANCH, PASTURE NO. 1
LOCATION	SAN JUAN DE CARRICITOS GR	LA PARRA GRANT, A-37	SAN SALVADOR DEL TULE GRANT
OWNER	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	03/27/72	06/23/70	04/28/50
SAMPLED	03/13/75	12/10/71	08/25/50
FORMATION	OLIG-FRIO	OLIG-FRIO C	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8603	13622	8270
WELLHEAD PRESSURE,PSIG	4226	9500	3815
OPEN FLOW, MCFD	12000	26000	5100
COMPONENT, MOLE PCT			
METHANE	93.8	89.4	87.0
ETHANE	1.1	5.6	5.2
PROPANE	0.2	2.1	3.3
N-BUTANE	TRACE	0.5	1.1
ISOBUTANE	0.1	0.8	1.3
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	0.5	0.3
NITROGEN	2.3	0.6	0.8
OXYGEN	0.2	TRACE	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	2.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	986	1146	1184
SPECIFIC GRAVITY	0.563	0.646	0.673

	INDEX 8008 SAMPLE 12028	INDEX 8009 SAMPLE 12029	INDEX 8010 SAMPLE 12211
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	JULIAN	JULIAN	MURDOCK PASS
WELL NAME	JULIAN PASTURE NO. 5	JULIAN PASTURE NO. 5	STATE TRACT 230 NO. 1
LOCATION	SAN SALVADOR DEL TULE GR.	SAN SALVADOR DEL TULE GR.	TRACT 230, LAGUNDA MADRE
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	SAMEDAN OIL CORP.
COMPLETED	09/04/69	09/15/68	02/20/69
SAMPLED	09/--/00	09/04/69	02/22/70
FORMATION	OLIG-22-A SAND	OLIG-21-A SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8230	8160	7279
WELLHEAD PRESSURE,PSIG	2643	2499	2708
OPEN FLOW, MCFD	10800	4200	8200
COMPONENT, MOLE PCT			
METHANE	85.0	82.9	95.8
ETHANE	5.2	5.3	1.3
PROPANE	4.5	4.9	0.2
N-BUTANE	0.9	1.2	0.2
ISOBUTANE	2.0	2.3	0.0
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.7	0.1
NITROGEN	1.3	1.6	1.9
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1201	1254	1020
SPECIFIC GRAVITY	0.687	0.723	0.581

	INDEX 8011 SAMPLE 5234	INDEX 8012 SAMPLE 13605	INDEX 8013 SAMPLE 13149
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	PENASCAL	POTRERO LOPENO	RAYMONDVILLE
WELL NAME	KENEDY RANCH NO. A-1	STATE TRACT 318 NO. 1	YTURRIA L&C CO. NO. 35-H
LOCATION	RINCON DEL PENASCAL	EL TORO ISLAND	7 MI. SE RUDOLPH
OWNER	LA GLORIA CORP.	HUGHES & HUGHES	TEXACO INC.
COMPLETED	01/30/52	NOT GIVEN	01/22/71
SAMPLED	05/05/52	06/04/73	02/10/72
FORMATION	OLIG-MARGINULINA	NOT GIVEN	OLIG-F-14 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7040	6288	7900
WELLHEAD PRESSURE,PSIG	3241	2534	2515
OPEN FLOW, MCFD	42000	12000	1550
COMPONENT, MOLE PCT			
METHANE	95.2	96.4	93.8
ETHANE	1.9	1.3	1.0
PROPANE	0.5	0.2	0.1
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	1.8	1.8	4.1
OXYGEN	TRACE	0.0	0.7
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1031	1008	975
SPECIFIC GRAVITY	0.586	0.572	0.583

	INDEX 8014 SAMPLE 10259	INDEX 8015 SAMPLE 14293	INDEX 8016 SAMPLE 14296
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	RITA	RITA	RITA
WELL NAME	MRS. S.K. EAST NO. 21	S. K. EAST NO. 59	MRS. S. K. EAST NO. 59
LOCATION	LOS FINADOS GRANT A-36	LOS FINADOS GRANT A-36	LOS FINADOS GRANT A-36
OWNER	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	07/21/64	02/06/73	02/06/73
SAMPLED	10/29/65	03/13/75	03/13/75
FORMATION	OLIG-M-85	-A-36	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12398	3707	4650
WELLHEAD PRESSURE,PSIG	4545	1508	1304
OPEN FLOW, MCFD	5600	NOT GIVEN	5348
COMPONENT, MOLE PCT			
METHANE	95.6	93.4	94.2
ETHANE	2.0	2.9	3.0
PROPANE	0.2	0.8	0.8
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.3	0.5
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	1.3	1.8	1.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1042	1054	1059
SPECIFIC GRAVITY	0.574	0.602	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8017 SAMPLE 9667		INDEX 8018 SAMPLE 5140		INDEX 8019 SAMPLE 12037	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	KENEDY		KENEDY		KENEDY	
FIELD	SARITA		SARITA		SARITA E	
WELL NAME	J. G. KENEDY B-5		JOHN G. KENEDY, JR. NO. 1-E		MRS. S. K. EAST NO. 18-B	
LOCATION	EL PAISTLE GRANT		EL PAISTLE GRANT		LAPARRA GRANT A-37	
OWNER	HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	10/24/48		NOT GIVEN		04/23/68	
SAMPLED	03/23/49		11/29/51		09/15/69	
FORMATION	MIOC-FLEMING		OLIG-FRIO		OLIG-FRIO M-02	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2920		7057		11626	
WELLHEAD PRESSURE,PSIG	1016		2730		10925	
OPEN FLOW, MCFD	8200		9000		68000	
COMPONENT, MOLE PCT						
METHANE	97.6		92.1		91.5	
ETHANE	0.1		3.4		4.6	
PROPANE	0.0		1.4		1.5	
N-BUTANE	0.0		0.5		0.2	
ISOBUTANE	0.0		0.2		0.4	
N-PENTANE	0.0		0.2		0.2	
ISOPENTANE	0.0		0.2		TRACE	
CYCLOPENTANE	0.0		TRACE		0.1	
HEXANES PLUS	0.0		0.2		0.3	
NITROGEN	1.9		1.4		0.8	
OXYGEN	0.2		0.2		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.2		0.0	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	990		1081		1096	
SPECIFIC GRAVITY	0.566		0.617		0.617	

	INDEX 8020 SAMPLE 5972		INDEX 8021 SAMPLE 3663		INDEX 8022 SAMPLE 8598	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	KENT		KENT		KIMBLE	
FIELD	CHAPARRAL		NOT GIVEN		BOLT NW	
WELL NAME	J. W. YOUNG NO. 118-1		NO. 1		M. H. MURR	
LOCATION	W & W RR SUR. BLK. G		SEC. 73, BLK. 1		SEC. 7, TWNG SUR.	
OWNER	GENERAL CRUDE OIL CO.		GIRARD TRUST CO. ET AL.		LOW DRILLING CO., INC.	
COMPLETED	08/08/55		NOT GIVEN		04/09/62	
SAMPLED	11/10/55		09/17/43		06/26/62	
FORMATION	PENN-L		NOT GIVEN		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		410	
DEPTH, FEET	6752		233		1976	
WELLHEAD PRESSURE,PSIG	100		NOT GIVEN		603	
OPEN FLOW, MCFD	30		NOT GIVEN		6000	
COMPONENT, MOLE PCT						
METHANE	51.4		0.0		83.8	
ETHANE	10.0		1.4		1.6	
PROPANE	16.6		---		0.6	
N-BUTANE	6.1		---		0.2	
ISOBUTANE	3.4		---		0.2	
N-PENTANE	0.9		---		TRACE	
ISOPENTANE	1.8		---		0.1	
CYCLOPENTANE	0.2		---		TRACE	
HEXANES PLUS	0.5		---		0.1	
NITROGEN	8.6		98.1		13.0	
OXYGEN	TRACE		0.4		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.2		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.3		0.0		0.1	
HELIUM	0.04		0.09		0.43	
HEATING VALUE*	1400		25		916	
SPECIFIC GRAVITY	1.020		0.968		0.632	

	INDEX 8023 SAMPLE 9607		INDEX 8024 SAMPLE 6847		INDEX 8025 SAMPLE 7216	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	KIMBLE		KING		KING	
FIELD	NOT GIVEN		JUNIPER		JUNIPER	
WELL NAME	J. D. COWSERT NO. 1-A		R. H. MASTERSON NO. 13		R. H. MASTERSON NO. 16	
LOCATION	SEC. 19, BLK. 16, TWNG SUR.		SEC.152,BLK.A,MONTGOMERY SUR		SEC. 41, ABAM SUR.	
OWNER	TUCKER DRILLING CO., INC.		PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	10/1A/63		NOT GIVEN		05/09/59	
SAMPLED	10/1A/64		10/28/58		09/15/59	
FORMATION	PENN-STRAWN		PENN-STRAWN		PENN-HEND CONGLOMERATE	
GEOLOGIC PROVINCE CODE	410		430		430	
DEPTH, FEET	3532		5275		5710	
WELLHEAD PRESSURE,PSIG	1200		1892		2028	
OPEN FLOW, MCFD	24000		7000		900	
COMPONENT, MOLE PCT						
METHANE	91.2		55.1		74.0	
ETHANE	2.3		10.4		0.0	
PROPANE	1.0		9.8		4.7	
N-BUTANE	0.2		5.0		1.3	
ISOBUTANE	0.2		3.2		0.7	
N-PENTANE	TRACE		1.4		0.1	
ISOPENTANE	0.1		2.6		0.9	
CYCLOPENTANE	0.1		0.5		0.1	
HEXANES PLUS	0.1		1.7		0.3	
NITROGEN	3.7		9.8		17.3	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.1		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		TRACE		0.1	
HELIUM	0.16		0.10		0.10	
HEATING VALUE*	1018		1552		1002	
SPECIFIC GRAVITY	0.611		0.996		0.730	

	INDEX 8026 SAMPLE 13879		INDEX 8027 SAMPLE 10258		INDEX 8028 SAMPLE 4285	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	KLEBERG		KLEBERG		KLEBERG	
FIELD	ALAZAN		ALAZAN N		BORREGOS	
WELL NAME	K.R. ALAZAN NO. 275		KING RANCH ALAZAN NO. 164		KING RANCH-BORREGAS NO. 1	
LOCATION	EL ALAZAN GRANT, A-241		LOS COMITAS GRANT A-231		SANTA GERTRUDIS GRANT	
OWNER	EXXON CO., U.S.A.		HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	11/09/72		10/12/64		12/15/45	
SAMPLED	02/07/74		10/29/65		03/21/47	
FORMATION	MIOC-052 SAND		OLIG-J-06		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3515		9444		6720	
WELLHEAD PRESSURE,PSIG	1485		3501		3247	
OPEN FLOW, MCFD	8036		4500		18000	
COMPONENT, MOLE PCT						
METHANE	95.6		90.9		73.5	
ETHANE	1.9		4.5		25.0	
PROPANE	0.1		1.4		---	
N-BUTANE	0.0		0.3		---	
ISOBUTANE	0.1		0.4		---	
N-PENTANE	0.0		0.1		---	
ISOPENTANE	0.1		0.1		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	TRACE		1.5		---	
NITROGEN	2.2		0.3		0.6	
OXYGEN	0.0		0.0		0.3	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.0		0.1		0.6	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1000		1107		1193	
SPECIFIC GRAVITY	0.578		0.644		0.688	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8029 SAMPLE 14270	INDEX 8030 SAMPLE 4825	INDEX 8031 SAMPLE 10260
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	DUNN MCCAMPBELL	LAGUNA LARGA	MADERO
WELL NAME	GULF STATE C NO. 937-1	KING RANCH NO. G-1	KING RANCH MADERO NO. 2
LOCATION	STATE TRACT 937-S	RINCON DE LOS LAURELES, T123	SEC. 610, ALEX WHITAKER SUR.
OWNER	SUN OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/03/72	08/26/49	10/06/63
SAMPLED	02/14/75	11/26/49	10/29/65
FORMATION	OLIG-FRIO	OLIG-MARGINULINA	OLIG-J-58
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7757	6495	9586
WELLHEAD PRESSURE,PSIG	1590	2867	3672
OPEN FLOW, MCFD	5200	35000	4400
COMPONENT, MOLE PCT			
METHANE	94.0	94.1	90.1
ETHANE	2.9	2.7	4.9
PROPANE	0.8	0.8	1.5
N-BUTANE	0.2	0.2	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.0	0.4
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.8
NITROGEN	1.0	1.3	0.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1059	1058	1123
SPECIFIC GRAVITY	0.600	0.603	0.637

	INDEX 8032 SAMPLE 15026	INDEX 8033 SAMPLE 12090	INDEX 8034 SAMPLE 15097
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	MAY SE	MURDOCK PASS N	PADRE ISLAND N
WELL NAME	V. T. COLLINS NO. 1	DUNN MCCAMPBELL A NO. 3	STATE TRACT 924-S NO. 1
LOCATION	G. TREVINO GRANT, A-232	PADRE ISLAND	6 MI. SE CORPUS CHRISTI
OWNER	TEXAS OIL & GAS CORP.	SUN OIL CO.	MCMORAN EXPLORATION CO.
COMPLETED	02/26/75	12/12/68	03/02/72
SAMPLED	06/16/77	10/21/69	09/07/77
FORMATION	OLIG-FRIO	OLIG-MARGINULINA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8222	7318	8450
WELLHEAD PRESSURE,PSIG	3700	2798	900
OPEN FLOW, MCFD	470	152272	15300
COMPONENT, MOLE PCT			
METHANE	92.3	95.3	94.6
ETHANE	4.1	2.1	2.7
PROPANE	1.4	0.4	0.7
N-BUTANE	0.4	0.1	0.2
ISOBUTANE	0.4	0.1	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	1.2	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1095	1034	1052
SPECIFIC GRAVITY	0.616	0.583	0.596

	INDEX 8035 SAMPLE 14026	INDEX 8036 SAMPLE 14027	INDEX 8037 SAMPLE 12567
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	PADRE N	PADRE N	SPRINT S
WELL NAME	STATE TRACT 924-S NO. 1	STATE TRACT 924-S NO. 1	STATE TRACT 980-S NO. 1
LOCATION	STATE TRACT 924-S	STATE TRACT 924-S	OFFSHORE
OWNER	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/07/72	03/07/72	09/02/68
SAMPLED	06/12/74	06/12/74	11/02/70
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8450	7625	9915
WELLHEAD PRESSURE,PSIG	3240	2465	2975
OPEN FLOW, MCFD	15300	59000	45450
COMPONENT, MOLE PCT			
METHANE	94.9	93.3	94.8
ETHANE	2.6	3.3	2.3
PROPANE	0.7	1.1	0.7
N-BUTANE	0.2	0.2	TRACE
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	1.0	1.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1057	1070	1042
SPECIFIC GRAVITY	0.595	0.606	0.591

	INDEX 8038 SAMPLE 13861	INDEX 8039 SAMPLE 8672	INDEX 8040 SAMPLE 15289
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	SPRINT S	TIO PANCHO	WILDCAT
WELL NAME	SOUTH SPRINT GAS UNIT NO. 2	K. R. RINCON NO. 1	G. P. WARDNER NO. 127
LOCATION	STATE TRACT 981-S	R.E.L. KING SUR. NO. 282	PASO ANCHO DE ABAJO GNT.
OWNER	AMOCO PRODUCTION CO.	HUMBLE OIL & REFINING CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	10/17/72	05/31/52	10/16/76
SAMPLED	01/09/74	09/11/62	05/--/78
FORMATION	OLIG-FRIO A	OLIG-FRIO-J55 SAND	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7880	9540	8662
WELLHEAD PRESSURE,PSIG	2700	3652	5330
OPEN FLOW, MCFD	6700	39000	82000
COMPONENT, MOLE PCT			
METHANE	95.2	90.0	89.0
ETHANE	2.1	4.5	4.5
PROPANE	0.6	1.7	2.2
N-BUTANE	0.1	0.5	0.7
ISOBUTANE	0.3	0.8	0.9
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.1	0.9	0.5
NITROGEN	1.2	0.8	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	1.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1040	1147	1156
SPECIFIC GRAVITY	0.591	0.649	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8041 SAMPLE 15290	INDEX 8042 SAMPLE 5560	INDEX 8043 SAMPLE 3776
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	LA SALLE	LA SALLE
FIELD	WILDCAT	STUART CITY	WASHBURN
WELL NAME	G. P. WARDNER NO. 127	ALBERT MARTIN NO. 1	S.T.S. A LSE NO. 13
LOCATION	PASO ANCHO DE ABAJO GNT.	J. M. MARTIN SUR.	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	STANOLIND OIL & GAS CO.	QUINTANA PETROLEUM CORP.
COMPLETED	10/16/76	02/02/54	08/24/42
SAMPLED	05/--/78	07/29/54	04/08/44
FORMATION	OLIG-VICKSBURG	CRET-EDWARDS	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8662	10022	4820
WELLHEAD PRESSURE,PSIG	5330	4772	1100
OPEN FLOW, MCFD	82000	5500	537
COMPONENT, MOLE PCT			
METHANE	92.5	91.5	87.8
ETHANE	4.1	3.3	11.1
PROPANE	1.4	0.6	---
N-BUTANE	0.4	0.2	---
ISOBUTANE	0.3	0.0	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	0.2	0.0	0.2
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	4.3	0.5
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1046	1008	1088
SPECIFIC GRAVITY	0.617	0.621	0.617

	INDEX 8044 SAMPLE 3777	INDEX 8045 SAMPLE 3778	INDEX 8046 SAMPLE 9100
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LA SALLE	LA SALLE	LAMB
FIELD	WASHBURN	WASHBURN S	ANTON N
WELL NAME	S.T.S. A LSE NO. 31	S.T.SD LSE NO. 1	H.L. CAIN & W.S. MOSS NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 6, BLK. 1, THOMPSON SUR
OWNER	QUINTANA PETROLEUM CORP.	QUINTANA PETROLEUM CORP.	W. S. MOSS
COMPLETED	03/18/44	03/30/43	--/--/57
SAMPLED	04/08/44	04/08/44	09/28/63
FORMATION	EOCE-WILCOX	EOCE-WILCOX	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	220	220	435
DEPTH, FEET	5092	6030	500
WELLHEAD PRESSURE,PSIG	1750	800	32
OPEN FLOW, MCFD	2190	606	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	79.6	TRACE
ETHANE	14.7	19.2	0.0
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.4	0.3	98.6
OXYGEN	0.5	0.4	TRACE
ARGON	---	---	1.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.5	TRACE
HELIUM	0.00	0.00	0.31
HEATING VALUE*	1114	1150	0
SPECIFIC GRAVITY	0.635	0.658	0.968

	INDEX 8047 SAMPLE 10827	INDEX 8048 SAMPLE 14568	INDEX 8049 SAMPLE 15190
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAMB	LAVACA	LAVACA
FIELD	WILDCAT	BORCHERS	BORCHERS
WELL NAME	EVA WELLS NO. 1	WILLIAM BORCHERS NO. 4	D. C. P. LOEGER NO. 1
LOCATION	STATE CAPITOL LANDS	A. ELGIN ABSTRACT 156	ELLEN FAGAN SUR. A-571
OWNER	VAUGHN PETROLEUM CO.	MURPHY H. BAXTER	SUPERIOR OIL CO.
COMPLETED	NOT GIVEN	01/30/75	08/04/74
SAMPLED	NOT GIVEN	01/28/76	01/14/78
FORMATION	NOT GIVEN	MIOC-BORCHERS	MIOC-
GEOLOGIC PROVINCE CODE	435	220	220
DEPTH, FEET	2615	1900	1894
WELLHEAD PRESSURE,PSIG	NOT GIVEN	816	645
OPEN FLOW, MCFD	NOT GIVEN	270	4720
COMPONENT, MOLE PCT			
METHANE	0.2	97.8	98.9
ETHANE	0.0	0.1	0.1
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	99.2	1.8	0.5
OXYGEN	0.2	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	2	993	1017
SPECIFIC GRAVITY	0.969	0.567	0.565

	INDEX 8050 SAMPLE 15191	INDEX 8051 SAMPLE 3696	INDEX 8052 SAMPLE 14900
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	BORCHERS	BRUSHY CREEK	HALLETTSVILLE NW
WELL NAME	D. C. P. LOEGER NO. 1	D. G. MCMANUS NO. 1	JULIUS TECHNIK UNIT NO. 1
LOCATION	ELLEN FAGAN SUR. A-571	C. P. DALMUS SUR.	JAMES CAMPBELL SUR., A-6
OWNER	SUPERIOR OIL CO.	SHELL OIL CO.	HOWELL DRILLING, INC.
COMPLETED	08/04/74	03/21/42	06/30/75
SAMPLED	01/14/78	10/27/43	02/11/77
FORMATION	MIOC-	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1894	7480	8738
WELLHEAD PRESSURE,PSIG	645	3311	2465
OPEN FLOW, MCFD	4720	11250	5600
COMPONENT, MOLE PCT			
METHANE	99.0	77.0	82.7
ETHANE	TRACE	20.4	6.6
PROPANE	TRACE	---	4.9
N-BUTANE	TRACE	---	1.1
ISOBUTANE	TRACE	---	0.9
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.2	---	0.4
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.5	0.1	0.6
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	1.8	2.2
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1022	1196	1190
SPECIFIC GRAVITY	0.642	0.677	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8053 SAMPLE 13169	INDEX 8054 SAMPLE 12099	INDEX 8055 SAMPLE 12101
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	JANSKY	KINKLER	MORALES N
WELL NAME	W. V. JANSKY NO. 1	ELLA ZAPALAC NO. 1	WM. BORCHERS NO. 4
LOCATION	N. E. HALLETTVILLE 3 MI.	SAMUEL FULLER SUR. A-18	JAMES CHESHER SUR. A-114
OWNER	HNG OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	09/04/68	10/03/68
SAMPLED	03/16/72	11/09/69	11/09/69
FORMATION	EOCE-WILCOX	EOCE-WILCOX U	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8620	8814	1880
WELLHEAD PRESSURE,PSIG	2579	2875	1475
OPEN FLOW, MCFD	82000	10500	4000
COMPONENT, MOLE PCT			
METHANE	61.5	80.4	99.3
ETHANE	7.3	7.4	0.0
PROPANE	12.3	5.4	0.1
N-BUTANE	5.8	0.9	0.0
ISOBUTANE	4.7	1.1	0.0
N-PENTANE	1.8	0.3	0.0
ISOPENTANE	2.0	0.4	0.0
CYCLOPENTANE	0.4	0.1	0.0
HEXANES PLUS	1.5	0.4	0.0
NITROGEN	0.9	1.2	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.2	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1681	1209	1009
SPECIFIC GRAVITY	1.010	0.726	0.558

	INDEX 8056 SAMPLE 4697	INDEX 8057 SAMPLE 3694	INDEX 8058 SAMPLE 4832
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	MORALES W	PROVIDENT CITY	PROVIDENT CITY
WELL NAME	WM. BORCHERS NO. 1-A	F. W. NEUHAUS NO. 1	FAY ROUSE NO. 1
LOCATION	WM. HOSFORD SUR. ABST. 232	JOHN D. RAGSDALE SUR.	AARON MONROE SUR.
OWNER	UNION PRODUCING CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/24/48	09/23/42	08/24/49
SAMPLED	09/--/48	11/03/43	12/19/49
FORMATION	MIOC-	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2030	8540	8890
WELLHEAD PRESSURE,PSIG	464	3860	NOT GIVEN
OPEN FLOW, MCFD	4400	40000	8800
COMPONENT, MOLE PCT			
METHANE	98.3	81.0	88.1
ETHANE	0.1	14.8	4.8
PROPANE	0.0	---	1.9
N-BUTANE	0.0	---	0.5
ISOBUTANE	0.0	---	0.4
N-PENTANE	0.0	---	0.2
ISOPENTANE	0.0	---	0.3
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.4
NITROGEN	1.4	1.3	1.2
OXYGEN	0.1	0.4	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	2.5	2.1
HELIUM	0.01	0.00	0.01
HEATING VALUE*	997	1086	1100
SPECIFIC GRAVITY	0.562	0.660	0.659

	INDEX 8059 SAMPLE 12100	INDEX 8060 SAMPLE 12102	INDEX 8061 SAMPLE 13911
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	PROVIDENT CITY	PROVIDENT CITY	PROVIDENT CITY
WELL NAME	A. V. TRAYLOR NO. 6	A. V. TRAYLOR NO. 6	PROVIDENT CITY G.U. NO. 9
LOCATION	DAVID DAVIS SUR. A-135	DAVID DAVIS SUR. A-135	DAVID DAVIS SUR. A-135
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	11/09/68	11/09/68	01/04/72
SAMPLED	11/09/69	11/09/69	02/06/74
FORMATION	OLIG-FRIO	EOCE-YEGUA M-1	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3176	5837	8895
WELLHEAD PRESSURE,PSIG	1330	1500	3100
OPEN FLOW, MCFD	26000	6000	16500
COMPONENT, MOLE PCT			
METHANE	99.1	88.0	88.6
ETHANE	0.0	6.5	4.9
PROPANE	TRACE	2.8	2.0
N-BUTANE	0.0	0.5	0.5
ISOBUTANE	0.0	0.7	0.5
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.8	0.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	2.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1004	1138	1093
SPECIFIC GRAVITY	0.557	0.647	0.650

	INDEX 8062 SAMPLE 15179	INDEX 8063 SAMPLE 15438	INDEX 8064 SAMPLE 13872
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	RAGSDALE RANCH	SPEAKS SW	VIENNA
WELL NAME	J. R. RAGSDALE NO. 1	I. S. EAVES NO. 1	JOE KAHANEK NO. 3
LOCATION	JAMES RYAN SUR., A-42	JAMES CHESHER SR. SUR. A-114	M. MULDOON SUR. A-34
OWNER	HUGHES & HUGHES OIL & GAS	WAINOCO OIL & GAS CO.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	02/04/75	04/14/77	03/28/73
SAMPLED	01/06/78	10/16/78	01/18/74
FORMATION	EOCE-WILCOX	EOCE-YEGUA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8364	5450	3243
WELLHEAD PRESSURE,PSIG	2885	2091	1385
OPEN FLOW, MCFD	13000	3700	16000
COMPONENT, MOLE PCT			
METHANE	89.7	91.6	99.2
ETHANE	4.4	5.1	0.1
PROPANE	1.6	1.6	TRACE
N-BUTANE	0.5	0.3	0.0
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.3	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1071	1108	1007
SPECIFIC GRAVITY	0.638	0.622	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8065 SAMPLE 12582	INDEX 8066 SAMPLE 13857	INDEX 8067 SAMPLE 14268
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	VIENNA N	WORD N	WORD N
WELL NAME	R. L. ZINN ET AL. NO. 1	ANNIE BROWN ET AL. NO. 1	NEUHAUS UNIT NO. 2
LOCATION	J. B. P. JANUARY SUR. A-552	NOT GIVEN	J. SMOTHERS SUR. A-47
OWNER	CONTINENTAL OIL CO.	SUPERIOR OIL CO.	BASS ENTERPRISES PROD. CO.
COMPLETED	08/03/70	06/09/72	03/13/73
SAMPLED	12/17/70	12/27/73	02/19/75
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8296	8115	7506
WELLHEAD PRESSURE,PSIG	2913	2818	2569
OPEN FLOW, MCFD	5600	14800	13500
COMPONENT, MOLE PCT			
METHANE	90.0	85.4	84.8
ETHANE	4.3	6.4	6.0
PROPANE	1.8	3.5	3.3
N-BUTANE	0.5	0.8	0.8
ISOBUTANE	0.4	0.8	0.9
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.3	0.6
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.7	0.3	0.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	2.1	2.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1084	1147	1167
SPECIFIC GRAVITY	0.640	0.676	0.693

	INDEX 8068 SAMPLE 14269	INDEX 8069 SAMPLE 14298	INDEX 8070 SAMPLE 6475
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LEE
FIELD	WORD N	YOAKUM	TANGLEWOOD
WELL NAME	NEUHAUS UNIT NO. 2	TURNER UNIT NO. 2	JAMES JOHNSON NO. 1
LOCATION	J. SMOTHERS SUR. A-47	2 MI. SE OF YOAKUM	JOHN FULCHER SUR.
OWNER	BASS ENTERPRISES PROD. CO.	ENTERPRISE RESOURCES INC.	VICK ASSOC., J. E. PEDERSON
COMPLETED	04/20/74	04/11/73	03/--/48
SAMPLED	02/19/75	03/07/75	01/15/58
FORMATION	EOCE-WILCOX	EOCE-WILCOX	CRET-BUDA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7100	8812	6060
WELLHEAD PRESSURE,PSIG	2369	1860	2700
OPEN FLOW, MCFD	12000	9844	5400
COMPONENT, MOLE PCT			
METHANE	86.4	85.5	91.6
ETHANE	5.9	6.3	2.4
PROPANE	2.9	3.0	0.8
N-BUTANE	0.8	0.8	0.2
ISOBUTANE	0.6	0.6	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.6	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.5	0.3	1.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.8	2.9
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1157	1122	1016
SPECIFIC GRAVITY	0.677	0.672	0.620

	INDEX 8071 SAMPLE 12576	INDEX 8072 SAMPLE 11848	INDEX 8073 SAMPLE 14775
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	BUFFALO	BUFFALO S	CENTERVILLE N
WELL NAME	EMMA B. PAGE NO. 1	MARY HOWARD NO. 1	T. R. RODELL NO. 1
LOCATION	NOT GIVEN	RALPH CAMPBELL SUR. A-191	B. CARAKER SUR.
OWNER	LONE STAR PRODUCING CO.	PAN AMERICAN PETROLEUM CORP.	LAKE RONEL OIL CO.
COMPLETED	NOT GIVEN	10/04/68	06/04/76
SAMPLED	12/08/70	05/07/69	09/--/76
FORMATION	CRET-WOODBINE	CRET-WOODBINE	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5496	5830	10151
WELLHEAD PRESSURE,PSIG	1400	1865	4515
OPEN FLOW, MCFD	NOT GIVEN	11180	7600
COMPONENT, MOLE PCT			
METHANE	97.6	96.3	94.7
ETHANE	0.7	0.6	1.6
PROPANE	0.4	0.1	0.5
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.6	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.4	2.2
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1012	989	1025
SPECIFIC GRAVITY	0.570	0.583	0.602

	INDEX 8074 SAMPLE 13838	INDEX 8075 SAMPLE 12575	INDEX 8076 SAMPLE 12429
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	JEWETT	LEON	MCRAE
WELL NAME	W.G. CLUTE NO. 1	PAGE ESTATE NO. C-1	BARKLEY NO. 1
LOCATION	J.B. TOMLINSON SUR. A-863	NOT GIVEN	JEWETT, TEXAS
OWNER	DOW CHEMICAL CO.	LONE STAR PRODUCING CO.	SUN OIL CO.
COMPLETED	11/04/71	02/13/51	08/19/55
SAMPLED	12/22/73	12/08/70	10/07/70
FORMATION	CRET-PETTIT	CRET-RODESSA	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9446	8799	8740
WELLHEAD PRESSURE,PSIG	1500	1240	925
OPEN FLOW, MCFD	6500	1476	1670
COMPONENT, MOLE PCT			
METHANE	94.9	91.4	86.6
ETHANE	1.3	0.8	2.1
PROPANE	0.4	0.2	2.0
N-BUTANE	0.3	0.0	1.0
ISOBUTANE	0.3	0.0	1.5
N-PENTANE	0.1	0.0	0.8
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.0	0.3
HEXANES PLUS	0.1	0.0	1.6
NITROGEN	0.2	4.1	1.6
OXYGEN	0.2	0.2	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.0	2.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1036	947	1127
SPECIFIC GRAVITY	0.602	0.693	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8077 SAMPLE 12604	INDEX 8078 SAMPLE 12574	INDEX 8079 SAMPLE 8996
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	NAVARRO CROSSING	OAKWOOD	RED OAK
WELL NAME	E. F. SWIFT HEIRS NO. 1	C. M. HALEY	P. E. HARCROW NO. 2
LOCATION	OAKWOOD	NOT GIVEN	JOSEPH BEATTY SUR. A-59
OWNER	HUMBLE OIL & REFINING CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	NOT GIVEN	12/07/61	05/26/63
SAMPLED	12/22/70	12/08/70	05/30/63
FORMATION	CRET-WOODBINE	CRET-WOODBINE	CRET-SUB-CLARKSVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5700	5814	5767
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1400	1810
OPEN FLOW, MCFD	NOT GIVEN	2840	1070
COMPONENT, MOLE PCT			
METHANE	90.8	95.3	85.8
ETHANE	1.6	1.8	8.0
PROPANE	0.6	0.7	2.5
N-BUTANE	0.2	0.2	0.9
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.6	0.8	1.2
OXYGEN	0.9	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.6
HELIUM	0.01	0.02	0.01
HEATING VALUE*	996	1047	1152
SPECIFIC GRAVITY	0.611	0.594	0.665

	INDEX 8080 SAMPLE 15392	INDEX 8081 SAMPLE 4694	INDEX 8082 SAMPLE 5000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	CLEVELAND S	DAYTON N	DAYTON N
WELL NAME	WILMA D. GASKAMP NO. 1	J. A. DEERING NCT-1, NO. 2	J. D. WILLIAMS NO. 3
LOCATION	MAURICE SMITH SUR. A-105	BLK. 134, H&TC RY CO. SUR.	H&TC SUR. 123, A-262
OWNER	ATAPCO	TEXAS CO.	TEXAS CO.
COMPLETED	08/19/76	06/04/48	10/31/50
SAMPLED	09/26/78	03/05/49	01/24/50
FORMATION	EOCE-YEGUA	EOCE-YEGUA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6625	7474	2136
WELLHEAD PRESSURE,PSIG	2493	3742	NOT GIVEN
OPEN FLOW, MCFD	5900	18000	20000
COMPONENT, MOLE PCT			
METHANE	86.9	87.3	90.4
ETHANE	6.6	7.0	0.4
PROPANE	2.6	2.9	0.2
N-BUTANE	0.6	0.7	0.1
ISOBUTANE	0.4	0.4	0.0
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	0.6	8.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.0	0.3	0.2
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1129	1145	936
SPECIFIC GRAVITY	0.654	0.647	0.599

	INDEX 8083 SAMPLE 14184	INDEX 8084 SAMPLE 12023	INDEX 8085 SAMPLE 5133
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	ESPERSON DOME	GUM BAYOU	GUM ISLAND
WELL NAME	MOORE"S BLUFF NO. A-207	MOORE BLUFF NO. H-1	ESPERSON NO. C.I.
LOCATION	C.W. FISHER SUR., A-657	LOUIS DAVIS SUR. A-18	NOT GIVEN
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.
COMPLETED	04/20/73	04/04/68	03/05/51
SAMPLED	10/23/74	08/29/69	09/28/51
FORMATION	EOCE-COOK MOUNTAIN	EOCE-COOK MOUNTAIN L	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7610	11922	8915
WELLHEAD PRESSURE,PSIG	3000	1600	4102
OPEN FLOW, MCFD	NOT GIVEN	2000	14000
COMPONENT, MOLE PCT			
METHANE	88.4	87.7	90.0
ETHANE	5.5	6.1	2.0
PROPANE	2.6	2.7	5.3
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.4	0.3	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.5	0.6	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	1.3	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1143	1116	1110
SPECIFIC GRAVITY	0.653	0.647	0.652

	INDEX 8086 SAMPLE 4047	INDEX 8087 SAMPLE 4049	INDEX 8088 SAMPLE 2500
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	HARDIN	HARDIN	HULL
WELL NAME	PARTLOW NO. 1-C	PARTLOW NO. 1-T	NO. 63-A
LOCATION	NOT GIVEN	NOT GIVEN	JESSE DEVORE LEAGUE
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	REPUBLIC PRODUCTION CO.
COMPLETED	07/--/44	12/06/38	04/23/32
SAMPLED	07/26/45	07/26/45	05/19/32
FORMATION	EOCE-MCMURTRY	EOCE-DAVIS SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7580	7547	2366
WELLHEAD PRESSURE,PSIG	1000	1100	NOT GIVEN
OPEN FLOW, MCFD	9700	19600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.2	75.6	58.5
ETHANE	17.3	23.9	38.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	0.0
OXYGEN	0.0	0.0	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.5	2.3
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1143	1194	1288
SPECIFIC GRAVITY	0.645	0.678	0.771

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8089 SAMPLE 14872	INDEX 8090 SAMPLE 11997	INDEX 8091 SAMPLE 13404
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	HULL S	MCCOY	QUINN
WELL NAME	HANNAH CARR NO. 1	MABEL OTT HOWARD NO. 1	U.S. PLYWOOD ET AL NO. 1
LOCATION	NICHOLAS LYNCH SUR. A-308	DANIEL DONAHOE SUR. A-24	REUBIN NARROW SUR. A-136
OWNER	GENERAL CRUDE OIL CO.	PAN AMERICAN PETROLEUM CORP.	MCCORMICK OIL & GAS CORP.
COMPLETED	10/14/76	03/12/68	06/30/71
SAMPLED	12/19/76	08/11/69	09/26/72
FORMATION	EOCE-YEGUA	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8976	14392	7524
WELLHEAD PRESSURE,PSIG	3850	9510	1270
OPEN FLOW, MCFD	21669	3449	13000
COMPONENT, MOLE PCT			
METHANE	89.9	79.4	88.0
ETHANE	5.7	8.4	5.7
PROPANE	2.1	2.4	2.2
N-BUTANE	0.5	0.3	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	3.7	1.6
OXYGEN	0.0	0.7	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	4.2	1.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1129	1059	1095
SPECIFIC GRAVITY	0.639	0.698	0.641

	INDEX 8092 SAMPLE 14871	INDEX 8093 SAMPLE 15145	INDEX 8094 SAMPLE 11748
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIMESTONE
FIELD	RAYWOOD W	RAYWOOD W	BOX CHURCH
WELL NAME	MALLET UNIT NO. 1	MALLET MITCHELL NO. 1	WHITE NO. 1
LOCATION	WILLIAM FIELDS SUR., A-194	URTAH ANDERSON SUR. A-1	JUAN O. ACOSTA SUR. A-1
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	JAKE L. HAMON
COMPLETED	06/01/75	05/04/76	01/08/69
SAMPLED	12/19/76	05/15/77	01/12/69
FORMATION	EOCE-COOK MOUNTAIN	EOCE-COOK MOUNTAIN	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	220	220	260
DEPTH, FEET	12002	11904	10690
WELLHEAD PRESSURE,PSIG	4500	1550	4082
OPEN FLOW, MCFD	6400	5000	24000
COMPONENT, MOLE PCT			
METHANE	89.9	90.2	60.8
ETHANE	5.3	4.4	2.2
PROPANE	1.9	1.4	0.9
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.3	1.4	28.2
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	6.2
HELIUM	TRACE	TRACE	0.07
HEATING VALUE*	1108	1084	741
SPECIFIC GRAVITY	0.637	0.635	0.779

	INDEX 8095 SAMPLE 12465	INDEX 8096 SAMPLE 10916	INDEX 8097 SAMPLE 5064
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	FALLON	HEADSVILLE	OLETHA
WELL NAME	FLOYD DUKE NO. 1	R. L. BROWN NO. 1	LULA MASON NO. 1
LOCATION	JUAN N. ACOSTA SUR. A-1	J. G. GARDNER SUR. A217	JUAN LUIS CHAVERT SUR.
OWNER	GEORGE MITCHELL & ASSOC. INC	MOBIL OIL CORP.	TEXAS CO.
COMPLETED	05/13/69	NOT GIVEN	04/01/51
SAMPLED	10/22/70	04/06/67	06/18/51
FORMATION	JURA-COTTON VALLEY	JURA-COTTON VALLEY	CRET-GLEN ROSE L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11212	9664	6788
WELLHEAD PRESSURE,PSIG	3500	3940	3151
OPEN FLOW, MCFD	10000	21700	22000
COMPONENT, MOLE PCT			
METHANE	96.2	95.3	89.7
ETHANE	1.0	1.8	4.6
PROPANE	0.1	0.3	1.7
N-BUTANE	0.2	0.0	0.5
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.3	1.4
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.2	2.3	1.2
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1002	1005	1080
SPECIFIC GRAVITY	0.596	0.590	0.636

	INDEX 8098 SAMPLE 12507	INDEX 8099 SAMPLE 10820	INDEX 8100 SAMPLE 10774
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	OLETHA	OLETHA SW	POKEY
WELL NAME	J. H. BATTLE G.U. NO. 1-C	CRYSTAL C. JONES NO. 1	LULLENE REGAN NO. 1
LOCATION	NOT GIVEN	M. C. REJON SUR. A-26	J.D. BROWN SUR. A-51
OWNER	TEXACO INC.	WATBURN OIL CO., ET AL.	J. BURNS BROWN, ET AL.
COMPLETED	--/--/52	10/14/20	07/23/66
SAMPLED	11/01/78	12/12/66	11/10/66
FORMATION	CRET-RODESSA	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6738	6724	6852
WELLHEAD PRESSURE,PSIG	2150	1960	2700
OPEN FLOW, MCFD	2362	10000	4000
COMPONENT, MOLE PCT			
METHANE	93.7	91.8	88.6
ETHANE	3.6	3.0	1.1
PROPANE	1.0	1.6	0.2
N-BUTANE	0.3	0.6	0.0
ISOBUTANE	0.3	0.6	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.4	0.0
NITROGEN	0.7	0.6	9.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1061	1111	922
SPECIFIC GRAVITY	0.606	0.637	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8101 SAMPLE 10776	INDEX 8102 SAMPLE 10777	INDEX 8103 SAMPLE 12040
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	POKEY	POKEY	TILLMON
WELL NAME	JOHN C. MCCLARAN NO. 1	JESSIE P. WRIGHT NO. 1-T	TILLMON NO. 1
LOCATION	M. RIVA PALACIOUS SUR. A-21	JUAN LUIS CHAVERT SUR. A-4	P. JOHNSON SUR. A-295
OWNER	J. BURNS BROWN, ET AL.	J. BURNS BROWN, ET AL.	UNION PRODUCTION CO.
COMPLETED	04/10/65	08/28/65	02/22/69
SAMPLED	11/10/66	11/10/66	09/15/69
FORMATION	CRET-RODESSA	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6415	7414	8822
WELLHEAD PRESSURE,PSIG	2300	1600	3280
OPEN FLOW, MCFD	4000	4000	3800
COMPONENT, MOLE PCT			
METHANE	90.3	96.7	97.6
ETHANE	3.2	1.3	0.3
PROPANE	1.8	0.2	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.8	0.0	0.0
NITROGEN	0.7	1.1	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	1.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1148	1008	997
SPECIFIC GRAVITY	0.655	0.573	0.570

	INDEX 8104 SAMPLE 4906	INDEX 8105 SAMPLE 11640	INDEX 8106 SAMPLE 12188
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIPSCOMB
FIELD	WILDCAT	WILDCAT	BEAL
WELL NAME	KEY NO. 1	EASTERLING NO. 1	PORTER A NO. 1
LOCATION	ROZELIA SCOTT SUR	7 MILES SE MEXIA	SEC. 413, BLK. 43, H&TC SUR.
OWNER	GREAT EXPECTATION OIL CO.	VAUGHN PETROLEUM, INC.	DIAMOND SHAMROCK CORP.
COMPLETED	05/16/50	04/07/68	12/16/69
SAMPLED	05/17/50	09/12/68	02/09/70
FORMATION	NOT GIVEN	JURA-COTTON VALLEY	PENN-MORROW U
GEOLOGIC PROVINCE CODE	260	260	360
DEPTH, FEET	2705	11329	9543
WELLHEAD PRESSURE,PSIG	350	5775	2400
OPEN FLOW, MCFD	3150	8000	3500
COMPONENT, MOLE PCT			
METHANE	98.3	96.2	86.6
ETHANE	0.7	0.7	7.3
PROPANE	0.4	0.1	2.9
N-BUTANE	0.2	0.0	0.6
ISOBUTANE	0.2	0.0	0.2
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	---	0.3	1.1
OXYGEN	---	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	---	2.6	0.8
HELIUM	0.00	0.01	0.06
HEATING VALUE*	1042	990	1124
SPECIFIC GRAVITY	0.572	0.585	0.649

	INDEX 8107 SAMPLE 13209	INDEX 8108 SAMPLE 15685	INDEX 8109 SAMPLE 7636
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BEAL	BOOKER S	BRADFORD
WELL NAME	ALEXANDER NO. 1	SCOTT NO. 1	C. L. KING NO. 1
LOCATION	SEC. 467, BLK. 43, H&TC SUR.	SEC.1117, BLK.43, H&TC SUR.	SEC. 642, BLK. 43, HT&C SUR.
OWNER	PHILCON DEVELOPMENT CO.	LEAR PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/03/72	10/07/78	01/25/60
SAMPLED	05/15/72	07/05/79	08/08/70
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10222	9350	6474
WELLHEAD PRESSURE,PSIG	3782	2600	1650
OPEN FLOW, MCFD	3750	NOT GIVEN	21300
COMPONENT, MOLE PCT			
METHANE	90.8	84.8	80.2
ETHANE	4.8	7.9	8.5
PROPANE	1.7	3.7	5.3
N-BUTANE	0.3	0.9	1.6
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.1	0.3	0.7
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	0.5	0.9	2.0
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	0.3
HELIUM	0.04	0.08	0.10
HEATING VALUE*	1092	1172	1243
SPECIFIC GRAVITY	0.627	0.675	0.725

	INDEX 8110 SAMPLE 7721	INDEX 8111 SAMPLE 9530	INDEX 8112 SAMPLE 9947
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	PEERY A NO. 1	J. B. MARTIN NO. 1	HAMKER NO. 1
LOCATION	SEC. 730, BLK. 43, H&TC SUR.	SEC. 809, BLK. 43, H&TC SUR.	SEC. 590, BLK. 43, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	SHAMROCK OIL & GAS CORP.	GULF OIL CORP.
COMPLETED	08/09/60	06/09/64	06/05/64
SAMPLED	10/13/60	08/06/64	07/11/65
FORMATION	PENN-MORROW U	PENN-CLEVELAND	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9049	7623	6475
WELLHEAD PRESSURE,PSIG	2541	1800	1758
OPEN FLOW, MCFD	14250	6650	11750
COMPONENT, MOLE PCT			
METHANE	86.0	78.1	78.7
ETHANE	7.3	7.1	8.4
PROPANE	3.3	5.8	5.2
N-BUTANE	0.8	2.3	1.5
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	TRACE	0.6	0.4
ISOPENTANE	0.5	0.6	0.4
CYCLOPENTANE	0.2	0.3	0.3
HEXANES PLUS	0.2	0.6	0.6
NITROGEN	0.4	1.3	3.3
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.7	0.2
HELIUM	0.10	0.07	0.14
HEATING VALUE*	1174	1257	1236
SPECIFIC GRAVITY	0.670	0.765	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8113 SAMPLE 10020	INDEX 8114 SAMPLE 10376	INDEX 8115 SAMPLE 13584
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	A. BECKER, JR. ET AL, NO. 1	G. JERGENSON NO. 1	BRADFORD B NO. 1
LOCATION	SEC. 774, BLK. 43, H&TC SUR.	SEC. 895, BLK. 43, H&TC SUR.	SEC. 687, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	COTTON PETROLEUM CORP.
COMPLETED	04/27/64	12/10/65	10/18/72
SAMPLED	08/02/65	01/29/66	04/12/73
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7961	7655	9618
WELLHEAD PRESSURE,PSIG	2344	2350	1200
OPEN FLOW, MCFD	4080	7300	750
COMPONENT, MOLE PCT			
METHANE	87.2	88.6	87.8
ETHANE	6.0	6.2	6.5
PROPANE	2.2	2.3	2.8
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.3	0.2	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.2	1.4	0.5
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.8
HELIUM	0.08	0.10	0.04
HEATING VALUE*	1108	1109	1138
SPECIFIC GRAVITY	0.648	0.635	0.651

	INDEX 8116 SAMPLE 14983	INDEX 8117 SAMPLE 14984	INDEX 8118 SAMPLE 15932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	OLA O. PIPER NO. 3	OLA O. PIPER NO. 3	FRED LOESCH NO. 2
LOCATION	SEC. 688, BLK. 43, H&TC SUR.	SEC. 688, BLK. 43, H&TC SUR.	SEC. 945, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	ARCO OIL & GAS CO.
COMPLETED	02/02/77	02/02/77	11/26/79
SAMPLED	05/01/77	05/01/77	04/09/80
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9859	7646	7334
WELLHEAD PRESSURE,PSIG	3090	2075	1085
OPEN FLOW, MCFD	1400	6000	11500
COMPONENT, MOLE PCT			
METHANE	96.3	90.4	86.1
ETHANE	1.1	5.8	5.8
PROPANE	0.2	1.6	3.8
N-BUTANE	0.1	0.4	1.2
ISOBUTANE	0.1	TRACE	0.4
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.4	0.8	1.3
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.5	0.3
HELIUM	0.06	0.05	0.12
HEATING VALUE*	1007	1088	1173
SPECIFIC GRAVITY	0.581	0.620	0.674

	INDEX 8119 SAMPLE 15916	INDEX 8120 SAMPLE 10183	INDEX 8121 SAMPLE 9391
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	CAMBRIDGE	COBURN	COBURN N
WELL NAME	WERTHTH NO. 1	CIT.NATL.BANK TRUSTEE D NO.2	GILBERT HILL NO. 1
LOCATION	SEC. 499, BLK. 43, H&TC SUR.	SEC. 657, BLK. 43, H&TC SUR.	SEC. 933, BLK. 43, H&TC SUR.
OWNER	MAY PETROLEUM, INC.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	NOT GIVEN	09/03/65	03/18/64
SAMPLED	03/09/80	10/05/65	06/08/64
FORMATION	PENN-ATOKA&NOVA	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8700	11204	10974
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3944	3340
OPEN FLOW, MCFD	9500	3100	5200
COMPONENT, MOLE PCT			
METHANE	86.5	96.7	93.6
ETHANE	9.0	0.7	3.0
PROPANE	2.6	0.2	1.2
N-BUTANE	0.6	0.0	0.2
ISOBUTANE	0.2	0.0	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.1	0.5	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.9	1.2
HELIUM	0.07	0.04	0.04
HEATING VALUE*	1150	9970	1053
SPECIFIC GRAVITY	0.649	0.581	0.603

	INDEX 8122 SAMPLE 9709	INDEX 8123 SAMPLE 12235	INDEX 8124 SAMPLE 10829
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	COBURN SW	FOLLETT	FOLLETT S
WELL NAME	CITIZENS NATL.BK. TR. A NO.2	TRAVIS NO. 1-V	MAUD 1 HAINES NO. 1
LOCATION	SEC. 166, BLK 43, H&TC SUR.	SEC. 92, BLK. 10, HT&B SUR.	SEC. 1138, BLK.43, H&TC SUR.
OWNER	SHAMROCK OIL AND GAS CORP.	CLINTON OIL CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	11/15/64	01/24/70	11/01/66
SAMPLED	01/21/65	NOT GIVEN	01/04/67
FORMATION	PENN-MORROW	PENN-MORROW M	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11587	8717	9066
WELLHEAD PRESSURE,PSIG	4792	2700	2503
OPEN FLOW, MCFD	1430	24500	4750
COMPONENT, MOLE PCT			
METHANE	96.3	89.7	84.0
ETHANE	2.4	4.9	6.6
PROPANE	0.7	2.3	3.5
N-BUTANE	0.1	0.6	1.1
ISOBUTANE	0.1	0.3	0.6
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.1	0.6
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.5	0.1	0.6
NITROGEN	0.3	0.9	1.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.7	1.4
HELIUM	0.05	0.05	0.08
HEATING VALUE*	1057	1100	1194
SPECIFIC GRAVITY	0.606	0.631	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8125 SAMPLE 15754	INDEX 8126 SAMPLE 7506	INDEX 8127 SAMPLE 7537
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	FOLLETT S	FRASS	FRASS
WELL NAME	BORN NO. 1	HENRY FRASS, JR. B-1-LC	ANNA FRASS G NO. 1
LOCATION	SEC. 969, BLK. 43, H&TC SUR.	SEC. 70, BLK. 10, HT&B SUR.	SEC. 105, BLK. 10, H&TB SUR.
OWNER	HOME PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	TEXACO INC.
COMPLETED	04/12/79	01/29/60	10/30/59
SAMPLED	09/17/79	04/15/60	05/03/60
FORMATION	PENN-MORROW	PENN-MORROW L	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9244	8778	8839
WELLHEAD PRESSURE,PSIG	2800	2391	2418
OPEN FLOW, MCFD	3000	3700	3350
COMPONENT, MOLE PCT			
METHANE	94.2	96.5	81.1
ETHANE	3.0	1.4	6.9
PROPANE	0.9	0.7	4.0
N-BUTANE	0.2	0.1	1.9
ISOBUTANE	0.1	0.1	0.9
N-PENTANE	TRACE	TRACE	1.5
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.6
HEXANES PLUS	0.1	0.1	1.9
NITROGEN	0.5	0.2	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.6
HELIUM	0.04	0.10	0.10
HEATING VALUE*	1051	1033	1327
SPECIFIC GRAVITY	0.596	0.582	0.765

	INDEX 8128 SAMPLE 12764	INDEX 8129 SAMPLE 9900	INDEX 8130 SAMPLE 8691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	GHEEN	HIGGINS S	HIGGINS W
WELL NAME	GHEEN NO. 1	ROY SANSING NO. 1	LILLIAN M. ADDIE NO. 1
LOCATION	SEC. 468, BLK. 43, H&TC SUR.	SEC. 88, BLK. 43, H&TC SUR.	SEC. 161, BLK. 43, H&TC SUR.
OWNER	PHILCON DEVELOPEMENT CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/03/69	03/22/65	04/10/62
SAMPLED	04/15/71	05/19/65	10/03/62
FORMATION	PENN-MORROW L	PENN-TONKAWA	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10203	7584	11539
WELLHEAD PRESSURE,PSIG	3438	NOT GIVEN	3986
OPEN FLOW, MCFD	4900	7500	8300
COMPONENT, MOLE PCT			
METHANE	89.6	83.4	96.6
ETHANE	5.0	5.6	0.7
PROPANE	1.9	4.5	0.1
N-BUTANE	0.4	1.0	0.1
ISOBUTANE	0.6	0.7	TRACE
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	0.3	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.4	TRACE	0.0
NITROGEN	0.8	3.9	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.4	2.2
HELIUM	0.04	0.11	TRACE
HEATING VALUE*	1109	1132	997
SPECIFIC GRAVITY	0.639	0.678	0.583

	INDEX 8131 SAMPLE 8951	INDEX 8132 SAMPLE 14236	INDEX 8133 SAMPLE 14738
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	HIGGINS W	HIGGINS W	HORSE CREEK NW
WELL NAME	JESS R. BUSSARD NO. 1	MAY M. WRIGHT E NO. 1-163	BROADDUS NO. 1
LOCATION	SEC. 162, BLK. 43, H&TC SUR.	SEC. 163, BLK. 43, H&TC SUR.	SEC. 293, BLK. 43, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	01/31/63	10/01/74	NOT GIVEN
SAMPLED	05/01/63	11/24/74	08/19/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10564	10660	10920
WELLHEAD PRESSURE,PSIG	3776	3950	3580
OPEN FLOW, MCFD	23500	5200	4500
COMPONENT, MOLE PCT			
METHANE	90.2	88.8	96.9
ETHANE	5.9	6.1	1.2
PROPANE	1.5	1.8	0.3
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	TRACE	0.4	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.3	0.6	0.0
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.1	0.4	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.9
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1094	1133	1011
SPECIFIC GRAVITY	0.625	0.649	0.573

	INDEX 8134 SAMPLE 15617	INDEX 8135 SAMPLE 9925	INDEX 8136 SAMPLE 7536
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	HORSE CREEK NW	KELLN	KIOWA CREEK
WELL NAME	KELLN 206 NO. 1	KELLN NO. 3	CRUISE A NO. 1
LOCATION	SEC. 206, BLK. 43, H&TC SUR.	SEC. 153, BLK. 43, H&TC SUR.	SEC. 856, BLK. 43, H&TC SUR.
OWNER	DORCHESTER EXPLORATION, INC.	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	05/04/79	03/31/65	03/16/60
SAMPLED	05/04/79	06/09/65	05/04/60
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11042	7239	6389
WELLHEAD PRESSURE,PSIG	4410	166	1811
OPEN FLOW, MCFD	6600	3300	20099
COMPONENT, MOLE PCT			
METHANE	97.3	81.5	86.6
ETHANE	0.8	4.6	2.9
PROPANE	0.1	4.5	2.7
N-BUTANE	0.0	1.0	1.0
ISOBUTANE	0.0	0.8	0.4
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	0.3	2.5	1.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.3	0.2
HELIUM	0.04	0.10	0.10
HEATING VALUE*	1003	1148	1169
SPECIFIC GRAVITY	0.574	0.697	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8137 SAMPLE 11709	INDEX 8138 SAMPLE 16137	INDEX 8139 SAMPLE 6258
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	KIOWA CREEK	KIOWA CREEK N	R. H. COWAN NO. 1
WELL NAME	BRILLHART NO. 2-852	PARKER "F" NO. 1	SEC. 545, BLK. 43, H&TC SUR.
LOCATION	SEC. 852, BL. 43, H&TC SUR.	SEC. 1031, BLK. 43, H&TC SUR	HUMBLE OIL & REFINING CO.
OWNER	KERR-MCGEE CORP.	TEXAS OIL & GAS CORP.	01/19/57
COMPLETED	03/07/68	08/20/80	03/08/57
SAMPLED	12/17/68	12/04/80	PENN-MORROW
FORMATION	PENN-MORROW	PENN-MORROW	360
GEOLOGIC PROVINCE CODE	360	360	10164
DEPTH, FEET	9134	8654	2972
WELLHEAD PRESSURE,PSIG	2242	2900	10800
OPEN FLOW, MCFD	4160	38000	
COMPONENT, MOLE PCT			
METHANE	85.8	84.4	93.1
ETHANE	7.1	7.4	3.5
PROPANE	3.7	3.5	1.3
N-BUTANE	0.9	0.8	0.3
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.7	1.8	0.1
OXYGEN	0.1	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	1.3
HELIUM	0.06	0.07	0.06
HEATING VALUE*	1163	1147	1062
SPECIFIC GRAVITY	0.668	0.672	0.608

	INDEX 8140 SAMPLE 6263	INDEX 8141 SAMPLE 6341	INDEX 8142 SAMPLE 7715
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB	LIPSCOMB	LIPSCOMB
WELL NAME	VERA N. MILLER NO. 1	SCHULTZ BROTHERS NO. 1	C. C. DUKE NO. 1
LOCATION	SEC. 715, BLK. 43, H&TC SUR.	SEC. 694, BLK. 43, H&TC SUR.	SEC. 781, BLK. 43, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	01/20/57	03/19/57	05/02/57
SAMPLED	03/08/57	06/12/57	10/10/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9764	9736	6610
WELLHEAD PRESSURE,PSIG	3250	3374	1876
OPEN FLOW, MCFD	2300	13200	5900
COMPONENT, MOLE PCT			
METHANE	87.2	84.7	85.3
ETHANE	7.0	7.0	6.5
PROPANE	2.4	2.6	3.1
N-BUTANE	0.6	1.0	1.2
ISOBUTANE	0.3	0.8	0.7
N-PENTANE	0.2	0.8	0.4
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.4	1.5	0.4
NITROGEN	0.2	0.1	1.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.1
HELIUM	0.08	0.04	0.10
HEATING VALUE*	1149	1238	1176
SPECIFIC GRAVITY	0.659	0.711	0.678

	INDEX 8143 SAMPLE 13583	INDEX 8144 SAMPLE 15568	INDEX 8145 SAMPLE 13647
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB	LIPSCOMB S	LIPSCOMB SE
WELL NAME	JAMES ROLAND WHEAT NO. 1	VALENTINE SCHOENHALS A NO. 1	ROSE C. TURNER NO. 1
LOCATION	SEC. 455, BLK. 43, H&TC SUR.	SEC. 457, BLK. 43, H&TC SUR.	SEC. 541, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	03/13/73	01/11/79	04/24/73
SAMPLED	04/14/73	02/20/79	07/14/73
FORMATION	PENN-CLEVELAND	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8096	9758	10134
WELLHEAD PRESSURE,PSIG	2424	2493	3518
OPEN FLOW, MCFD	2900	5200	3100
COMPONENT, MOLE PCT			
METHANE	89.0	88.2	96.4
ETHANE	5.8	6.9	1.0
PROPANE	2.4	2.2	0.2
N-BUTANE	0.6	0.4	TRACE
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.8	0.5	0.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	1.7
HELIUM	0.06	0.06	0.03
HEATING VALUE*	1120	1113	1000
SPECIFIC GRAVITY	0.639	0.637	0.579

	INDEX 8146 SAMPLE 13657	INDEX 8147 SAMPLE 14533	INDEX 8148 SAMPLE 16142
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB SE	LIPSCOMB SW	LIPSCOMB SW
WELL NAME	PUMT	ANITA M. ANTHONY NO. 1	OWEN NO. 1-844
LOCATION	SEC. 516, BLK. 43, H&TC SUR.	SEC. 372, BLK. 43, H&TC SUR.	SEC. 544, BLK. 43, H&TC SUR.
OWNER	COTTON PETROLEUM CORP.	DIAMOND SHAMROCK CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	09/28/72	09/17/75	03/25/80
SAMPLED	07/25/73	11/14/75	12/05/80
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10393	8194	9211
WELLHEAD PRESSURE,PSIG	4323	2320	2791
OPEN FLOW, MCFD	25700	2900	5900
COMPONENT, MOLE PCT			
METHANE	95.7	85.3	87.7
ETHANE	1.5	7.6	7.9
PROPANE	0.5	3.6	2.1
N-BUTANE	0.1	0.9	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	1.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.3	0.5
HELIUM	0.04	0.10	0.05
HEATING VALUE*	1025	1160	1125
SPECIFIC GRAVITY	0.590	0.665	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8149 SAMPLE 7984	INDEX 8150 SAMPLE 10384	INDEX 8151 SAMPLE 10524
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	MAMMOTH CREEK	MAMMOTH CREEK N	MAMMOTH CREEK S
WELL NAME	BROYLES NO. 1	EHRLICH NO. 1	YAUCK NO. 1
LOCATION	SEC. 978, BLK. 43, H&TC SUR.	SEC. 1051, BLK.43, H&TC SUR.	SEC. 782, H&TC SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	APACHE CORP.
COMPLETED	03/30/61	11/01/65	02/12/66
SAMPLED	05/21/61	02/07/66	04/11/66
FORMATION	PENN-CLEVELAND	PENN-COTTAGE GROVE	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7347	7500	6549
WELLHEAD PRESSURE,PSIG	2580	2350	1775
OPEN FLOW, MCFD	7000	3000	6900
COMPONENT, MOLE PCT			
METHANE	88.6	89.3	83.1
ETHANE	5.9	6.0	6.6
PROPANE	1.9	1.9	3.0
N-BUTANE	0.5	0.7	1.2
ISOBUTANE	0.2	0.2	0.6
N-PENTANE	0.2	0.3	1.1
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	0.2	0.8
HEXANES PLUS	0.2	0.7	1.8
NITROGEN	1.6	0.2	1.4
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.10	0.06	0.10
HEATING VALUE*	1097	1148	1266
SPECIFIC GRAVITY	0.637	0.648	0.733

	INDEX 8152 SAMPLE 15680	INDEX 8153 SAMPLE 16148	INDEX 8154 SAMPLE 6298
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	MAY	MAY	MERYDITH
WELL NAME	DUKE NO. 1	TERRELL NO. 1	W. C. MERYDITH NO. 1
LOCATION	SEC.1038, BLK.43, H&TC SUR.	SEC.1125, BLK.43, H&TC SUR.	SEC. 469, BLK. 43, H&TC SUR.
OWNER	MAY PETROLEUM CORP.	UNIVERSAL RESOURCES CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	11/16/78	09/15/80	02/29/56
SAMPLED	06/28/79	12/15/80	04/10/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9384	9228	10162
WELLHEAD PRESSURE,PSIG	3118	3223	85
OPEN FLOW, MCFD	46000	4300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.7	93.5	83.0
ETHANE	2.4	2.4	8.0
PROPANE	0.7	0.6	3.6
N-BUTANE	0.2	0.1	1.1
ISOBUTANE	0.1	0.1	1.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	0.4	1.5	0.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	0.9
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1044	1026	1230
SPECIFIC GRAVITY	0.597	0.598	0.709

	INDEX 8155 SAMPLE 14594	INDEX 8156 SAMPLE 15283	INDEX 8157 SAMPLE 15849
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	NORTHRUP	NORTHRUP	NOT GIVEN
WELL NAME	WALLACE N. HAMKER NO. 1	W. T. TREGELLAS-A NO. 1	BENSCH NO. 1
LOCATION	SEC. 589, BLK. 43, H&TC SUR.	SEC. 675, BLK. 43, H&TC SUR.	SEC. 946,BLK.43,H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	COTTON PETROLEUM CO.
COMPLETED	11/25/75	04/04/78	NOT GIVEN
SAMPLED	03/04/76	05/25/78	12/05/79
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7485	730	7600
WELLHEAD PRESSURE,PSIG	1815	1750	1400
OPEN FLOW, MCFD	6500	6000	1350
COMPONENT, MOLE PCT			
METHANE	85.7	85.8	86.0
ETHANE	6.5	6.8	5.9
PROPANE	3.6	3.7	3.7
N-BUTANE	1.1	1.0	1.1
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.2	1.1	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1163	1162	1163
SPECIFIC GRAVITY	0.668	0.667	0.670

	INDEX 8158 SAMPLE 11463	INDEX 8159 SAMPLE 11464	INDEX 8160 SAMPLE 11974
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	NOTLA	NOTLA	TROSPER
WELL NAME	DAVID KELLN NO. 1	DAVID KELLN NO. 1	TROSPER NO. 1
LOCATION	SEC. 59, BLK. 43, H&TC SUR.	SEC. 59, BLK 43, H&TC SUR.	SEC. 362, BLK. 43, H&TC SUR.
OWNER	CABOT CORP.	CABOT CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	06/10/69
SAMPLED	04/29/68	04/29/68	07/17/69
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON & ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9944	10950	13376
WELLHEAD PRESSURE,PSIG	4622	5275	4285
OPEN FLOW, MCFD	14420	14930	62000
COMPONENT, MOLE PCT			
METHANE	86.4	93.9	96.2
ETHANE	7.7	2.6	0.5
PROPANE	2.9	0.7	0.1
N-BUTANE	0.6	0.2	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	0.7	0.6	1.7
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.2	1.2
HELIUM	0.05	0.04	0.06
HEATING VALUE*	1146	1053	986
SPECIFIC GRAVITY	0.658	0.606	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8161 SAMPLE 11975	INDEX 8162 SAMPLE 12187	INDEX 8163 SAMPLE 6449
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	TROSPER	TROSPER	WILDCAT
WELL NAME	TROSPER NO. 1	CITIZEN NATIONAL BANK G-8-A	J.A. BARTON NO. 1
LOCATION	SEC. 342, BLK. 43, H&TC SUR.	SEC. 343, BLK. 43, H&TC SUR.	SEC. 525, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	TEXAS CO.
COMPLETED	06/10/69	12/15/69	10/02/57
SAMPLED	07/17/69	02/04/70	11/23/57
FORMATION	PENN-MORROW	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10520	10607	10440
WELLHEAD PRESSURE,PSIG	3748	3288	3342
OPEN FLOW, MCFD	33250	5200	1500
COMPONENT, MOLE PCT			
METHANE	96.4	95.8	96.2
ETHANE	0.7	1.8	1.5
PROPANE	0.2	0.5	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.6	0.6	0.2
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.2	1.5
HELIUM	0.04	0.04	0.10
HEATING VALUE*	995	1016	1018
SPECIFIC GRAVITY	0.578	0.583	0.584

	INDEX 8164 SAMPLE 7797	INDEX 8165 SAMPLE 11059	INDEX 8166 SAMPLE 12407
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BLAU NO. 1	HARRY L. KING NO. 1	R. PAINE NO. 1-944
LOCATION	SEC. 941, BLK. 43, H&TC SUR.	SEC. 551, BLK. 43, H&TC SUR.	SEC. 944, BLK. 43, H&TC SUR.
OWNER	AMBASSADOR OIL CORP.	APACHE CORP.	YUCCA PETROLEUM CO.
COMPLETED	01/26/61	04/01/67	08/04/70
SAMPLED	12/19/60	08/08/67	09/--/70
FORMATION	PENN-DOUGLAS	PENN-MORROW	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5900	9428	5873
WELLHEAD PRESSURE,PSIG	1500	2675	1462
OPEN FLOW, MCFD	5402	NOT GIVEN	16500
COMPONENT, MOLE PCT			
METHANE	82.9	81.8	83.0
ETHANE	6.6	6.7	5.7
PROPANE	3.2	3.1	3.0
N-BUTANE	1.0	0.8	0.8
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.3	0.0	0.3
ISOPENTANE	0.2	1.2	0.2
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	4.5	3.7	6.0
OXYGEN	TRACE	0.7	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	TRACE
HELIUM	0.20	0.07	0.19
HEATING VALUE*	1130	1165	1093
SPECIFIC GRAVITY	0.680	0.706	0.670

	INDEX 8167 SAMPLE 13551	INDEX 8168 SAMPLE 13788	INDEX 8169 SAMPLE 14249
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	RACHEL "A" NO. 1	REDELSPERGER NO. 1	ALEX BORN ET AL NO. A-1
LOCATION	SEC. 292, BLK. 43, H&TC SUR.	SEC. 900, BLK. 43, H&TC SUR.	SEC. 332, BLK. 43, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	COTTON PETROLEUM CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	11/16/72	04/17/73	11/19/74
SAMPLED	02/28/73	10/30/73	12/28/74
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10884	7516	8140
WELLHEAD PRESSURE,PSIG	4175	1802	1947
OPEN FLOW, MCFD	13500	2700	13000
COMPONENT, MOLE PCT			
METHANE	96.7	85.7	82.6
ETHANE	0.9	6.1	7.8
PROPANE	0.2	4.2	4.6
N-BUTANE	TRACE	1.1	1.4
ISOBUTANE	TRACE	0.5	0.7
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	0.5	1.3	1.3
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.3	0.4
HELIUM	0.04	0.11	0.10
HEATING VALUE*	1001	1167	1216
SPECIFIC GRAVITY	0.576	0.670	0.703

	INDEX 8170 SAMPLE 4574	INDEX 8171 SAMPLE 12234	INDEX 8172 SAMPLE 5099
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	ALBERT W	ATKINSON (4250 FT.)	BAKER
WELL NAME	ALBERT W. WEST A NO. 2	M. M. ATKINSON NO. 1	BAKER NO. 1
LOCATION	MICHAEL CRONICAN SUR.	P. MOORE SUR. 145, A-298	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	RICHARD E. HAAS	W. EARL ROWE
COMPLETED	07/06/45	07/03/69	11/29/47
SAMPLED	10/02/48	04/09/70	11/03/51
FORMATION	EOCE-SLICK	EOCE-REKLAW	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6696	4295	2000
WELLHEAD PRESSURE,PSIG	2950	1625	760
OPEN FLOW, MCFD	NOT GIVEN	125000	4000
COMPONENT, MOLE PCT			
METHANE	81.2	90.7	98.4
ETHANE	16.8	4.3	0.1
PROPANE	---	2.1	0.1
N-BUTANE	---	0.5	0.1
ISOBUTANE	---	0.4	0.0
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.3	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.0	1.1	0.9
OXYGEN	0.1	0.0	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.7	0.3	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1124	1177	1011
SPECIFIC GRAVITY	0.656	0.630	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8173 SAMPLE 14274	INDEX 8174 SAMPLE 14113	INDEX 8175 SAMPLE 10141
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	BRASLAU	C.A. WINN	CHAPA
WELL NAME	F. BRASLAU GU NO. 2	ROY HINNANT NO. 5	EL PASO NATURAL GAS NO. 1
LOCATION	J. POITEVENT SUR. A-324	5 MI. S OF GEORGE WEST	SEC. 320 VIC. CHAPASUR.A-739
OWNER	ATLANTIC RICHFIELD CO.	FRIO PRODUCTION CO.	THE ATLANTIC REFINING CO.
COMPLETED	02/26/73	09/03/72	08/20/64
SAMPLED	02/20/75	07/24/74	09/21/65
FORMATION	EOCE-WILCOX	EOCE-HOCKLEY	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8550	4173	8228
WELLHEAD PRESSURE,PSIG	5020	760	4400
OPEN FLOW, MCFD	60000	4200	20950
COMPONENT, MOLE PCT			
METHANE	86.7	88.2	87.4
ETHANE	6.1	6.0	5.8
PROPANE	2.9	2.9	2.2
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.5	0.8	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.2	0.3	0.4
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.2	2.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1139	1162	1110
SPECIFIC GRAVITY	0.671	0.655	0.661

	INDEX 8176 SAMPLE 4774	INDEX 8177 SAMPLE 4896	INDEX 8178 SAMPLE 4897
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	CLAYTON	CLAYTON	CLAYTON
WELL NAME	C. S. HERRING NO. 1	GREAT SO. LIFE INS.CO.NO. 1	BLK. 76, UNIT NO. 1
LOCATION	C. F. SIMMONS SUBD.	BLK. 51	BLK. 76, SARA AMESON SUR.
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	MAGNOLIA PETROLEUM CO.
COMPLETED	06/11/49	03/29/50	10/24/49
SAMPLED	10/25/49	05/19/50	03/07/50
FORMATION	EOCE-	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6500	6426	6953
WELLHEAD PRESSURE,PSIG	2405	2315	2985
OPEN FLOW, MCFD	60000	36000	43500
COMPONENT, MOLE PCT			
METHANE	88.8	88.6	88.7
ETHANE	5.9	5.9	5.3
PROPANE	2.3	2.4	2.7
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	0.5	0.0	0.3
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	1.1	0.8
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1119	1133	1141
SPECIFIC GRAVITY	0.645	0.653	0.652

	INDEX 8179 SAMPLE 13890	INDEX 8180 SAMPLE 15585	INDEX 8181 SAMPLE 15586
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	CLAYTON	CLAYTON	CLAYTON
WELL NAME	BLOCK 86 NO. 2	HERRING "A" NO. 1	HERRING "A" NO. 1
LOCATION	D.R. FANT SUR. NO. 20, A-628	JOHN BUCHANAN SUR. A-81	JOHN BUCHANAN SUR. A-81
OWNER	MOBIL OIL CORP.	KILROY CO. OF TEXAS	KILROY CO. OF TEXAS
COMPLETED	01/16/74	08/10/77	08/10/77
SAMPLED	01/25/74	03/20/79	03/20/79
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8353	7720	8351
WELLHEAD PRESSURE,PSIG	3870	2785	4035
OPEN FLOW, MCFD	2800	4100	1330
COMPONENT, MOLE PCT			
METHANE	89.8	86.9	81.8
ETHANE	4.1	3.6	6.1
PROPANE	2.4	2.9	3.6
N-BUTANE	0.5	0.6	0.9
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.7	2.8	3.8
OXYGEN	0.0	0.2	0.6
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.9	1.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1105	1083	1125
SPECIFIC GRAVITY	0.644	0.661	0.696

	INDEX 8182 SAMPLE 16032	INDEX 8183 SAMPLE 13356	INDEX 8184 SAMPLE 3981
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	LIMES	MAXINE NE	OAKVILLE
WELL NAME	C. S. NELSON TRUST NO. 1	CHARLES LINDHOLM NO. 1	L. A. REAGAN NO. 3
LOCATION	CAMERON CO. SCHOOL LAND	R. W. FANT SUR. A615	NOT GIVEN
OWNER	PEND OREILLE OIL & GAS CO.	PRAIRIE PRODUCING CO.	HENDERSON COQUAT
COMPLETED	NOT GIVEN	11/11/71	02/25/45
SAMPLED	07/31/80	08/18/72	03/01/45
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCF-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7882	8010	6930
WELLHEAD PRESSURE,PSIG	2249	3825	920
OPEN FLOW, MCFD	5000	6600	11300
COMPONENT, MOLE PCT			
METHANE	86.2	84.6	81.8
ETHANE	6.2	7.2	15.1
PROPANE	3.1	4.1	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.6	0.7	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.5	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.1	---
NITROGEN	0.3	0.5	0.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.7	1.4	3.0
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1157	1168	1099
SPECIFIC GRAVITY	0.675	0.682	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8185 SAMPLE 15183		INDEX 8186 SAMPLE 12036		INDEX 8187 SAMPLE 13546	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIVE OAK		LIVE OAK		LIVE OAK	
FIELD	OAKVILLE E		SALT CREEK		TOM LYNE N	
WELL NAME	H. L. HINTON GU 1 NO 1		SALT CREEK G. U. NO. 1		T.J. LYNE NO. 12	
LOCATION	JAMES MCGLOIN SUR. A-26		D. R. FANT SUR. NO. 2		SEC. 165, A&M SUR. A-74	
OWNER	NEUMIN PRODUCTION CO.		HUMBLE OIL & REFINING CO.		ATLANTIC RICHFIELD CO.	
COMPLETED	07/08/76		02/05/68		01/06/71	
SAMPLED	12/28/77		09/12/69		02/13/73	
FORMATION	EOCE-SLICK		EOCE-WILCOX		ORDO-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6759		8237		9397	
WELLHEAD PRESSURE,PSIG	2374		3265		5625	
OPEN FLOW, MCFD	2600		5000		156000	
COMPONENT, MOLE PCT						
METHANE	89.3		85.3		86.8	
ETHANE	5.7		6.2		6.9	
PROPANE	2.2		3.6		2.6	
N-BUTANE	0.5		0.8		0.4	
ISOBUTANE	0.3		0.5		0.4	
N-PENTANE	0.1		0.3		TRACE	
ISOPENTANE	0.2		0.4		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.1		0.3		TRACE	
NITROGEN	0.2		1.1		0.3	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		1.2		2.4	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1102		1162		1102	
SPECIFIC GRAVITY	0.649		0.680		0.653	

	INDEX 8188 SAMPLE 4637		INDEX 8189 SAMPLE 4737		INDEX 8190 SAMPLE 15519	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIVE OAK		LIVE OAK		LOVING	
FIELD	WILDCAT		WILDCAT		HARRISON RANCH	
WELL NAME	C. W. B. CHRISTENSON NO. 1		MAGUGLIN NO. 1		HARRISON NO. 10-1	
LOCATION	NOT GIVEN		NOT GIVEN		SEC. 10, BLK 29, PSL SUR.	
OWNER	CONTINENTAL OIL CO.		WESTERN NATURAL GAS CO.		HUNT PETROLEUM CORP.	
COMPLETED	08/12/48		12/30/48		10/08/77	
SAMPLED	11/27/48		05/03/49		11/17/78	
FORMATION	EOCE-QUEEN CITY L		EOCE-WILCOX		PENN-MORROW	
GEOLOGIC PROVINCE CODE	220		220		430	
DEPTH, FEET	7172		7986		16294	
WELLHEAD PRESSURE,PSIG	4000		3120		11370	
OPEN FLOW, MCFD	560		84000		4500	
COMPONENT, MOLE PCT						
METHANE	67.8		87.4		96.6	
ETHANE	27.0		6.0		1.7	
PROPANE	---		2.4		0.2	
N-BUTANE	---		0.6		0.1	
ISOBUTANE	---		0.5		0.0	
N-PENTANE	---		0.2		TRACE	
ISOPENTANE	---		0.1		TRACE	
CYCLOPENTANE	---		0.1		TRACE	
HEXANES PLUS	---		0.3		0.1	
NITROGEN	3.6		0.4		0.5	
OXYGEN	1.4		0.1		TRACE	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.0		0.1	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		2.1		0.7	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1171		1119		1023	
SPECIFIC GRAVITY	0.713		0.664		0.577	

	INDEX 8191 SAMPLE 15038		INDEX 8192 SAMPLE 7525		INDEX 8193 SAMPLE 14108	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LOVING		LOVING		LOVING	
FIELD	W.A.J.		MASON N		MOORE-HOOPER	
WELL NAME	LAGO GAS UNIT NO. 1		MINNIE KYLE A NO. 2		MOORE HOOPER NO. 1	
LOCATION	SEC. 34, BLK.56,T-1,T&P SUR.		SEC. 10, BLK. 55, T&P SUR.		SEC. 79, BLK.1, W&NW SUR.	
OWNER	TEXACO INC.		OHIO OIL CO.		SUN OIL CO.	
COMPLETED	11/24/75		02/15/53		01/02/74	
SAMPLED	06/29/77		04/27/60		07/25/74	
FORMATION	SILU-FUSSELMAN		PERM-DELAWARE		SILU-FUSSELMAN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	17500		3976		18988	
WELLHEAD PRESSURE,PSIG	5500		695		6450	
OPEN FLOW, MCFD	2000		NOT GIVEN		164000	
COMPONENT, MOLE PCT						
METHANE	73.6		79.0		96.3	
ETHANE	0.5		9.7		0.8	
PROPANE	TRACE		4.0		0.1	
N-BUTANE	TRACE		0.8		0.0	
ISOBUTANE	TRACE		0.5		0.0	
N-PENTANE	TRACE		0.1		0.0	
ISOPENTANE	TRACE		0.2		0.0	
CYCLOPENTANE	TRACE		0.1		0.0	
HEXANES PLUS	0.1		0.1		0.0	
NITROGEN	4.1		5.3		1.0	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.1		0.0		0.1	
CARBON DIOXIDE	1.7		0.1		1.7	
HELIUM	0.04		0.02		0.03	
HEATING VALUE*	960		1143		993	
SPECIFIC GRAVITY	0.683		0.696		0.581	

	INDEX 8194 SAMPLE 14262		INDEX 8195 SAMPLE 10816		INDEX 8196 SAMPLE 16079	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LOVING		LOVING		LOVING	
FIELD	VERMEJO		WILDCAT		WILDCAT	
WELL NAME	EL PASO STATE NO. 1		WILDER NO. 1		RED BLUFF DEEP NO. 1	
LOCATION	SEC. 58, BLK. 1, W&NW SUR.		SEC. 36, BLK. 76, PSL SUR.		SEC. 7, BLK. 56,T-1-T&P SUR.	
OWNER	FOREST OIL CORP.		NATURAL GAS & OIL CORP.		H. L. BROWN, JR.	
COMPLETED	07/26/73		12/12/66		03/--/80	
SAMPLED	02/14/75		12/13/66		09/25/80	
FORMATION	SILU-FUSSELMAN		PENN-MORROW & ATOKA		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	18804		15470		11971	
WELLHEAD PRESSURE,PSIG	6100		6606		7963	
OPEN FLOW, MCFD	32000		32000		10500	
COMPONENT, MOLE PCT						
METHANE	96.3		96.8		86.5	
ETHANE	0.8		1.5		8.5	
PROPANE	TRACE		0.2		2.6	
N-BUTANE	0.0		0.1		0.8	
ISOBUTANE	0.0		0.0		0.5	
N-PENTANE	0.0		0.0		0.2	
ISOPENTANE	0.0		TRACE		0.2	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.2	
NITROGEN	2.9		0.8		0.5	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.1		0.0		0.0	
CARBON DIOXIDE	2.2		0.5		0.2	
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	983		1021		1115	
SPECIFIC GRAVITY	0.582		0.576		0.659	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8197 SAMPLE 6871	INDEX 8198 SAMPLE 12332	INDEX 8199 SAMPLE 12704
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LUBBOCK	MADISON	MARION
FIELD	LEE HARRISON	HOOKER	EXCELSIOR
WELL NAME	E. SCHOPPA NO. 3	WILSON HEIRS NO. 1	BLISS STALCUP
LOCATION	SEC. 23, BLK. I, EL&RR SUR.	JOHN MONTGOMERY SUR. A-153	SMITHLAND
OWNER	WALICE-BOGART PRODUCTION CO.	GLEN ROSE CORP.	BARNWELL DRILLING CO.
COMPLETED	03/--/58	04/01/69	10/27/65
SAMPLED	08/--/58	07/20/70	03/07/71
FORMATION	NOT GIVEN	CRET-GEORGETOWN	CRET-PETTIT
GEOLOGIC PROVINCE CODE	430	220	260
DEPTH, FEET	NOT GIVEN	11108	6237
WELLHEAD PRESSURE, PSIG	NOT GIVEN	4100	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	900000
COMPONENT, MOLE PCT			
METHANE	0.5	80.1	87.1
ETHANE	0.1	8.3	4.1
PROPANE	0.1	2.8	1.5
N-BUTANE	0.1	0.7	0.6
ISOBUTANE	0.0	0.6	0.6
N-PENTANE	0.1	0.3	0.5
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.7
NITROGEN	96.7	2.2	3.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	1.3	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	4.6	0.7
HELIUM	0.04	0.01	0.03
HEATING VALUE*	26	1104	1107
SPECIFIC GRAVITY	0.966	0.709	0.663

	INDEX 8200 SAMPLE 15618	INDEX 8201 SAMPLE 12485	INDEX 8202 SAMPLE 12705
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MARION	MARION	MARION
FIELD	PINES SPILLWAY	RODESSA	RODESSA
WELL NAME	S. E. WOOD NO. 1	CROMER NO. 1	BADGETT NO. 1
LOCATION	J. C. WALKER SUR. A-413	W. PEACOCK SUR.	JEFFERSON, TEXAS
OWNER	CLAYTON W. WILLIAMS, JR.	ARKANSAS LOUISIANA GAS CO.	BARNWELL DRILLING CO.
COMPLETED	10/09/76	09/14/39	11/14/68
SAMPLED	05/10/79	10/16/70	03/07/71
FORMATION	CRET-RODESSA	CRET-GLOYD	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6073	5915	6742
WELLHEAD PRESSURE, PSIG	2035	200	800
OPEN FLOW, MCFD	4700	NOT GIVEN	800000
COMPONENT, MOLE PCT			
METHANE	91.4	89.7	86.7
ETHANE	3.9	3.7	2.5
PROPANE	1.1	1.3	0.6
N-BUTANE	0.5	0.4	0.2
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	1.0	2.2	8.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.0
HELIUM	0.01	0.12	0.04
HEATING VALUE*	1091	1086	976
SPECIFIC GRAVITY	0.626	0.636	0.633

	INDEX 8203 SAMPLE 10697	INDEX 8204 SAMPLE 11963	INDEX 8205 SAMPLE 11991
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	BAER RANCH	BAY CITY	BAY CITY E
WELL NAME	BAER RANCH NO. A-3	F. G. COBB NO. 32-B	MCWILLIAMS GAS UNIT NO. 2
LOCATION	CHARLES DALE SUR. A-148	MARIA CUMMINS SUR. A-22	SEC. 1, I&GNRR SUR.
OWNER	FALCON SEABOARD DRLG. CO.	SKELLY OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/19/65	09/20/68	11/13/67
SAMPLED	08/03/66	07/11/69	08/10/69
FORMATION	OLIG-TEX-MISS NO. 3	OLIG-FRIO	OLIG-SLOAN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14454	7470	8794
WELLHEAD PRESSURE, PSIG	10750	2435	1610
OPEN FLOW, MCFD	11400	20000	8790
COMPONENT, MOLE PCT			
METHANE	89.2	82.6	91.4
ETHANE	5.3	5.5	3.8
PROPANE	1.2	4.3	1.7
N-BUTANE	0.3	1.3	0.5
ISOBUTANE	0.1	1.8	0.4
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.2	1.2	0.4
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	TRACE	1.0	0.2
NITROGEN	0.1	1.2	0.7
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.2	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1060	1282	1104
SPECIFIC GRAVITY	0.640	0.739	0.630

	INDEX 8206 SAMPLE 14004	INDEX 8207 SAMPLE 14005	INDEX 8208 SAMPLE 10877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	BRAZOS AREA BLK. 541	BRAZOS AREA BLK. 541	BRAZOS BLOCK 519S B
WELL NAME	BLK. 5410CS-G-1733 NO. A-2	BLK. 5410CS-G-1733 NO. 2	STATE TRACT 519 S NO. 1
LOCATION	OFFSHORE FED. BLK 541	OFFSHORE FED. BLK. 541	BRAZOS AREA GULF OF MEXICO
OWNER	TEXACO INC.	TEXACO INC.	SHELL OIL CO.
COMPLETED	03/09/72	03/09/72	10/01/66
SAMPLED	05/04/72	05/04/72	02/22/67
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6971
WELLHEAD PRESSURE, PSIG	3835	2051	2781
OPEN FLOW, MCFD	2787	1717	20000
COMPONENT, MOLE PCT			
METHANE	94.7	93.9	95.2
ETHANE	2.2	2.3	1.9
PROPANE	0.9	0.9	0.7
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.5	1.2	1.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1053	1055	1039
SPECIFIC GRAVITY	0.597	0.606	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8209 SAMPLE 13789	INDEX 8210 SAMPLE 4644	INDEX 8211 SAMPLE 12360
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	BRAZOS BLOCK A-76 S.	COLLEGEPORT	COLLEGEPORT
WELL NAME	OCS-G-1752 NO. A-1	MARY PIERCE NO. 1	C. T. FRAZIER NO. 2C
LOCATION	BLOCK A-76 OFFSHORE	SEC. A419	BLK. 26, E. YEAMANS SUR.A148
OWNER	CITIES SERVICE OIL CO.	GULF OIL CORP.	DOW CHEMICAL CO.
COMPLETED	10/31/71	07/19/48	12/18/68
SAMPLED	10/26/73	01/03/49	08/13/70
FORMATION	MIOC-AIGENERINA HUMBLEI	MIOC-	MIOC-2900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9193	4094	2929
WELLHEAD PRESSURE,PSIG	4200	1591	1252
OPEN FLOW, MCFD	15000	10500	151000
COMPONENT, MOLE PCT			
METHANE	94.8	92.5	98.2
ETHANE	2.0	3.9	0.3
PROPANE	0.9	---	0.1
N-BUTANE	0.2	---	0.0
ISOBUTANE	0.4	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.7	3.3	1.4
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1049	1007	1003
SPECIFIC GRAVITY	0.597	0.589	0.563

	INDEX 8212 SAMPLE 12361	INDEX 8213 SAMPLE 12362	INDEX 8214 SAMPLE 12363
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	RAY ROWERS NO. 4J	SAM V. LETULLE NO. 9H	SAM V. LETULLE NO. 9I
LOCATION	SEC. 38, GM&D SUR., A-186	SEC. 38, D. YEAMANS SUR.A417	SEC. 38, D. YEAMANS SUR.A417
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	04/19/69	04/10/69	06/10/69
SAMPLED	08/13/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 4 SAND	MIOC-NO. 4 SAND	MIOC-NO. 6 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3900	3891	4110
WELLHEAD PRESSURE,PSIG	679	546	1726
OPEN FLOW, MCFD	4300	2151	4075
COMPONENT, MOLE PCT			
METHANE	97.4	98.3	98.3
ETHANE	0.2	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.1	1.5	1.4
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	990	998	998
SPECIFIC GRAVITY	0.566	0.561	0.560

	INDEX 8215 SAMPLE 12364	INDEX 8216 SAMPLE 12365	INDEX 8217 SAMPLE 12366
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	SAM V. LETULLE NO. 9F	SAM V. LETULLE NO. 9G	A. C. HUTCHENSON JR.
LOCATION	SEC. 38, D. YEAMANS SUR.A417	SEC. 38, D. YEAMANS SUR.A417	SEC. 9, GM&D NO. 3 SUR.A-180
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	04/14/69	04/10/69	08/12/69
SAMPLED	08/13/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 7-A SAND	MIOC-NO. 7-B SAND	MIOC-NO. 3-A SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5072	5266	3773
WELLHEAD PRESSURE,PSIG	2053	2050	1171
OPEN FLOW, MCFD	7800	8000	160000
COMPONENT, MOLE PCT			
METHANE	98.2	94.8	98.4
ETHANE	0.1	2.1	0.2
PROPANE	TRACE	1.0	TRACE
N-BUTANE	0.0	0.3	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	1.5	0.9	1.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	997	1066	1000
SPECIFIC GRAVITY	0.560	0.599	0.560

	INDEX 8218 SAMPLE 12367	INDEX 8219 SAMPLE 12368	INDEX 8220 SAMPLE 12369
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	RAY ROWERS NO. 4I	J. A. LOPSHIRE NO. 1J	J. A. LOPSHIRE NO. 1H
LOCATION	SEC. 38, GM&D SUR., A-186	SEC. 25, D. YEAMANS SUR.A417	SEC. 25, D. YEAMANS SUR.A417
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	12/05/69	05/13/69	05/13/69
SAMPLED	08/14/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 5-A SAND	MIOC-NORTH SAND	MIOC-NO. 3 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4066	1914	3737
WELLHEAD PRESSURE,PSIG	718	773	932
OPEN FLOW, MCFD	1040	7400	3200
COMPONENT, MOLE PCT			
METHANE	98.3	98.5	98.2
ETHANE	0.1	0.0	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.5	1.5	1.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	998	998	1000
SPECIFIC GRAVITY	0.561	0.561	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8221 SAMPLE 12393		INDEX 8222 SAMPLE 15887		INDEX 8223 SAMPLE 15888	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	COVE		DUNCAN SLOUGH S		DUNCAN SLOUGH S	
WELL NAME	TEXAS GULF 57686 NO. 5		GULF COAST WATER NO. 1		GULF COAST WATER NO. 1	
LOCATION	STATE TRACT 487-L		MONTEZ & DURAN SUR. 11		MONTEZ & DURAN SUR. 11	
OWNER	MOBIL OIL CORP.		DANIEL OIL CO.		DANIEL OIL CO.	
COMPLETED	02/21/69		NOT GIVEN		NOT GIVEN	
SAMPLED	08/26/70		01/29/80		01/29/80	
FORMATION	MIOC-COVE		OLIG-FRIO F-6 UPPER		OLIG-FRIO LOWER	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6559		10719		11092	
WELLHEAD PRESSURE,PSIG	2923		6000		4000	
OPEN FLOW, MCFD	52000		58000		8000	
COMPONENT, MOLE PCT						
METHANE	94.3		91.7		89.3	
ETHANE	2.3		4.5		5.5	
PROPANE	0.9		1.5		2.1	
N-BUTANE	0.2		0.4		0.5	
ISOBUTANE	0.4		0.4		0.6	
N-PENTANE	0.3		0.2		0.2	
ISOPENTANE	0.0		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.4		0.1		0.2	
NITROGEN	0.9		0.3		0.3	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.9		1.0	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1077		1093		1126	
SPECIFIC GRAVITY	0.607		0.623		0.645	

	INDEX 8224 SAMPLE 15134		INDEX 8225 SAMPLE 15396		INDEX 8226 SAMPLE 12108	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	HAMMAN		HAWKINSVILLE N		LUCKY W	
WELL NAME	GLOVER UNIT NO. 1		NORA CALDWELL NO. 1		R. P. DAWDY NO. 1-A	
LOCATION	J.T. BELKNAP SUR. A-113		A. C. BUCKNER LEAGUE, A-10		BOWMAN & REESE SUR. A-8	
OWNER	ATLANTIC RICHFIELD CO.		H. L. HAWKINS, JR.		J. M. HUBER CORP.	
COMPLETED	11/04/77		03/24/77		06/09/68	
SAMPLED	11/03/77		10/02/78		11/09/69	
FORMATION	PENN-CLEVELAND		OLIG-FRIO		OLIG-FRIO F-12	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9151		11200		9202	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1600		3300	
OPEN FLOW, MCFD	NOT GIVEN		4200		7000	
COMPONENT, MOLE PCT						
METHANE	87.8		84.3		92.7	
ETHANE	5.6		4.4		3.0	
PROPANE	2.5		2.9		1.3	
N-BUTANE	0.7		0.9		0.3	
ISOBUTANE	0.9		2.4		0.2	
N-PENTANE	0.3		0.8		0.1	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	TRACE		0.5		TRACE	
HEXANES PLUS	0.2		1.8		0.1	
NITROGEN	0.6		0.7		0.9	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		1.0		0.7	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1140		1277		1062	
SPECIFIC GRAVITY	0.660		0.743		0.606	

	INDEX 8227 SAMPLE 4037		INDEX 8228 SAMPLE 12383		INDEX 8229 SAMPLE 5229	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	MARKHAM		MARKHAM S		NOT GIVEN	
WELL NAME	DENMAN KOUNTZE C NO. 3		J. R. DAWDY ET AL. NO. 1		TEXAS STATE E-8 NO. 1	
LOCATION	HENRY PARKER SUR. L12		BOWMAN & REESE SUR. A-8		STATE T55, TRES PALACIOS BAY	
OWNER	ATLANTIC REFINING CO.		OCCIDENTAL PETROLEUM CORP.		BRAZOS OIL & GAS CO.	
COMPLETED	12/06/44		10/05/69		11/11/51	
SAMPLED	05/24/45		08/23/70		03/21/52	
FORMATION	OLIG-FRIO		OLIG-ANOMILINA		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	4847		10150		4526	
WELLHEAD PRESSURE,PSIG	1900		1650		NOT GIVEN	
OPEN FLOW, MCFD	20000		4200		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.4		91.4		97.9	
ETHANE	3.4		3.8		1.0	
PROPANE	---		1.3		TRACE	
N-BUTANE	---		0.4		0.0	
ISOBUTANE	---		0.2		0.0	
N-PENTANE	---		0.2		0.1	
ISOPENTANE	---		0.1		0.0	
CYCLOPENTANE	---		0.1		0.0	
HEXANES PLUS	---		0.3		TRACE	
NITROGEN	0.0		0.7		0.9	
OXYGEN	0.1		0.1		TRACE	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		TRACE		TRACE	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.1		1.2		0.1	
HELIUM	0.00		0.01		0.01	
HEATING VALUE*	1037		1080		1014	
SPECIFIC GRAVITY	0.573		0.624		0.566	

	INDEX 8230 SAMPLE 5230		INDEX 8231 SAMPLE 13959		INDEX 8232 SAMPLE 13960	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	NOT GIVEN		OLIVER POINT S		OLIVER POINT S	
WELL NAME	TEXAS STATE XA NO. 2		STATE TRACT 86 NO. 1-L		STATE TRACT 86 NO. 1-U	
LOCATION	STATE TRACT 195		TRES PALACIOS BAY		TRES PALACIOS BAY	
OWNER	BRAZOS OIL & GAS CO.		MCMORAN EXPLORATION CO.		MCMORAN EXPLORATION CO.	
COMPLETED	NOT GIVEN		05/22/72		05/22/72	
SAMPLED	03/24/52		03/14/74		03/14/74	
FORMATION	MIOC-		MIOC-4200 FT. SAND		MIOC-3950 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	NOT GIVEN		4184		3953	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1705		1720	
OPEN FLOW, MCFD	NOT GIVEN		7500		8000	
COMPONENT, MOLE PCT						
METHANE	98.2		97.9		98.2	
ETHANE	0.1		0.3		0.4	
PROPANE	TRACE		0.1		TRACE	
N-BUTANE	0.1		TRACE		TRACE	
ISOBUTANE	0.0		0.1		TRACE	
N-PENTANE	0.0		TRACE		TRACE	
ISOPENTANE	0.1		TRACE		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		TRACE		TRACE	
NITROGEN	1.4		1.5		1.2	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		TRACE	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1004		1003		1002	
SPECIFIC GRAVITY	0.565		0.564		0.560	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8233 SAMPLE 12637		INDEX 8234 SAMPLE 12640		INDEX 8235 SAMPLE 4048	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	OYSTER LAKE		OYSTER LAKE		PALACIOS	
WELL NAME	SAM V. LE TULLE ET AL. NO. 1		SAM V. LE TULLE ET AL. NO. 1		STATE BANK NO. 1	
LOCATION	RALPH WRIGHT SUR. A-407		RALPH WRIGHT SUR. A-407		NOT GIVEN	
OWNER	VENUS OIL CO.		VENUS OIL CO.		ATLANTIC REFINING CO.	
COMPLETED	01/13/69		01/13/69		08/06/37	
SAMPLED	01/21/71		01/21/71		05/24/45	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3981		3981		7864	
WELLHEAD PRESSURE,PSIG	1580		1508		2000	
OPEN FLOW, MCFD	41000		41000		15000	
COMPONENT, MOLE PCT						
METHANE	98.6		98.6		84.3	
ETHANE	0.1		0.2		15.2	
PROPANE	0.1		TRACE		---	
N-BUTANE	0.0		0.0		---	
ISOBUTANE	0.0		0.0		---	
N-PENTANE	0.0		0.0		---	
ISOPENTANE	0.0		0.0		---	
CYCLOPENTANE	0.0		0.0		---	
HEXANES PLUS	0.0		0.0		---	
NITROGEN	1.2		1.2		0.0	
OXYGEN	0.0		0.0		0.1	
ARGON	0.0		0.0		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		TRACE		0.4	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1003		1002		1126	
SPECIFIC GRAVITY	0.562		0.560		0.634	

	INDEX 8236 SAMPLE 13449		INDEX 8237 SAMPLE 12110		INDEX 8238 SAMPLE 12111	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	PETRUCHA		PHEASANT		PHEASANT	
WELL NAME	PETRUCHA GAS UNIT NO. 2		EAST FRIO NO. 1		EAST FRIO NO. 1	
LOCATION	DUGOLD MCFARLAND SUR. A-61		JOHN H. UPDIKE SUR. A-399		JOHN H. UPDIKE SUR. A-399	
OWNER	AMOCO PRODUCTION CO.		MICHEL T. HALBOUTY		MICHEL T. HALBOUTY	
COMPLETED	03/02/71		08/01/68		08/01/68	
SAMPLED	10/03/72		11/11/69		11/11/69	
FORMATION	OLIG-FRIO		OLIG-MCDONALD		OLIG-FRIO F28	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	12645		8900		9200	
WELLHEAD PRESSURE,PSIG	7339		1500		1500	
OPEN FLOW, MCFD	10288		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.9		88.5		89.9	
ETHANE	4.8		5.9		5.4	
PROPANE	1.9		2.4		1.9	
N-BUTANE	0.4		0.6		0.4	
ISOBUTANE	0.4		0.4		0.4	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.4		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.2		0.7		0.6	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.9		0.5		0.6	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1087		1134		1111	
SPECIFIC GRAVITY	0.634		0.646		0.632	

	INDEX 8239 SAMPLE 13751		INDEX 8240 SAMPLE 13845		INDEX 8241 SAMPLE 11174	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	PHEASANT SW		PHEASANT SW		WADSWORTH	
WELL NAME	MATL-TRULL NO. 2		MATL TRULL NO. 2		ETHEL CORNELIUS NO. 15	
LOCATION	SUSAN PERKINS SUR., A-371		SUSAN PERKINS SUR., A-371		SAMUEL M. FISHER SUR. A-34	
OWNER	MOBIL OIL CORP.		MOBIL OIL CORP.		MOBIL OIL CORP.	
COMPLETED	02/24/72		02/24/72		07/07/66	
SAMPLED	10/12/73		12/28/73		10/16/67	
FORMATION	OLIG-FRIO		OLIG-FRIO H		-CH-1	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11465		11297		9317	
WELLHEAD PRESSURE,PSIG	4482		3440		1667	
OPEN FLOW, MCFD	74000		25364		1630	
COMPONENT, MOLE PCT						
METHANE	87.3		87.3		86.0	
ETHANE	6.6		6.5		6.5	
PROPANE	2.5		2.5		2.5	
N-BUTANE	0.6		0.5		0.5	
ISOBUTANE	0.7		0.8		0.8	
N-PENTANE	0.1		0.1		0.2	
ISOPENTANE	0.4		0.3		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.2	
NITROGEN	0.2		0.6		2.1	
OXYGEN	TRACE		0.0		0.3	
ARGON	0.0		0.0		TRACE	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.0		0.5	
HELIUM	TRACE		TRACE		0.02	
HEATING VALUE*	1152		1141		1123	
SPECIFIC GRAVITY	0.662		0.657		0.658	

	INDEX 8242 SAMPLE 11175		INDEX 8243 SAMPLE 4016		INDEX 8244 SAMPLE 5179	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MATAGORDA		MATAGORDA		MATAGORDA	
FIELD	WADSWORTH		WILDCAT		WILDCAT	
WELL NAME	ETHEL CORNELIUS NO. 15		GRAHAM-TYLLILOVE NO. 1		ETHEL CORNELIUS NO. 1	
LOCATION	SAMUEL M. FISHER SUR. A-34		NOT GIVEN		NOT GIVEN	
OWNER	MOBIL OIL CORP.		SKELLY OIL CO.		MAGNOLIA PETROLEUM CO.	
COMPLETED	07/07/66		11/1[illegible]/44		10/[illegible]/51	
SAMPLED	10/16/67		05/07/45		01/18/52	
FORMATION	CHEY-LEWIS 9900		OLIG-FRIO L		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	[illegible]963		8735		11374	
WELLHEAD PRESSURE,PSIG	1122		3100		4012	
OPEN FLOW, MCFD	22000		3827		43	
COMPONENT, MOLE PCT						
METHANE	79.3		89.2		89.2	
ETHANE	7.2		4.4		4.7	
PROPANE	4.2		---		1.8	
N-BUTANE	1.6		---		0.4	
ISOBUTANE	1.6		---		0.4	
N-PENTANE	1.8		---		0.2	
ISOPENTANE	1.8		---		0.0	
CYCLOPENTANE	0.3		---		TRACE	
HEXANES PLUS	1.7		---		0.2	
NITROGEN	0.7		5.9		0.7	
OXYGEN	TRACE		0.3		0.1	
ARGON	0.1		---		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	1.6		1.1		1.2	
HELIUM	0.01		0.10		0.01	
HEATING VALUE*	1[illegible]1		1072		1099	
SPECIFIC GRAVITY	0.7[illegible]		0.613		0.626	

* GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8245 SAMPLE 1983	INDEX 8246 SAMPLE 10314	INDEX 8247 SAMPLE 10315
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MAVERICK	MAVERICK	MAVERICK
FIELD	CHITTIM	CHITTIM	CHITTIM
WELL NAME	RYCADE NO. 3	CHITTIM ESTATE NO. 1	CHITTIM NO. 1-607
LOCATION	SEC.116, BLK. 7, I&GNRR SUR.	SEC. 188, I&GN RR SUR. A-199	SEC. 607, I & GN SUR. A-199
OWNER	RYCADE OIL CORP.	W. B. YARBOROUGH	W. B. YARBOROUGH
COMPLETED	02/02/30	02/28/64	08/01/64
SAMPLED	04/07/30	11/20/65	11/20/65
FORMATION	CRET-GLEN ROSE	CRET-PEARSALL	CRET-PEARSALL
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5522	6970	7870
WELLHEAD PRESSURE,PSIG	2100	2726	6595
OPEN FLOW, MCFD	11750	5600	20800
COMPONENT, MOLE PCT			
METHANE	79.8	86.3	80.8
ETHANE	17.9	7.4	8.9
PROPANE	---	2.1	3.3
N-BUTANE	---	0.7	1.5
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.4	1.1
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	0.1	0.3
HEXANES PLUS	---	0.5	1.8
NITROGEN	0.3	1.5	0.9
OXYGEN	0.3	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.7	0.4	0.4
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1129	1149	1295
SPECIFIC GRAVITY	0.662	0.663	0.747

	INDEX 8248 SAMPLE 8383	INDEX 8249 SAMPLE 8241	INDEX 8250 SAMPLE 8243
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MAVERICK	MCCULLOCH	MCCULLOCH
FIELD	EAGLE	LOJON	LOJON
WELL NAME	NO. A	NAT RANDALS NO. 1	CHARLES MILLER NO. 1
LOCATION	SEC. 18, BLK. 6, I&GNRR SUR.	A. M. WALDRIP SUR. NO. 146	BONN SUR. NO. 1184
OWNER	C. C. WINN	LOW DRILLING CO., INC.	LOW DRILLING CO., INC.
COMPLETED	02/24/61	05/05/60	07/15/59
SAMPLED	01/25/62	10/12/61	10/12/61
FORMATION	CRET-SAN MIGUEL	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	220	410	410
DEPTH, FEET	1185	1346	1376
WELLHEAD PRESSURE,PSIG	500	610	600
OPEN FLOW, MCFD	610	2525	3100
COMPONENT, MOLE PCT			
METHANE	99.0	74.5	77.0
ETHANE	0.1	2.7	2.4
PROPANE	0.1	1.1	1.0
N-BUTANE	0.0	0.3	0.2
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	20.2	18.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.58	0.56
HEATING VALUE*	1007	854	872
SPECIFIC GRAVITY	0.559	0.670	0.662

	INDEX 8251 SAMPLE 8244	INDEX 8252 SAMPLE 8245	INDEX 8253 SAMPLE 11062
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCCULLOCH
FIELD	LOJON	LOJON	LOJON
WELL NAME	WARREN CAYLOR	J. K. SHELTON NO. 1	J. B. ROWE NO. 1
LOCATION	H&TC RR CO. SUR.	B. HULBURT SUR. NO. 1098	NEAR WALDRIP
OWNER	LOW DRILLING CO., INC.	J. S. PLUMMER	BRADY MUNICIPAL GAS CORP.
COMPLETED	05/05/60	NOT GIVEN	--/--/42
SAMPLED	10/12/61	10/12/61	08/14/67
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	976	NOT GIVEN	1395
WELLHEAD PRESSURE,PSIG	511	NOT GIVEN	620
OPEN FLOW, MCFD	940	NOT GIVEN	5500
COMPONENT, MOLE PCT			
METHANE	77.0	80.2	73.4
ETHANE	1.9	0.9	2.8
PROPANE	0.6	0.5	1.0
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	19.3	17.3	20.6
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.64	0.54	0.59
HEATING VALUE*	841	857	856
SPECIFIC GRAVITY	0.652	0.641	0.681

	INDEX 8254 SAMPLE 11063	INDEX 8255 SAMPLE 11064	INDEX 8256 SAMPLE 11065
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCCULLOCH
FIELD	LOJON	LOJON	LOJON
WELL NAME	S. A. LAWSON NO. 1	C. E. FROST NO. 1	S. A. LAWSON NO. 2
LOCATION	NEAR WALDRIP	NEAR WALDRIP	NEAR WALDRIP
OWNER	BRADY MUNICIPAL GAS CORP.	BRADY MUNICIPAL GAS CORP.	BRADY MUNICIPAL GAS CORP.
COMPLETED	--/--/41	--/--/45	--/--/41
SAMPLED	08/14/67	08/14/67	08/14/67
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	1400	1400	1399
WELLHEAD PRESSURE,PSIG	600	265	615
OPEN FLOW, MCFD	4400	NOT GIVEN	690
COMPONENT, MOLE PCT			
METHANE	75.2	75.7	75.3
ETHANE	2.8	1.6	2.7
PROPANE	1.1	0.7	1.1
N-BUTANE	0.2	0.2	0.3
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.5	20.7	19.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.59	0.56	0.56
HEATING VALUE*	864	934	874
SPECIFIC GRAVITY	0.667	0.663	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8257 SAMPLE 1830		INDEX 8258 SAMPLE 5163		INDEX 8259 SAMPLE 15598	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MCCULLOCH		MCCULLOCH		MCCULLOCH	
FIELD	M. C. SMITH		SILER & JOHNSON		WALLOPE CREEK	
WELL NAME	M. C. SMITH NO. 2		JOHNSON NO. 1		JOHNNIE V. GUICE NO. 1	
LOCATION	SEC. 1293, T., SERKHART SUR.		INDIANOLA SUR. NO. 15		SEC. 4, BRONAUGH BRO. SUR.	
OWNER	ROTH & FAUROT		PRINCE BROTHERS&GEHLE DRLG.		BLAIR EXPLORATION, INC.	
COMPLETED	05/31/29		09/05/51		10/20/78	
SAMPLED	08/04/29		02/13/52		04/04/79	
FORMATION	NOT GIVEN		PENN-		PENN-CROSS CUT	
GEOLOGIC PROVINCE CODE	410		410		410	
DEPTH, FEET	1567		1690		1700	
WELLHEAD PRESSURE,PSIG	450		204		875	
OPEN FLOW, MCFD	2400		1500		5082	
COMPONENT, MOLE PCT						
METHANE	73.7		83.8		74.4	
ETHANE	8.5		0.2		2.2	
PROPANE	---		0.1		1.0	
N-BUTANE	---		0.0		0.3	
ISOBUTANE	---		0.1		0.2	
N-PENTANE	---		0.0		0.1	
ISOPENTANE	---		0.0		0.1	
CYCLOPENTANE	---		0.1		TRACE	
HEXANES PLUS	---		0.2		0.1	
NITROGEN	16.4		15.0		20.1	
OXYGEN	0.2		0.1		0.0	
ARGON	---		0.1		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.6		0.0		0.7	
HELIUM	0.68		0.50		0.72	
HEATING VALUE*	989		867		850	
SPECIFIC GRAVITY	0.669		0.627		0.676	

	INDEX 8260 SAMPLE 14588		INDEX 8261 SAMPLE 13877		INDEX 8262 SAMPLE 3805	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MCMULLEN		MCMULLEN		MCMULLEN	
FIELD	BRAZIL		CAMPANA S		EZZELL	
WELL NAME	EARL BAKER NO. 5		H.E. GOUGER FEE NO. 31		EZZELL C-2	
LOCATION	M. F. LOWE SUR. 6, A-886		SEC. 75, AB&M SUR. A-1451		NOT GIVEN	
OWNER	ATLANTIC RICHFIELD CO.		TEXACO INC.		EDWIN M. JONES	
COMPLETED	10/14/74		04/02/72		NOT GIVEN	
SAMPLED	02/23/76		01/21/74		04/16/44	
FORMATION	EOCE-WILCOX		OLIG-FRIO		EOCE-CARRIZO & WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8474		1700		6419	
WELLHEAD PRESSURE,PSIG	4971		470		1150	
OPEN FLOW, MCFD	33250		4989		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	87.6		99.4		80.4	
ETHANE	5.7		TRACE		17.0	
PROPANE	1.9		TRACE		---	
N-BUTANE	0.4		0.0		---	
ISOBUTANE	0.4		0.0		---	
N-PENTANE	0.1		0.0		---	
ISOPENTANE	0.2		0.0		---	
CYCLOPENTANE	0.1		0.0		---	
HEXANES PLUS	0.1		0.0		---	
NITROGEN	0.0		0.5		2.1	
OXYGEN	0.0		0.0		0.4	
ARGON	0.0		0.0		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	3.6		0.1		0.1	
HELIUM	TRACE		TRACE		0.00	
HEATING VALUE*	1087		1007		1119	
SPECIFIC GRAVITY	0.660		0.557		0.650	

	INDEX 8263 SAMPLE 3785		INDEX 8264 SAMPLE 11999		INDEX 8265 SAMPLE 4923	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MCMULLEN		MCMULLEN		MCMULLEN	
FIELD	GREEN RANCH		GREEN RANCH SE		HAGIST RANCH	
WELL NAME	S.T.S., C LSE NO. 1		SOUTH TEXAS SYNDICATE NO. 1		HAGIST RANCH INC. NO. A-1	
LOCATION	SEC. 25		MOSES MCLAIN SUR. A-793		R. W. MILLS SUR. NO. 467	
OWNER	QUINTANA PETROLEUM CORP.		UNION PRODUCING CO.		STANOLIND OIL & GAS CO.	
COMPLETED	06/29/42		03/27/68		06/06/50	
SAMPLED	04/08/44		08/19/69		09/29/50	
FORMATION	EOCE-WILCOX		EOCE-WILCOX 6200		EOCE-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5719		6190		7696	
WELLHEAD PRESSURE,PSIG	1400		216		2922	
OPEN FLOW, MCFD	747		3460		34000	
COMPONENT, MOLE PCT						
METHANE	73.4		86.3		88.9	
ETHANE	24.2		5.9		5.4	
PROPANE	---		3.5		2.2	
N-BUTANE	---		0.9		0.5	
ISOBUTANE	---		0.5		0.3	
N-PENTANE	---		0.2		0.3	
ISOPENTANE	---		0.4		0.1	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.2		0.5	
NITROGEN	1.4		1.3		0.0	
OXYGEN	0.6		0.0		0.1	
ARGON	---		0.0		0.0	
HYDROGEN	---		0.2		---	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.4		0.4		1.7	
HELIUM	0.00		0.01		TRACE	
HEATING VALUE*	1177		1154		1123	
SPECIFIC GRAVITY	0.668		0.666		0.655	

	INDEX 8266 SAMPLE 5002		INDEX 8267 SAMPLE 12008		INDEX 8268 SAMPLE 5169	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MCMULLEN		MCMULLEN		MCMULLEN	
FIELD	HAGIST RANCH		HAGIST RANCH		HOSTETTER	
WELL NAME	HAGIST RANCH INC. NO. A-1		HAGIST RANCH NO. 1		A. M. HOSTETTER NO. 1	
LOCATION	ABSACAR CO. SUR. NO. 3		ETAH SUR. NO. 6		JUSTO CORONA SUR. NO. 68	
OWNER	STANOLIND OIL & GAS CO.		FRIO PRODUCTION CO.		SUNRAY OIL CO.	
COMPLETED	08/12/50		02/05/68		06/23/51	
SAMPLED	01/16/51		08/23/69		12/01/51	
FORMATION	EOCE-WILCOX		OLIG-FRIO		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7125		1055		10088	
WELLHEAD PRESSURE,PSIG	2245		390		7664	
OPEN FLOW, MCFD	1275		2600		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	86.7		99.2		85.1	
ETHANE	5.7		0.0		7.4	
PROPANE	2.8		0.0		2.5	
N-BUTANE	0.7		0.0		0.6	
ISOBUTANE	0.6		0.0		0.3	
N-PENTANE	0.3		0.0		0.2	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.1		0.0		TRACE	
HEXANES PLUS	0.4		0.0		0.3	
NITROGEN	0.2		0.6		0.5	
OXYGEN	0.1		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.1		2.0	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1142		1005		1121	
SPECIFIC GRAVITY	0.657		0.557		0.675	

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8269 SAMPLE 5632	INDEX 8270 SAMPLE 12051	INDEX 8271 SAMPLE 14331
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	HOSTETTER	HOSTETTER	HOSTETTER
WELL NAME	RENSHAW UNIT NO. 1	HUGHES GAS UNIT NO. 1	GOUGER GAS UNIT 2 NO. 2
LOCATION	SEC. 53, AB&M SUR.	AB&M SUR. A-26	SEC. 67, AB&M SUR. A-27
OWNER	SUNRAY OIL CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	03/13/54	04/01/68	01/31/73
SAMPLED	05/28/54	09/20/69	05/09/75
FORMATION	EOCE-QUEEN CITY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6068	9892	9390
WELLHEAD PRESSURE,PSIG	2271	NOT GIVEN	5900
OPEN FLOW, MCFD	1950	600	8000
COMPONENT, MOLE PCT			
METHANE	89.0	85.0	86.5
ETHANE	5.5	6.3	5.5
PROPANE	2.4	2.2	3.3
N-BUTANE	0.0	0.4	0.8
ISOBUTANE	1.1	0.4	0.9
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.5	1.6	0.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	3.7	1.7
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1114	1085	1157
SPECIFIC GRAVITY	0.639	0.675	0.677

	INDEX 8272 SAMPLE 14332	INDEX 8273 SAMPLE 14273	INDEX 8274 SAMPLE 2482
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	HOSTETTER	HOSTETTER N	JACOB GAS
WELL NAME	GOUGER GAS UNIT 2 NO. 2	D. W. RHODE 54 NO. 1	JACOB NO. 1-A
LOCATION	SEC. 67, AB&M SUR. A-27	ALFRED SPAULDING SUR. 54	NOT GIVEN
OWNER	TEXACO INC.	ATLANTIC RICHFIELD CO.	JACOB,BUZZINI,&PICKETT,INC.
COMPLETED	01/31/73	01/25/75	--/--/31
SAMPLED	05/09/75	02/20/75	04/01/32
FORMATION	-SCHULZE	EOCE-WILCOX	EOCE-JACKSON BASAL
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9070	9000	765
WELLHEAD PRESSURE,PSIG	7056	5800	350
OPEN FLOW, MCFD	24000	28500	4000
COMPONENT, MOLE PCT			
METHANE	86.4	90.1	92.0
ETHANE	5.4	4.2	0.0
PROPANE	3.5	1.2	---
N-BUTANE	0.8	0.2	---
ISOBUTANE	0.9	0.3	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.1	---
NITROGEN	0.6	0.1	7.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.6	3.6	0.4
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1161	1045	932
SPECIFIC GRAVITY	0.679	0.634	0.590

	INDEX 8275 SAMPLE 5907	INDEX 8276 SAMPLE 5712	INDEX 8277 SAMPLE 4632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	OPOSSUM CREEK	SAN MIGUEL CREEK	SANCAJA
WELL NAME	MABEL BROWNSON NO. 11	SMC GAS UNIT I, WELL NO. 1	EZZELL NO. C-6
LOCATION	W. H. JACOBS SUR. 10, A-1028	SEC. A-430, SMITH SUR. NO.26	NOT GIVEN
OWNER	BRIDWELL OIL CO.	HUMBLE OIL & REFINING CO.	ESTATE OF EDWIN M. JONES
COMPLETED	04/25/55	10/25/53	08/10/48
SAMPLED	08/04/55	10/06/54	11/19/48
FORMATION	EOCE-WILCOX BASAL	CRET-EDWARDS	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6047	10182	6926
WELLHEAD PRESSURE,PSIG	2300	3700	2950
OPEN FLOW, MCFD	4000	905	12000
COMPONENT, MOLE PCT			
METHANE	85.5	75.4	71.0
ETHANE	5.0	2.5	27.4
PROPANE	3.6	1.3	---
N-BUTANE	1.2	0.4	---
ISOBUTANE	0.9	0.2	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.9	0.1	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	0.9	0.1	---
NITROGEN	0.9	4.6	0.0
OXYGEN	0.0	0.0	0.3
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	5.1	---
CARBON DIOXIDE	0.5	9.9	1.5
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1232	909	1210
SPECIFIC GRAVITY	0.709	0.742	0.704

	INDEX 8278 SAMPLE 15882	INDEX 8279 SAMPLE 15729	INDEX 8280 SAMPLE 8534
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MEDINA
FIELD	TILDEN E	WILLIFORD	WILDCAT
WELL NAME	L. H. MCLAUGHERTY NO. 1	VIRGINIA RAGSDALE NO. 1	CARL EST BUSHWACK RANCH NO.1
LOCATION	BS&F SUR. 13, A-517	PABLO ALANIS SUR. 112, A1120	NOT GIVEN
OWNER	SHELL OIL CO.	ARCO OIL & GAS CO.	MONO CORP.
COMPLETED	11/12/77	07/18/78	02/03/62
SAMPLED	01/21/80	08/23/79	04/25/62
FORMATION	CRET-EDWARDS	OLIG-FRIO	CRET-ANACACHO
GEOLOGIC PROVINCE CODE	220	220	400
DEPTH, FEET	11692	1648	1184
WELLHEAD PRESSURE,PSIG	4240	453	30
OPEN FLOW, MCFD	14000	11802	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	99.1	18.7
ETHANE	1.2	0.1	0.3
PROPANE	0.3	TRACE	0.1
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.2	0.6	1.7
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	4.6
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	6.6	0.1	74.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	967	1006	201
SPECIFIC GRAVITY	0.634	0.559	1.267

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8281 SAMPLE 12723	INDEX 8282 SAMPLE 12724	INDEX 8283 SAMPLE 12725
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	AZALEA	AZALEA	AZALEA
WELL NAME	CRESPI NO. 2-37	CRESPI NO. 2-17	WILLIS NO. 1-40
LOCATION	SEC.37, BLK.38, TPRR CO.SUR.	SEC.17, BLK.38, TPRR CO.SUR.	SEC.40, BLK.A, W.T.GRAY SUR.
OWNER	MURPHY H. BAXTER	MURPHY H. BAXTER	MURPHY H. BAXTER
COMPLETED	10/10/60	04/21/61	12/08/59
SAMPLED	03/19/71	03/19/71	03/19/71
FORMATION	DEVO-	DEVO-	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11460	11460	10484
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	75.6	75.4	69.7
ETHANE	14.3	14.4	13.9
PROPANE	5.5	5.4	6.4
N-BUTANE	1.3	1.1	2.2
ISOBUTANE	0.4	0.6	1.2
N-PENTANE	0.4	0.2	0.9
ISOPENTANE	0.4	0.4	1.4
CYCLOPENTANE	0.1	TRACE	0.4
HEXANES PLUS	0.2	0.1	1.1
NITROGEN	1.7	1.9	2.6
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1265	1250	1405
SPECIFIC GRAVITY	0.737	0.731	0.832

	INDEX 8284 SAMPLE 12726	INDEX 8285 SAMPLE 7214	INDEX 8286 SAMPLE 12739
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	AZALEA	DAVIS	DORA ROBERTS RANCH
WELL NAME	CRESPI UNIT NO. 1	J. T. BROWN ET AL, NO. 1	DORA ROBERTS RANCH NO. 908
LOCATION	SEC. 20, BLK. 38, T-2 SUR.	SEC. A, T5S, T&PRR	SEC. 9, BLK. 41, T&P RR SUR.
OWNER	MURPHY H. BAXTER	GULF OIL CORP.	CITIES SERVICE OIL CO.
COMPLETED	06/17/58	06/12/59	04/28/63
SAMPLED	03/19/71	09/16/59	03/25/71
FORMATION	PENN-STRAWN	PERM-WICHITA-ALBANY	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10444	9885	11700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2345	2300
OPEN FLOW, MCFD	NOT GIVEN	2000	7200
COMPONENT, MOLE PCT			
METHANE	2.1	70.7	79.2
ETHANE	7.9	15.4	14.2
PROPANE	48.3	6.9	3.3
N-BUTANE	25.0	1.9	0.8
ISOBUTANE	10.3	0.7	0.3
N-PENTANE	1.9	0.1	0.2
ISOPENTANE	3.3	1.1	0.1
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	0.1	2.5	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.6
HELIUM	0.01	0.04	0.03
HEATING VALUE*	2884	1324	1206
SPECIFIC GRAVITY	1.746	0.780	0.697

	INDEX 8287 SAMPLE 10477	INDEX 8288 SAMPLE 5547	INDEX 8289 SAMPLE 12776
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	G. ARYANT	NOT GIVEN	PARKS
WELL NAME	G. ARYANT B NO. 1	H. S. FOSTER NO. B-1	TRACT 23 NO. 1
LOCATION	SEC. 39, BLK. 40, T&P SUR.	SEC. 11, BLK. 141, T&P SUR.	BLK. 40, T3S, T+P RR CO. SUR
OWNER	TEXACO INC.	PLYMOUTH OIL CO.	MOBIL OIL CORP.
COMPLETED	09/02/65	12/27/52	07/21/69
SAMPLED	03/24/66	08/02/53	04/20/71
FORMATION	DEVO-	PENN-STRAWN	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11860	10579	11748
WELLHEAD PRESSURE,PSIG	2352	1200	1050
OPEN FLOW, MCFD	2800	NOT GIVEN	400
COMPONENT, MOLE PCT			
METHANE	76.7	71.6	75.6
ETHANE	13.3	17.0	14.6
PROPANE	5.6	6.3	5.5
N-BUTANE	1.4	1.4	1.2
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.9	2.5	0.9
OXYGEN	0.2	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1258	1273	1259
SPECIFIC GRAVITY	0.733	0.752	0.734

	INDEX 8290 SAMPLE 12677	INDEX 8291 SAMPLE 12737	INDEX 8292 SAMPLE 12801
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	PEGASUS	SPRABERRY TREND	WAR-SAN
WELL NAME	PEGASUS UNIT 3 NO. 1-18	BEULAH COLEMAN NO. 6	MIDLAND A FEE NO. 5
LOCATION	22 MI. SE MIDLAND	SEC. 8, BLK. 37, T&P RR SUR.	NOT GIVEN
OWNER	MOBIL OIL CORP.	GETTY OIL CO.	TEXACO INC.
COMPLETED	12/13/62	09/20/67	NOT GIVEN
SAMPLED	02/11/71	03/25/71	04/28/71
FORMATION	DEVO-	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11984	11229	11893
WELLHEAD PRESSURE,PSIG	1576	900	1508
OPEN FLOW, MCFD	8200	506	1240
COMPONENT, MOLE PCT			
METHANE	80.8	73.5	61.4
ETHANE	10.8	13.5	18.0
PROPANE	4.1	4.9	11.7
N-BUTANE	0.8	0.9	3.4
ISOBUTANE	0.5	0.6	1.5
N-PENTANE	0.3	0.3	0.6
ISOPENTANE	0.0	TRACE	0.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.0	4.7	1.8
OXYGEN	0.2	1.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.7
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1185	1182	1172
SPECIFIC GRAVITY	0.692	0.731	0.875

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8293 SAMPLE 2065	INDEX 8294 SAMPLE 901	INDEX 8295 SAMPLE 14502
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MITCHELL	MITCHELL	MITCHELL
FIELD	FOSTER	MITCHELL COUNTY	SPADE RANCH
WELL NAME	MARY FOSTER NO. 7, OIL WELL	LE SURE NO. 2	SPADE NO. 2
LOCATION	SEC. 17, BLK. 29, T&P SUR.	SEC. 40, BLK. 28, T1	SEC. 25, BLK. 18, SPRR SUR.
OWNER	MAGNOLIA PETROLEUM CO.	CALIFORNIA CO.	BURK ROYALTY CO.
COMPLETED	05/10/30	03/30/23	06/04/74
SAMPLED	06/18/30	07/09/24	10/16/75
FORMATION	PERM-GLORIETA	PERM-	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2756	3005	546
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	205
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	27.6	5.3	52.8
ETHANE	62.4	85.2	4.4
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	9.1	6.3	41.0
OXYGEN	0.3	0.6	TRACE
ARGON	---	---	0.2
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	2.5	0.3
HELIUM	0.16	TRACE	0.84
HEATING VALUE*	1398	1580	630
SPECIFIC GRAVITY	0.910	1.029	0.754

	INDEX 8296 SAMPLE 16017	INDEX 8297 SAMPLE 6305	INDEX 8298 SAMPLE 8739
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MITCHELL	MITCHELL	MONTAGUE
FIELD	TURNER-GREGORY	WILDCAT	GIFFORD
WELL NAME	ADAMS NO. 2	WEINER NO. 1	RUTH GIFFORD NO. 1
LOCATION	SEC.24,BLK.29T-LN-T&P SUR.	SEC. 7, BLK. 13, H&TC SUR.	NOT GIVEN
OWNER	ELLPEN, INC.	URICE DRILLING CO.	STAR OIL CO., INC.
COMPLETED	NOT GIVEN	03/20/57	10/16/61
SAMPLED	07/22/80	05/08/57	11/01/62
FORMATION	PERM-CLEARFORK	NOT GIVEN	-CONGLOMERATE
GEOLOGIC PROVINCE CODE	430	430	420
DEPTH, FEET	1350	520	6026
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	1380
OPEN FLOW, MCFD	NOT GIVEN	10000	4800
COMPONENT, MOLE PCT			
METHANE	TRACE	46.4	80.9
ETHANE	0.0	2.5	7.4
PROPANE	TRACE	0.1	4.8
N-BUTANE	0.0	0.1	1.3
ISOBUTANE	0.0	0.1	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	99.7	49.8	3.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.3
HELIUM	0.10	0.61	0.17
HEATING VALUE*	0	529	1173
SPECIFIC GRAVITY	0.966	0.776	0.699

	INDEX 8299 SAMPLE 1066	INDEX 8300 SAMPLE 1126	INDEX 8301 SAMPLE 1132
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTAGUE	MONTAGUE	MONTAGUE
FIELD	NOCONA	NOCONA	NOCONA
WELL NAME	J. F. LEMONS NO. 1	ROWLAND NO. 1	RUCKTASHEL NO. 1
LOCATION	T8S, BLK. 5, SAM. LITTLE SUR	J. CHAMBLISS SUR.	SAMUEL LITTLE SUR.
OWNER	TEXHOMA OIL & REFINING CO.	PURE OIL CO.	TEXAS CO.
COMPLETED	04/--/25	NOT GIVEN	NOT GIVEN
SAMPLED	05/27/25	08/18/25	08/20/25
FORMATION	PENN-CISCO	PENN-CISCO	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	680	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	270	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	45.0	50.0	42.1
ETHANE	3.5	3.6	5.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	50.0	44.5	49.8
OXYGEN	0.5	0.8	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.91	0.95	0.94
HEATING VALUE*	519	571	532
SPECIFIC GRAVITY	0.778	0.759	0.794

	INDEX 8302 SAMPLE 1137	INDEX 8303 SAMPLE 1295	INDEX 8304 SAMPLE 7912
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTAGUE	MONTAGUE	MONTAGUE
FIELD	NOCONA	NOCONA	NOCONA N
WELL NAME	ROWLAND NO. 1-A	MADDOX NO. 1	WELL A
LOCATION	J. CHAMBLISS SUR.	NOT GIVEN	NOT GIVEN
OWNER	TEXHOMA OIL & REFINING CO.	THE TEXAS CO.	GENERAL DRILLING & PROD. CO.
COMPLETED	NOT GIVEN	NOT GIVEN	--/--/46
SAMPLED	08/19/25	08/19/26	03/24/61
FORMATION	NOT GIVEN	NOT GIVEN	PENN-CISCO
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1192
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	44.7	51.3	58.6
ETHANE	3.3	5.2	3.5
PROPANE	---	---	2.4
N-BUTANE	---	---	1.2
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	50.2	41.9	32.5
OXYGEN	0.6	0.3	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	1.13	0.96	0.40
HEATING VALUE*	512	613	810
SPECIFIC GRAVITY	0.779	0.753	0.772

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8305 SAMPLE 4036	INDEX 8306 SAMPLE 11638	INDEX 8307 SAMPLE 14189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	CONROE	CONROE	CONROE
WELL NAME	KEYSTONE-MILLS NO. 20	A. A. & O. A. MADELEY NO. 43	E. MOODY NO. 26
LOCATION	NOT GIVEN	RANSOM HOUSE SURVEY A-244	RANSOM HOUSE SUR. A-244
OWNER	ATLANTIC REFINING CO.	HUMBLE OIL & REFINING CO.	TEXACO INC.
COMPLETED	02/19/34	06/22/67	07/17/73
SAMPLED	07/29/45	09/04/68	10/--/74
FORMATION	EOCE-COCKFIELD U	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4996	1810	2058
WELLHEAD PRESSURE,PSIG	900	530	930
OPEN FLOW, MCFD	14000	23182	8700
COMPONENT, MOLE PCT			
METHANE	84.5	97.1	97.3
ETHANE	15.3	0.6	1.5
PROPANE	---	0.4	0.2
N-BUTANE	---	0.4	TRACE
ISOBUTANE	---	0.1	TRACE
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	0.0	0.7	0.6
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1130	1043	1018
SPECIFIC GRAVITY	0.632	0.585	0.569

	INDEX 8308 SAMPLE 5694	INDEX 8309 SAMPLE 15535	INDEX 8310 SAMPLE 4836
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	CONROE TOWNSITE	CONROE W	DECKERS PRAIRIE
WELL NAME	FEDERAL ROYALTY CO. NO. 1	DAN O. MADELEY NO. 1	SCHIFO NO. 1
LOCATION	NOT GIVEN	JAMES PAVEHOUSE SUR.	T. J. STANSBURY SUR.
OWNER	HUMBLE OIL & REFINING CO.	MITCHELL ENERGY CORP.	STERLING OIL & REFINING CORP
COMPLETED	07/20/54	01/13/78	09/13/49
SAMPLED	09/23/54	12/12/78	01/25/50
FORMATION	EOCE-COCKFIELD	EOCE-HOCKLEY	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6232	4055	5486
WELLHEAD PRESSURE,PSIG	2308	1375	2343
OPEN FLOW, MCFD	7400	16330	10400
COMPONENT, MOLE PCT			
METHANE	92.1	97.9	90.6
ETHANE	3.7	0.4	4.4
PROPANE	1.8	TRACE	1.8
N-BUTANE	0.2	0.1	0.6
ISOBUTANE	0.6	0.0	0.3
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.4	1.0	0.7
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1104	1012	1105
SPECIFIC GRAVITY	0.621	0.567	0.634

	INDEX 8311 SAMPLE 9602	INDEX 8312 SAMPLE 13386	INDEX 8313 SAMPLE 13403
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	LAKE CREEK	LAKE CREEK	PAUL NELSON W
WELL NAME	LAKE CREEK UNIT NO. 27	EOLA G. FROST NO. 1	CHARLES M. THOMAS NO. 1
LOCATION	W. J. NICHOLS SUR. A-397	ARCHIBALD HODGE SUR. A-18	WILLIAM WILLS SUR. A-594
OWNER	SUPERIOR OIL CO.	PRAIRIE PRODUCING CO.	MCCORMICK OIL & GAS CORP.
COMPLETED	05/05/63	09/07/71	06/24/71
SAMPLED	10/14/64	09/--/72	09/26/72
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11540	11558	7556
WELLHEAD PRESSURE,PSIG	5500	2080	1465
OPEN FLOW, MCFD	7420	7600	20800
COMPONENT, MOLE PCT			
METHANE	91.8	84.8	85.3
ETHANE	3.9	6.2	6.6
PROPANE	1.4	2.7	2.7
N-BUTANE	0.3	0.6	0.6
ISOBUTANE	0.1	0.4	0.5
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.0	1.1	3.0
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	3.4	0.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1063	1092	1103
SPECIFIC GRAVITY	0.621	0.673	0.659

	INDEX 8314 SAMPLE 14320	INDEX 8315 SAMPLE 6013	INDEX 8316 SAMPLE 5436
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MOORE	MOORE
FIELD	PAUL NELSON W	BARREL SPRINGS	HUGOTON, TEXAS
WELL NAME	GOODSON NO. 2	MASTERSON A-5	GOCHNAUR NO. 1
LOCATION	W. S. TAYLOR SUR. A-552	SEC. 76, BLK. O-10, D&P SUR.	SEC. 3, BLK. M2, HARWELL SUR.
OWNER	MCCORMICK OIL & GAS CORP.	COLORADO INTERSTATE GAS CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	05/16/73	10/12/40	NOT GIVEN
SAMPLED	04/20/75	01/31/56	03/30/53
FORMATION	EOCE-YEGUA	PERM-WICHITA-ALBANY	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	220	440	440
DEPTH, FEET	7820	2465	3152
WELLHEAD PRESSURE,PSIG	2400	345	431
OPEN FLOW, MCFD	430	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	73.7	73.4
ETHANE	6.2	5.8	6.1
PROPANE	2.9	3.4	3.7
N-BUTANE	0.7	1.1	1.0
ISOBUTANE	0.8	0.4	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	13.8	13.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.1
HELIUM	0.02	0.03	0.62
HEATING VALUE*	1138	1025	1031
SPECIFIC GRAVITY	0.671	0.713	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8317 SAMPLE 5437	INDEX 8318 SAMPLE 5778	INDEX 8319 SAMPLE 6250
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	REEVES NO. 1	BOULWARE NO. 1	HUBER NO. 2
LOCATION	SEC. 8, BLK. Q	SEC. 17, BLK. M-2, HBA SUR.	SEC. 96, BLK. 3-T, T&NO SUR.
OWNER	KERR-MCGEE CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	NOT GIVEN	11/02/54	01/10/57
SAMPLED	03/30/53	02/11/55	02/15/57
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3333	3097
WELLHEAD PRESSURE,PSIG	NOT GIVEN	364	390
OPEN FLOW, MCFD	NOT GIVEN	216	3462
COMPONENT, MOLE PCT			
METHANE	71.2	72.3	74.4
ETHANE	5.9	6.5	6.7
PROPANE	3.9	3.6	3.5
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.3	14.6	12.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.81	0.72	0.60
HEATING VALUE*	993	1011	1030
SPECIFIC GRAVITY	0.717	0.713	0.703

	INDEX 8320 SAMPLE 7153	INDEX 8321 SAMPLE 7156	INDEX 8322 SAMPLE 7365
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	LETTERMAN GAS UNIT NO. 1	LACY-MEEK NO. 1	NEEL UNIT NO. 1
LOCATION	SEC. 22, BLK. M-2, H&TC SUR.	SEC. 6, BLK. Q, H&GN SUR.	SEC. 22, BLK. M-2, CAMPBELL
OWNER	TEXACO INC.	TEXACO INC.	KERR-MCGEE OIL IND., INC.
COMPLETED	01/31/58	10/30/57	06/09/59
SAMPLED	07/24/59	07/24/59	01/30/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3289	3287	3274
WELLHEAD PRESSURE,PSIG	382	398	362
OPEN FLOW, MCFD	4178	5090	354
COMPONENT, MOLE PCT			
METHANE	70.6	70.5	70.3
ETHANE	6.6	6.7	6.5
PROPANE	4.2	4.1	3.8
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	15.8	15.6	16.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.80	0.80	0.90
HEATING VALUE*	1019	1018	1000
SPECIFIC GRAVITY	0.727	0.724	0.721

	INDEX 8323 SAMPLE 13020	INDEX 8324 SAMPLE 13021	INDEX 8325 SAMPLE 13023
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	DOLOMITE WELL NO. 1	HUNGATE NO. 1	PAULUS NO. 1
LOCATION	SEC. 38, BLK. 2T, T&NO SUR.	SEC. 37, BLK. 2T, T&NO SUR.	SEC. 28, BLK. 2T, T&NO SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/20/71	09/20/71	09/20/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	71.3	72.1
ETHANE	6.3	6.3	6.3
PROPANE	4.5	4.6	4.5
N-BUTANE	1.1	1.0	1.1
ISOBUTANE	0.8	0.8	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.2	14.4	14.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.68	0.70	0.69
HEATING VALUE*	1051	1033	1049
SPECIFIC GRAVITY	0.731	0.724	0.726

	INDEX 8326 SAMPLE 13024	INDEX 8327 SAMPLE 15350	INDEX 8328 SAMPLE 3280
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	NOT GIVEN
WELL NAME	FEDERAL NO. 1	FLORES NO. 28	MASTERSON NO. A-2
LOCATION	SEC. 29, BLK. 2T, T&NO SUR.	SEC. 87, BLK. 3T, T&NO SUR.	SEC. 49, BLK. 3, G&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	DIAMOND SHAMROCK CORP.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	05/30/78	NOT GIVEN
SAMPLED	09/20/71	08/24/78	NOT GIVEN
FORMATION	PERM-CHASE GROUP	PERM-WICHITA ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3018	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	172	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	73.3	69.9
ETHANE	6.2	6.6	19.9
PROPANE	4.6	4.0	---
N-BUTANE	1.1	1.1	---
ISOBUTANE	0.7	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	15.2	13.1	9.2
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.1	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.73	0.62	0.50
HEATING VALUE*	1038	1038	1065
SPECIFIC GRAVITY	0.732	0.712	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8329 SAMPLE 1402		INDEX 8330 SAMPLE 1546		INDEX 8331 SAMPLE 1899	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	MASTERSON NO. J-1		T. THOMPSON A-2		FEE A-1	
LOCATION	SEC. 59, BLK. 0-18, D&P SUR.		SEC. 19, BLK. 44, H&TC SUR.		SEC. 76, BLK. 3 G&M SUR.	
OWNER	AMARILLO OIL CO.		AMARILLO OIL CO.		CANADIAN RIVER GAS CO.	
COMPLETED	04/30/27		09/--/27		DRILL STEM TEST	
SAMPLED	07/30/27		11/23/27		11/18/29	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3024		3270		3830	
WELLHEAD PRESSURE,PSIG	430		432		NOT GIVEN	
OPEN FLOW, MCFD	14000		90000		5000	
COMPONENT, MOLE PCT						
METHANE	56.1		64.2		70.1	
ETHANE	25.8		22.2		19.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	16.5		12.8		9.2	
OXYGEN	0.9		0.2		0.8	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.58		0.50		0.50	
HEATING VALUE*	1031		1048		1051	
SPECIFIC GRAVITY	0.755		0.719		0.690	

	INDEX 8332 SAMPLE 2283		INDEX 8333 SAMPLE 2648		INDEX 8334 SAMPLE 2768	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	J. M. SHELTON A-1		KILGORE NO. 2-G		REED NO. A-2	
LOCATION	SEC. 52, BLK. 3, G&M SUR.		SEC. 29, BLK. PMC, ELRR SUR.		SEC. 47, BLK. 3, G&M SUR.	
OWNER	RED RIVER GAS CO.		TEXOMA NATURAL GAS CO.		CANADIAN RIVER GAS CO.	
COMPLETED	04/05/30		06/02/31		09/--/37	
SAMPLED	02/09/31		10/19/33		09/--/37	
FORMATION	PERM-WICHITA-ALBANY&GR.WASH		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2761		2890		2215	
WELLHEAD PRESSURE,PSIG	425		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	57800		15600		41000	
COMPONENT, MOLE PCT						
METHANE	74.1		59.2		70.8	
ETHANE	17.3		20.2		17.9	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	7.7		19.4		10.1	
OXYGEN	0.2		0.3		0.5	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.47		0.64		0.46	
HEATING VALUE*	1061		962		1038	
SPECIFIC GRAVITY	0.673		0.737		0.687	

	INDEX 8335 SAMPLE 2862		INDEX 8336 SAMPLE 2864		INDEX 8337 SAMPLE 2873	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	SEAY NO. A-1		BIVINS NO. A-15		KILLGORE NO. A-1	
LOCATION	SEC. 85, BLK. 2, G&M SUR.		SEC. 76, BLK. 2, G&M SUR.		SEC. 18, BLK. PMC,EL&RR SUR.	
OWNER	CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.	
COMPLETED	06/15/28		03/04/36		05/27/39	
SAMPLED	08/21/41		08/21/41		08/21/41	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2420		2710		2920	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	14000		7300		36400	
COMPONENT, MOLE PCT						
METHANE	69.3		67.5		64.9	
ETHANE	14.4		15.3		20.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	14.9		14.6		13.7	
OXYGEN	0.2		0.7		0.5	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.9		0.3	
HELIUM	0.98		0.98		0.62	
HEATING VALUE*	960		958		1016	
SPECIFIC GRAVITY	0.688		0.699		0.713	

	INDEX 8338 SAMPLE 2875		INDEX 8339 SAMPLE 2881		INDEX 8340 SAMPLE 2920	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS NO. A-7		CRAWFORD NO. A-1		BIVINS A-17	
LOCATION	SEC. 7, BLK. 25,EL&RR SUR.		SEC. 26, BLK. PMC,EL&RR SUR.		SEC. 73, BLK. 2, C&M SUR.	
OWNER	CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.	
COMPLETED	09/10/28		06/29/28		01/28/36	
SAMPLED	08/21/41		08/22/41		10/14/41	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2919		2550		2875	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	25800		12500		5000	
COMPONENT, MOLE PCT						
METHANE	67.8		61.7		65.2	
ETHANE	15.4		20.9		17.3	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	15.6		15.2		15.6	
OXYGEN	0.3		0.6		0.6	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.96		1.44		1.02	
HEATING VALUE*	963		1000		971	
SPECIFIC GRAVITY	0.695		0.724		0.707	

*. CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**. DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8341 SAMPLE 2921	INDEX 8342 SAMPLE 3283	INDEX 8343 SAMPLE 3284
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-24	THOMPSON NO. B-2	SNEED NO. A-1
LOCATION	SEC. 23, BLK. PMC,EL&RR SUR.	SEC. 17, BLK. 44, H&TC SUR.	SEC. 51, BLK. 6T, T&NO SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	11/25/38	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/41	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2510	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	33480	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.4	66.2	68.4
ETHANE	18.2	20.2	20.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.0	12.6	10.6
OXYGEN	0.2	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.91	0.64	0.54
HEATING VALUE*	999	1033	1053
SPECIFIC GRAVITY	0.703	0.707	0.698

	INDEX 8344 SAMPLE 3290	INDEX 8345 SAMPLE 3336	INDEX 8346 SAMPLE 3339
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. J-1	SNEED NO. C-1	FEE NO. A-1
LOCATION	SEC. 54, BLK. 46, H&TC SUR.	SEC. 46, BLK. 6T, T&NO SUR.	SEC. 76, BLK. 3, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.0	70.7	71.4
ETHANE	19.7	19.6	19.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	8.7	8.4
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.50	0.47	0.46
HEATING VALUE*	1062	1067	1066
SPECIFIC GRAVITY	0.692	0.689	0.686

	INDEX 8347 SAMPLE 3350	INDEX 8348 SAMPLE 3842	INDEX 8349 SAMPLE 3978
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	THOMPSON NO. B-3	BROWN NO. 1	SNEED NO. 3-P
LOCATION	SEC. 75, BLK. 018, D&P SUR.	SEC. 4, BLK. 2, G&M SUR.	CENTER M-GEORGE SUR.
OWNER	CANADIAN RIVER GAS CO.	DAVID RUBIN	TEXOMA NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	01/12/35
SAMPLED	NOT GIVEN	NOT GIVEN	12/22/44
FORMATION	PERM-WICHITA-ALBANY	-BIG TIME	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3333	2338
WELLHEAD PRESSURE,PSIG	NOT GIVEN	330	368
OPEN FLOW, MCFD	NOT GIVEN	18000	8620
COMPONENT, MOLE PCT			
METHANE	68.8	59.6	69.1
ETHANE	18.0	21.8	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.9	16.8	10.9
OXYGEN	0.4	0.6	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	0.72	0.62	0.47
HEATING VALUE*	1020	994	1044
SPECIFIC GRAVITY	0.694	0.738	0.695

	INDEX 8350 SAMPLE 3979	INDEX 8351 SAMPLE 3980	INDEX 8352 SAMPLE 4022
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SNEED NO. 6-P	MOORE NO. 1-P	SNEED B-2
LOCATION	SEC. 38, BLK. GT, T&NO SUR.	SEC. 14, BLK. 44, H&TC SUR.	SEC. 27, BLK. G-T, T&NO SUR.
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	10/04/35	03/27/35	NOT GIVEN
SAMPLED	12/22/44	12/22/44	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	2971	3014
WELLHEAD PRESSURE,PSIG	405	417	NOT GIVEN
OPEN FLOW, MCFD	31000	9360	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.4	68.3	67.3
ETHANE	15.9	16.8	21.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.0	13.0	10.4
OXYGEN	0.0	0.0	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	1.3	0.1
HELIUM	0.38	0.61	0.49
HEATING VALUE*	988	993	1063
SPECIFIC GRAVITY	0.692	0.701	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8353 SAMPLE 4074		INDEX 8354 SAMPLE 4075		INDEX 8355 SAMPLE 4639	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BAKER NO. 1		BAKER NO. 1		CRAWFORD NO. C-1	
LOCATION	SEC. 39, BLK. O-18, D&P SUR.		SEC. 39, BLK. O-18, D&P SUR.		SEC. 24, BLK. PMC, EL&RR SUR	
OWNER	CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.	
COMPLETED	12/21/45		12/21/45		09/03/48	
SAMPLED	NOT GIVEN		NOT GIVEN		12/08/48	
FORMATION	PERM-L		PERM-L		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		2670		2476	
WELLHEAD PRESSURE,PSIG	399		399		341	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		5000	
COMPONENT, MOLE PCT						
METHANE	65.7	----------	69.3	----------	61.4	----------
ETHANE	18.0	----------	15.9	----------	21.1	----------
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---	----------	---	----------	---	----------
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---	----------	---	----------	---	----------
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---	----------	---	----------	---	----------
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	15.1	----------	13.8	----------	16.1	----------
OXYGEN	0.0	----------	0.0	----------	0.2	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2	----------	0.1	----------	0.3	----------
HELIUM	0.98		0.85		0.91	
HEATING VALUE*	988	----------	987	----------	1000	----------
SPECIFIC GRAVITY	0.704		0.687		0.726	

	INDEX 8356 SAMPLE 4641		INDEX 8357 SAMPLE 4781		INDEX 8358 SAMPLE 5195	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	COOPER NO. A-1		BIVINS A-55		BIVINS NO. A-82	
LOCATION	SEC. 16, BLK. PMC, EL&RR SUR		SEC. 75, GUNTER SUR., B-2		SEC. 1, BLK. 1 EL&RR SUR.	
OWNER	CANADIAN RIVER GAS CO.		CANADIAN RIVER GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	09/24/48		NOT GIVEN		NOT GIVEN	
SAMPLED	12/04/48		10/14/49		05/01/52	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2540		NOT GIVEN		2535	
WELLHEAD PRESSURE,PSIG	341		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	24		NOT GIVEN		56000	
COMPONENT, MOLE PCT						
METHANE	62.3	----------	72.6	----------	72.9	----------
ETHANE	20.8	----------	5.3	----------	4.9	----------
PROPANE	---	----------	2.8	----------	2.9	----------
N-BUTANE	---	----------	0.8	----------	0.8	----------
ISOBUTANE	---	----------	0.3	----------	0.3	----------
N-PENTANE	---	----------	0.1	----------	0.1	----------
ISOPENTANE	---	----------	0.3	----------	0.1	----------
CYCLOPENTANE	---	----------	0.1	----------	0.1	----------
HEXANES PLUS	---	----------	0.0	----------	0.1	----------
NITROGEN	15.1	----------	16.2	----------	TRACE	----------
OXYGEN	0.6	----------	0.1	----------	16.4	----------
ARGON	---		0.1		TRACE	----------
HYDROGEN	---	----------	0.0	----------	0.1	
HYDROGEN SULFIDE**	---		---		TRACE	----------
CARBON DIOXIDE	0.3	----------	0.4	----------	0.4	----------
HELIUM	0.92		0.98		0.97	
HEATING VALUE*	1004	----------	963	----------	951	----------
SPECIFIC GRAVITY	0.722		0.704		0.698	

	INDEX 8359 SAMPLE 5286		INDEX 8360 SAMPLE 5325		INDEX 8361 SAMPLE 5327	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	RICHARD A NO. 1		SUNRAY NO. 1		LEWIS NO. 1	
LOCATION	SEC. 172, BLK.3-T, T&NO SUR.		SEC. 1, BLK. M-2, B.H. SUR.		SEC. 121, BLK. 3-T, T&NO SUR	
OWNER	PHILLIPS PETROLEUM CO.		KERR-MCGEE CORP.		KERR-MCGEE CORP.	
COMPLETED	07/12/51		12/30/52		04/05/49	
SAMPLED	12/13/52		11/21/52		11/21/52	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2730		3310		3210	
WELLHEAD PRESSURE,PSIG	214		415		383	
OPEN FLOW, MCFD	1054?5		1500		865	
COMPONENT, MOLE PCT						
METHANE	74.7	----------	74.8	----------	74.9	----------
ETHANE	7.1	----------	6.1	----------	6.3	----------
PROPANE	4.1	----------	3.7	----------	3.9	----------
N-BUTANE	1.1	----------	1.0	----------	1.0	----------
ISOBUTANE	0.7	----------	0.5	----------	0.5	----------
N-PENTANE	0.2	----------	0.2	----------	0.2	----------
ISOPENTANE	0.2	----------	0.2	----------	0.1	----------
CYCLOPENTANE	TRACE	----------	TRACE	----------	0.1	----------
HEXANES PLUS	0.2	----------	0.1	----------	0.1	----------
NITROGEN	10.8	----------	12.7	----------	12.2	----------
OXYGEN	TRACE	----------	TRACE	----------	TRACE	----------
ARGON	0.0		0.1		0.1	
HYDROGEN	0.0	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.5	----------	0.2	----------	0.1	----------
HELIUM	0.43		0.50		0.52	
HEATING VALUE*	1078	----------	1036	----------	1045	----------
SPECIFIC GRAVITY	0.718		0.708		0.708	

	INDEX 8362 SAMPLE 5434		INDEX 8363 SAMPLE 5435		INDEX 8364 SAMPLE 5511	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	LEWIS NO. 1		SUNRAY NO. 1		LOCHTE	
LOCATION	SEC. 121, BLK. 3-T,T&NO SUR.		SEC. 1, BLK. M2,HARWELL SUR.		SEC. 4, BLK. 1, PD SUR.	
OWNER	KERR-MCGEE OIL IND., INC.		KERR-MCGEE CORP.		A. H. ROWLAND	
COMPLETED	NOT GIVEN		NOT GIVEN		12/13/52	
SAMPLED	12/07/53		03/30/53		07/02/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3210		3200		2740	
WELLHEAD PRESSURE,PSIG	196		428		205	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		3585	
COMPONENT, MOLE PCT						
METHANE	75.3	----------	75.0	----------	77.6	----------
ETHANE	6.2	----------	6.1	----------	6.6	----------
PROPANE	3.8	----------	3.7	----------	3.9	----------
N-BUTANE	1.0	----------	1.0	----------	1.1	----------
ISOBUTANE	0.4	----------	0.4	----------	0.5	----------
N-PENTANE	0.2	----------	0.2	----------	0.3	----------
ISOPENTANE	0.2	----------	0.2	----------	0.1	----------
CYCLOPENTANE	0.1	----------	0.1	----------	0.1	----------
HEXANES PLUS	0.1	----------	0.2	----------	0.2	----------
NITROGEN	12.2	----------	12.4	----------	9.3	----------
OXYGEN	TRACE	----------	TRACE	----------	TRACE	----------
ARGON	0.1		0.1		TRACE	
HYDROGEN	TRACE	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.6	----------
HELIUM	0.61		0.54		0.40	
HEATING VALUE*	1046	----------	1043	----------	1093	----------
SPECIFIC GRAVITY	0.706		0.708		0.702	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** MAY HAVE BEEN ABSORBED BY MUD DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8365 SAMPLE 5605	INDEX 8366 SAMPLE 5762	INDEX 8367 SAMPLE 5765
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	A. NIELD NO. 2	BIVINS A-15	BIVINS A-17
LOCATION	SEC. 361, BLK. 44, H&TC SUR.	SEC. 76, BLK. 2, G&M SUR.	SEC. 73, BLK. 2, G&M SUR.
OWNER	MAGNOLIA PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/15/53	03/04/36	01/28/36
SAMPLED	04/06/54	01/26/55	01/26/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2850	2710	2875
WELLHEAD PRESSURE,PSIG	187	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	87061	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.0	73.2	72.7
ETHANE	6.8	5.1	5.0
PROPANE	4.3	2.7	2.6
N-BUTANE	1.4	0.7	0.8
ISOBUTANE	0.8	0.4	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.8	15.8	16.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.41	0.97	1.01
HEATING VALUE*	1107	971	960
SPECIFIC GRAVITY	0.727	0.702	0.702

	INDEX 8368 SAMPLE 5767	INDEX 8369 SAMPLE 5769	INDEX 8370 SAMPLE 6025
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-21	BIVINS A-7	MASTERSON A-5
LOCATION	SEC. 35, BLK. PMC,EL&RR SUR.	SEC. 7, BLK. 25, EL&RR SUR.	SEC. 76, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	09/10/28	10/12/40
SAMPLED	01/26/55	01/26/55	02/10/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	-LIME & DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2645	NOT GIVEN	2465
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	277
OPEN FLOW, MCFD	30000	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	74.7	72.5	73.6
ETHANE	5.6	5.0	8.2
PROPANE	3.2	2.9	3.7
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.2	16.3	11.0
OXYGEN	TRACE	TRACE	1.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.77	1.01	0.15
HEATING VALUE*	1017	966	1053
SPECIFIC GRAVITY	0.702	0.706	0.713

	INDEX 8371 SAMPLE 6985	INDEX 8372 SAMPLE 7074	INDEX 8373 SAMPLE 7075
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	EMMA MCDOWELL NO. 2	KILLGORE A-15	KILLGORE A-16
LOCATION	SEC. 16, BLK. M-16	SEC. 13, BLK. PMC, EL&RR SUR	SEC. 31, BLK. 44, H&TC SUR.
OWNER	KERR-MCGEE OIL IND., INC.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/--/58	12/18/58	01/13/59
SAMPLED	03/25/59	05/14/59	05/04/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2662	3307
WELLHEAD PRESSURE,PSIG	NOT GIVEN	255	169
OPEN FLOW, MCFD	NOT GIVEN	7000	3900
COMPONENT, MOLE PCT			
METHANE	73.8	73.4	75.2
ETHANE	8.5	5.8	6.5
PROPANE	5.6	3.1	3.6
N-BUTANE	1.8	0.9	1.0
ISOBUTANE	0.9	0.5	0.7
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	7.5	14.3	11.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.6
HELIUM	0.30	0.80	0.50
HEATING VALUE*	1190	1001	1064
SPECIFIC GRAVITY	0.751	0.706	0.714

	INDEX 8374 SAMPLE 7087	INDEX 8375 SAMPLE 7092	INDEX 8376 SAMPLE 7293
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	HUCKABY NO. 2	ZOFFNESS NO. 2	READ A-7
LOCATION	A. DUBOIS SUR.	SEC. 55, BLK. GT, T&NO RRSUR	SEC. 1, BLK. M-3
OWNER	PHILLIPS PETROLEUM CO.	PANHANDLE EASTERN PIPELINE	COLORADO INTERSTATE GAS CO.
COMPLETED	04/21/59	06/29/31	09/10/59
SAMPLED	06/02/59	06/05/59	12/01/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2462	2100	2165
WELLHEAD PRESSURE,PSIG	150	214	205
OPEN FLOW, MCFD	4100	74435	33000
COMPONENT, MOLE PCT			
METHANE	77.7	76.6	77.0
ETHANE	6.5	6.6	6.1
PROPANE	4.2	3.6	3.7
N-BUTANE	1.4	1.2	1.3
ISOBUTANE	0.7	1.0	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	7.8	9.4	9.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.40	0.40	0.40
HEATING VALUE*	982	1107	1094
SPECIFIC GRAVITY	0.712	0.718	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8377 SAMPLE 7352	INDEX 8378 SAMPLE 7396	INDEX 8379 SAMPLE 7397
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SNEED NO. 1-20	CRAWFORD D-3	CRAWFORD C-2
LOCATION	SEC. 20, BLK. 6, T&NO SUR.	SEC. 32, BLK. PMC, EL&RR SUR	SEC. 32, BLK. PMC, EL&RR SUR
OWNER	PANHANDLE EASTERN PIPELINE	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/15/59	08/09/59	08/03/59
SAMPLED	01/14/60	02/16/60	02/16/60
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2490	3209	2945
WELLHEAD PRESSURE,PSIG	177	199	2203
OPEN FLOW, MCFD	4232	7700	16200
COMPONENT, MOLE PCT			
METHANE	76.1	74.3	73.5
ETHANE	6.5	6.3	5.9
PROPANE	4.4	3.5	3.6
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.7	0.7	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.7	12.4	12.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.7
HELIUM	0.40	0.40	0.60
HEATING VALUE*	1106	1057	1033
SPECIFIC GRAVITY	0.717	0.718	0.724

	INDEX 8380 SAMPLE 7398	INDEX 8381 SAMPLE 8200	INDEX 8382 SAMPLE 8417
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE A-16	WARRICK NO. 2-R	SNEED D-2
LOCATION	SEC. 31, BLK. 44, H&TC SUR.	SEC. 92, BLK. 46, H&TC SUR.	SEC. 42, BLK. 6-T, T&NO SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/13/59	NOT GIVEN	08/12/61
SAMPLED	01/14/60	09/13/61	02/07/62
FORMATION	PERM-WICHITA-ALBANY	PERM-TUBB	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3307	NOT GIVEN	2400
WELLHEAD PRESSURE,PSIG	169	3	186
OPEN FLOW, MCFD	3900	NOT GIVEN	8600
COMPONENT, MOLE PCT			
METHANE	74.9	82.0	77.8
ETHANE	6.2	6.4	6.5
PROPANE	4.0	2.4	4.0
N-BUTANE	1.1	0.5	1.3
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	11.5	7.7	8.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.50	0.45	0.137
HEATING VALUE*	1063	1052	1120
SPECIFIC GRAVITY	0.715	0.662	0.712

	INDEX 8383 SAMPLE 8849	INDEX 8384 SAMPLE 9065	INDEX 8385 SAMPLE 9066
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON M-5	KILLGORE B-1	KILLGORE B-1
LOCATION	SEC. 14, BLK. B-10,EL&RR SUR	SEC. 22, BLK. PMC,EL&RR SUR.	SEC. 22, BLK. PMC,EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/04/62	NOT GIVEN	NOT GIVEN
SAMPLED	02/11/63	08/16/63	08/16/63
FORMATION	PERM-GRANITE WASH	-BRODERHEAD	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2080	NOT GIVEN	2490
WELLHEAD PRESSURE,PSIG	189	216	216
OPEN FLOW, MCFD	13000	NOT GIVEN	30100
COMPONENT, MOLE PCT			
METHANE	75.9	70.4	73.8
ETHANE	6.8	6.7	5.8
PROPANE	4.2	3.9	3.3
N-BUTANE	1.5	1.5	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.3	0.7	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	9.7	13.5	13.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.50	0.60	0.90
HEATING VALUE*	1109	1098	1026
SPECIFIC GRAVITY	0.720	0.757	0.711

	INDEX 8386 SAMPLE 9116	INDEX 8387 SAMPLE 9117	INDEX 8388 SAMPLE 9217
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	FEE NO. 1-R	SNEED NO. 2R	STORM NO. 1
LOCATION	SEC. 76, BLK. 3, G&M SUR.	SEC. 5, BLK. B-10,EL&RR SUR	SEC. 13, BLK. PMC, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	KATEX OIL CO.
COMPLETED	10/17/63	10/14/63	NOT GIVEN
SAMPLED	10/17/63	10/14/63	01/17/64
FORMATION	PERM-TUBB	PERM-TUBB	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1164	1312	3383
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	138
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	857
COMPONENT, MOLE PCT			
METHANE	73.9	76.4	73.0
ETHANE	6.0	6.2	6.5
PROPANE	3.8	3.7	3.7
N-BUTANE	1.3	1.5	1.4
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	12.8	10.1	12.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	0.9
HELIUM	0.40	0.50	0.60
HEATING VALUE*	1040	1090	1062
SPECIFIC GRAVITY	0.721	0.713	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8389 SAMPLE 10673	INDEX 8390 SAMPLE 10674	INDEX 8391 SAMPLE 10675
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE B-1	BIVINS A-15	SEAY A-1
LOCATION	SEC. 22, BLK. PMC, EL&RR SUR	SEC. 76, BLK. 2, G&M SUR.	SEC. 85, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/14/41	03/04/36	06/13/28
SAMPLED	07/21/66	07/21/66	07/21/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2665	2710	2420
WELLHEAD PRESSURE,PSIG	187	206	191
OPEN FLOW, MCFD	9198	1522	983
COMPONENT, MOLE PCT			
METHANE	72.0	71.7	71.0
ETHANE	6.2	5.4	6.2
PROPANE	3.7	3.2	3.9
N-BUTANE	1.2	1.0	1.3
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.5	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.3	16.0	15.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.88	1.00	0.96
HEATING VALUE*	1038	992	1040
SPECIFIC GRAVITY	0.730	0.720	0.730

	INDEX 8392 SAMPLE 10676	INDEX 8393 SAMPLE 10677	INDEX 8394 SAMPLE 11877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE A-16	KILLGORE A-1	KILLGORE A-17
LOCATION	SEC. 31, BLK. 44, H&TC SUR.	SEC. 18, BLK. PMC&RR SUR.	SEC. 21, BLK. PMC,EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/13/59	05/27/39	05/13/69
SAMPLED	07/21/66	07/21/66	05/14/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3307	2920	3259
WELLHEAD PRESSURE,PSIG	113	124	125
OPEN FLOW, MCFD	1319	2319	1980
COMPONENT, MOLE PCT			
METHANE	73.6	73.1	72.1
ETHANE	6.7	6.4	6.0
PROPANE	4.2	4.0	3.2
N-BUTANE	1.3	1.3	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	11.2	12.3	14.8
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.8
HELIUM	0.50	0.65	0.68
HEATING VALUE*	1088	1067	1003
SPECIFIC GRAVITY	0.730	0.730	0.723

	INDEX 8395 SAMPLE 11894	INDEX 8396 SAMPLE 13260	INDEX 8397 SAMPLE 13264
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE A-17	BIVINS A-172	SEAY A-2
LOCATION	SEC. 21, BLK. PMC,EL&RR SUR.	SEC. 1, BLK.N-1,BOULDIN SUR.	SEC. 85, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/13/69	05/04/72	04/24/72
SAMPLED	05/10/69	05/04/72	04/24/72
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3489	2703	2408
WELLHEAD PRESSURE,PSIG	100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	7570	10150
COMPONENT, MOLE PCT			
METHANE	73.2	72.7	72.7
ETHANE	6.1	5.6	5.6
PROPANE	3.2	3.2	3.3
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	14.1	15.2	15.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.72	0.99	1.00
HEATING VALUE*	1024	994	996
SPECIFIC GRAVITY	0.717	0.706	0.706

	INDEX 8398 SAMPLE 13662	INDEX 8399 SAMPLE 5763	INDEX 8400 SAMPLE 6012
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	KILLGORE A-19	BIVINS A-2R	MASTERSON A-5
LOCATION	SEC. 12, BLK. PMC, EL&RR SUR.	SEC. 13, BLK. O-18,D&P SUR.	SEC. 76, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	07/16/24	10/12/40
SAMPLED	06/11/73	01/26/55	01/31/56
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	1865	1850
WELLHEAD PRESSURE,PSIG	81	NOT GIVEN	343
OPEN FLOW, MCFD	3840	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	74.8	79.2	78.9
ETHANE	5.8	8.6	8.5
PROPANE	3.5	3.4	3.7
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.6	0.5	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.7	6.6	6.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.3	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.65	0.17	0.16
HEATING VALUE*	1033	1111	1113
SPECIFIC GRAVITY	0.710	0.688	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8401 SAMPLE 7318		INDEX 8402 SAMPLE 7324		INDEX 8403 SAMPLE 7605	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	J. T. SNEED NO. 103		J. T. SNEED NO. 101		SHELTON A-9	
LOCATION	SEC. 15, BLK. M, N. JONES SUR		SEC. 54, BLK. 3, G&M SUR.		SEC. 51, BLK. 47, H&TC SUR.	
OWNER	NATURAL GAS PIPELINE CO.		NATURAL GAS PIPELINE CO.		AMARILLO OIL CO.	
COMPLETED	11/16/59		11/16/59		05/25/60	
SAMPLED	12/29/59		12/29/59		07/18/60	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1540		1575		1539	
WELLHEAD PRESSURE,PSIG	380		321		411	
OPEN FLOW, MCFD	3100		745		3900	
COMPONENT, MOLE PCT						
METHANE	81.7		81.3		80.8	
ETHANE	6.9		6.8		7.1	
PROPANE	2.8		2.6		3.0	
N-BUTANE	0.6		0.6		0.7	
ISOBUTANE	0.3		0.4		0.3	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	7.1		7.7		7.3	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		TRACE		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.10		0.10		0.10	
HEATING VALUE*	1072		1060		1072	
SPECIFIC GRAVITY	0.668		0.667		0.670	

	INDEX 8404 SAMPLE 7606		INDEX 8405 SAMPLE 7796		INDEX 8406 SAMPLE 7831	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	SHELTON A-10		BIVINS A-1R		MASTERSON NO. 2R	
LOCATION	SEC. 53, BLK. 3, G&M SUR.		SEC. 93, BLK. 46, H&TC SUR.		SEC. 85, BLK. O-18, D&P SUR.	
OWNER	AMARILLO OIL CO.		ANADARKO PRODUCTION CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	05/29/60		11/--/60		07/29/60	
SAMPLED	07/18/60		12/13/60		01/18/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1579		1873		1662	
WELLHEAD PRESSURE,PSIG	399		394		364	
OPEN FLOW, MCFD	6200		8700		2796	
COMPONENT, MOLE PCT						
METHANE	80.7		82.1		79.8	
ETHANE	7.2		6.6		8.3	
PROPANE	3.0		1.6		3.4	
N-BUTANE	0.8		0.5		0.8	
ISOBUTANE	0.1		0.4		0.5	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.2		0.1		0.1	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	7.1		8.2		6.2	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.3		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.2	
HELIUM	0.20		0.20		0.20	
HEATING VALUE*	1074		1035		1103	
SPECIFIC GRAVITY	0.669		0.656		0.681	

	INDEX 8407 SAMPLE 7832		INDEX 8408 SAMPLE 7833		INDEX 8409 SAMPLE 7864	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON NO. 1R		MASTERSON NO. 3R		SHELTON A-14R	
LOCATION	SEC. 76, BLK. O-18, D&P SUR.		SEC. 86, BLK. O-18, D&P SUR.		SEC. 50, BLK. 47, H&TC SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		AMARILLO OIL CO.	
COMPLETED	08/21/60		07/15/60		02/14/61	
SAMPLED	01/18/61		01/18/61		02/14/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1936		1566		1476	
WELLHEAD PRESSURE,PSIG	362		385		394	
OPEN FLOW, MCFD	2416		5374		6700	
COMPONENT, MOLE PCT						
METHANE	78.5		79.5		81.5	
ETHANE	9.4		8.2		7.0	
PROPANE	4.0		3.4		2.7	
N-BUTANE	0.9		0.9		0.6	
ISOBUTANE	0.6		0.6		0.4	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.1		0.2		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	5.6		6.3		7.4	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.4		TRACE	
HELIUM	0.20		0.20		0.10	
HEATING VALUE*	1142		1114		1064	
SPECIFIC GRAVITY	0.695		0.691		0.665	

	INDEX 8410 SAMPLE 7865		INDEX 8411 SAMPLE 7868		INDEX 8412 SAMPLE 7874	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	SHELTON A-11R		POLLY NO. 2		J. T. SNEED NO. 130	
LOCATION	SEC. 53, BLK. 3, G&M SUR.		SEC. 2, BLK. J-J, POIT. SUR		SEC. 1, BLK. B-12, D&PRR SUR	
OWNER	AMARILLO OIL CO.		PHILLIPS PETROLEUM CO.		NATURAL GAS PIPELINE CO.	
COMPLETED	02/14/61		01/27/61		12/29/60	
SAMPLED	02/14/61		02/22/61		02/28/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1479		1689		1549	
WELLHEAD PRESSURE,PSIG	398		376		400	
OPEN FLOW, MCFD	11000		13000		3600	
COMPONENT, MOLE PCT						
METHANE	81.5		81.2		81.9	
ETHANE	7.1		7.0		7.5	
PROPANE	2.8		2.6		3.2	
N-BUTANE	0.6		0.6		0.7	
ISOBUTANE	0.3		0.4		0.4	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	7.2		7.6		5.9	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		TRACE	
HELIUM	0.20		0.10		0.20	
HEATING VALUE*	1070		1063		1107	
SPECIFIC GRAVITY	0.666		0.668		0.673	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8413 SAMPLE 7875	INDEX 8414 SAMPLE 7876	INDEX 8415 SAMPLE 7877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	J. T. SNEED NO. 124	J. T. SNEED NO. 121	J. T. SNEED NO. 126
LOCATION	SEC. 5, BLK. B-12, D&PRR SUR	SEC. 1, TTRR CO. SUR.	C. RAGSDALE SUR.
OWNER	NATURAL GAS PIPELINE CO.	NATURAL GAS PIPELINE CO.	NATURAL GAS PIPELINE CO.
COMPLETED	NOT GIVEN	NOT GIVEN	12/23/60
SAMPLED	02/28/61	02/28/61	02/28/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1714	1660	1572
WELLHEAD PRESSURE,PSIG	425	355	406
OPEN FLOW, MCFD	5900	2900	2700
COMPONENT, MOLE PCT			
METHANE	80.9	80.6	81.4
ETHANE	7.6	7.8	7.3
PROPANE	3.2	3.3	2.9
N-BUTANE	0.7	0.8	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.5	6.5	6.9
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1090	1096	1074
SPECIFIC GRAVITY	0.672	0.676	0.666

	INDEX 8416 SAMPLE 7879	INDEX 8417 SAMPLE 7896	INDEX 8418 SAMPLE 7897
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	LATIN NO. 2	SHELTON A-13R	SHELTON A-12R
LOCATION	SEC. 1, J. POITEVENT SUR.	SEC. 52, BLK. 47, H&TC SUR.	SEC. 52, BLK. 3, G&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	12/19/60	02/17/61	02/17/61
SAMPLED	03/02/61	02/17/61	02/17/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1675	1516	1497
WELLHEAD PRESSURE,PSIG	346	392	399
OPEN FLOW, MCFD	4300	19500	4123
COMPONENT, MOLE PCT			
METHANE	81.4	81.2	81.7
ETHANE	6.9	7.0	8.3
PROPANE	2.7	2.6	2.5
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	7.8	5.9
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1055	1059	1045
SPECIFIC GRAVITY	0.662	0.669	0.665

	INDEX 8419 SAMPLE 7899	INDEX 8420 SAMPLE 7900	INDEX 8421 SAMPLE 8387
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	STATE A NO. 2-R	STATE A 1R	CRAWFORD NO. 1R
LOCATION	SEC. 95, BLK. 46, H&TC SUR.	SEC. 96, BLK. 46, H&TC SUR.	SEC. 24, BLK. PMC, EL&RR SUR
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/11/61	03/11/61	07/22/61
SAMPLED	03/13/61	03/11/61	01/31/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1270	1206	1837
WELLHEAD PRESSURE,PSIG	375	378	353
OPEN FLOW, MCFD	9200	5850	9800
COMPONENT, MOLE PCT			
METHANE	81.6	81.9	79.6
ETHANE	6.8	6.7	8.2
PROPANE	2.5	2.5	3.7
N-BUTANE	0.6	0.5	0.8
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	7.6	6.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.16
HEATING VALUE*	1061	1051	1112
SPECIFIC GRAVITY	0.667	0.661	0.684

	INDEX 8422 SAMPLE 8456	INDEX 8423 SAMPLE 8480	INDEX 8424 SAMPLE 8482
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	WARRICK NO. 2 R	SNEED B-9R	STATE A-3R
LOCATION	SEC. 92, BLK. 46, H&TC SUR.	SEC. 4, TTRR SUR.	SEC. 92, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	10/23/61	05/02/61	04/19/61
SAMPLED	03/14/62	03/21/62	03/21/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1476	1713	1303
WELLHEAD PRESSURE,PSIG	372	410	409
OPEN FLOW, MCFD	7000	1275	5576
COMPONENT, MOLE PCT			
METHANE	81.1	81.7	82.9
ETHANE	6.5	6.7	6.2
PROPANE	2.6	2.7	2.3
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.2	7.4	7.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.14	0.17	0.17
HEATING VALUE*	1050	1063	1055
SPECIFIC GRAVITY	0.666	0.666	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8425 SAMPLE 8887	INDEX 8426 SAMPLE 8852	INDEX 8427 SAMPLE 8857
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	THOMPSON NO. 1R	SNEED NO. 1R	BIVINS NO. 9R
LOCATION	SEC. 26, BLK. A-26, EL&RR SUR	TR. 74, MARY S. JOHNSON SUR.	SEC. 93, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/62	09/27/62	08/27/63
SAMPLED	02/07/63	02/07/63	02/14/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1725	1577	1464
WELLHEAD PRESSURE,PSIG	380	363	373
OPEN FLOW, MCFD	2050	9100	16000
COMPONENT, MOLE PCT			
METHANE	80.5	81.8	82.5
ETHANE	7.8	6.5	6.5
PROPANE	3.5	2.5	2.5
N-BUTANE	1.0	0.7	0.8
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.2	7.5	7.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1109	1055	1066
SPECIFIC GRAVITY	0.682	0.663	0.663

	INDEX 8428 SAMPLE 9296	INDEX 8429 SAMPLE 9298	INDEX 8430 SAMPLE 9300
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	SNEED NO. 2R	WARRICK NO. 4R	BIVINS NO. 19R
LOCATION	SEC. 51, BLK. A-10, ELRR SUR.	SEC. 94, BLK. 46, H&TC SUR.	SEC. 44, W.T. PALMER SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/15/63	09/24/63	09/26/63
SAMPLED	04/14/64	04/14/64	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1764	1548	1534
WELLHEAD PRESSURE,PSIG	387	344	341
OPEN FLOW, MCFD	3300	17200	18000
COMPONENT, MOLE PCT			
METHANE	80.4	82.2	79.9
ETHANE	6.2	6.6	6.9
PROPANE	3.6	2.6	2.4
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.0	7.2	8.9
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.15	0.16	0.14
HEATING VALUE*	1110	1062	1044
SPECIFIC GRAVITY	0.681	0.662	0.673

	INDEX 8431 SAMPLE 9755	INDEX 8432 SAMPLE 9759	INDEX 8433 SAMPLE 10028
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	FEE 2R	SNEED 3R	THOMPSON 2R
LOCATION	SEC. 51, BLK 3, G&M SUR.	HORACE HALL SUR.	SEC. 28, BLK B-10, EL & RR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/25/64	08/25/64	07/11/65
SAMPLED	02/18/65	02/18/65	08/05/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1552	1729	1871
WELLHEAD PRESSURE,PSIG	346	484	434
OPEN FLOW, MCFD	2450	4100	1950
COMPONENT, MOLE PCT			
METHANE	80.9	79.4	80.4
ETHANE	6.8	8.0	7.8
PROPANE	2.7	3.8	3.6
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.9	6.6	6.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.14	0.16
HEATING VALUE*	1064	1115	1106
SPECIFIC GRAVITY	0.672	0.692	0.682

	INDEX 8434 SAMPLE 10030	INDEX 8435 SAMPLE 10698	INDEX 8436 SAMPLE 11043
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	FEE 3R	BIVINS 24 R	SNEED 4R
LOCATION	SEC. 63, BLK 47, H&TC SUR.	SEC. 25, BLK. PMC, EL&RR SUR	SEC. 51, BLK. 6-T,T&NO SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/11/65	08/01/66	07/21/67
SAMPLED	08/05/65	08/19/66	07/27/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1492	1925	1777
WELLHEAD PRESSURE,PSIG	245	728	454
OPEN FLOW, MCFD	2850	9900	4800
COMPONENT, MOLE PCT			
METHANE	81.5	77.6	79.6
ETHANE	6.6	8.6	8.1
PROPANE	2.4	4.7	7.5
N-BUTANE	0.6	1.9	1.6
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.7	7.6	1.4
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.15	0.15
HEATING VALUE*	1047	1177	1059
SPECIFIC GRAVITY	0.667	0.712	0.687

* [illegible] AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8437 SAMPLE 12894	INDEX 8438 SAMPLE 13675	INDEX 8439 SAMPLE 2302
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOTLEY
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	NOT GIVEN
WELL NAME	BIVINS 47R	KILLGORE 1 R	NOT GIVEN
LOCATION	SEC. 23, BLK. PMC, EL&RR SUR	SEC. 18, BLK PMC, EL&RR SUR.	SEC. 40, BLK. B
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	MERRY BROS. & PERINI, INC.
COMPLETED	07/08/71	NOT GIVEN	DRILL STEM TEST
SAMPLED	07/09/71	08/08/73	03/01/31
FORMATION	PERM-RED CAVE	PERM-RED CAVE	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	435
DEPTH, FEET	1967	NOT GIVEN	1200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	589	750
OPEN FLOW, MCFD		2390	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.7	80.8	0.0
ETHANE	9.1	7.4	0.0
PROPANE	4.7	3.6	---
N-BUTANE	0.9	0.8	---
ISOBUTANE	0.8	0.5	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	5.2	6.2	99.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.15	0.120	0.04
HEATING VALUE*	1157	1110	0
SPECIFIC GRAVITY	0.701	0.683	0.969

	INDEX 8440 SAMPLE 6879	INDEX 8441 SAMPLE 12541	INDEX 8442 SAMPLE 12546
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOTLEY	NACOGDOCHES	NACOGDOCHES
FIELD	NOT GIVEN	DOUGLASS	DOUGLASS
WELL NAME	O. E. BIRNIE NO. 1	DOUGLASS GAS UNIT 6 NO. 1	DOUGLASS GAS UNIT 3 NO. 1
LOCATION	SEC. 1, BLK. GP, C&MRR SUR.	COY + COMB SUR.	MIGUEL SACCO SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/03/58	09/24/69	12/11/52
SAMPLED	11/24/58	11/10/70	11/10/70
FORMATION	PENN-STRAWN U	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	435	260	260
DEPTH, FEET	8517	8100	9170
WELLHEAD PRESSURE,PSIG	2080	3460	3656
OPEN FLOW, MCFD	1	95500	3600
COMPONENT, MOLE PCT			
METHANE	71.3	97.5	97.4
ETHANE	15.0	0.5	0.6
PROPANE	6.7	0.2	0.2
N-BUTANE	1.3	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	4.0	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.4	1.2
HELIUM	0.10	0.01	0.01
HEATING VALUE*	1250	1002	1003
SPECIFIC GRAVITY	0.754	0.574	0.572

	INDEX 8443 SAMPLE 13541	INDEX 8444 SAMPLE 4826	INDEX 8445 SAMPLE 9189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NACOGDOCHES
FIELD	DOUGLASS	TRAWICK	TRAWICK
WELL NAME	CROSSMAN "A" NO. 1	THURMAN CRAWFORD NO. 1	TRAWICK GAS UNIT NO. 6
LOCATION	JEFFERSON WILSON SUR. A-59	NOT GIVEN	NOT GIVEN
OWNER	INEXCO OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/05/72	05/29/49	10/24/62
SAMPLED	02/--/73	11/29/49	11/24/63
FORMATION	CRET-PETTIT U	CRET-PETTIT L	JURA-
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8972	7498	11840
WELLHEAD PRESSURE,PSIG	3874	3984	5689
OPEN FLOW, MCFD	2500	42000	2502
COMPONENT, MOLE PCT			
METHANE	96.4	94.8	96.9
ETHANE	1.1	1.3	1.3
PROPANE	0.3	0.3	0.4
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.5	2.0	0.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.4	1.0	1.2
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1016	1012	1015
SPECIFIC GRAVITY	0.584	0.589	0.576

	INDEX 8446 SAMPLE 12539	INDEX 8447 SAMPLE 12543	INDEX 8448 SAMPLE 12544
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NACOGDOCHES
FIELD	TRAWICK	TRAWICK	TRAWICK
WELL NAME	TRAWICK GAS UNIT 6 NO. 2	TRAWICK GAS UNIT 6 NO. 3	TRAWICK GAS UNIT 1 NO. 1
LOCATION	LUIS SANCHEZ SUR.	LUIS SANCHEZ SUR.	ZIMRI BENNETT SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/13/62	01/23/66	05/29/49
SAMPLED	11/10/70	11/10/70	11/10/70
FORMATION	JURA-	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11820	8576	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4158	3580	NOT GIVEN
OPEN FLOW, MCFD	6000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.5	95.3	97.2
ETHANE	1.4	2.6	0.7
PROPANE	0.2	0.6	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.7	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.9	1.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1028	1028	1005
SPECIFIC GRAVITY	0.592	0.584	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8449 SAMPLE 12547	INDEX 8450 SAMPLE 4652	INDEX 8451 SAMPLE 4189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NAVARRO
FIELD	TRAWICK	WILDCAT	ANGUS
WELL NAME	TRAWICK GAS UNIT 1 NO. 1	SARAH B. ADAMS NO. 1	J. L. JACKSON NO. 2
LOCATION	ZIMRI BENNETT SUR.	HARRISON-GRAHAM SUR. A-222	JOHN MCNEAL SUR.
OWNER	HUMBLE OIL & REFINING CO.	ARKANSAS FUEL OIL CO.	TEX HARVEY OIL CO.
COMPLETED	09/29/69	11/04/48	08/25/46
SAMPLED	11/10/70	01/07/49	11/13/46
FORMATION	CRET-RODESSA	CRET-PETTIT L	CRET-U
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6400	7109	1375
WELLHEAD PRESSURE,PSIG	2340	3185	NOT GIVEN
OPEN FLOW, MCFD	7400	1300	25000
COMPONENT, MOLE PCT			
METHANE	97.1	80.2	88.0
ETHANE	0.7	16.5	11.3
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.7	2.2	0.1
OXYGEN	0.0	0.3	0.1
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.1	0.8	0.5
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1004	1108	1096
SPECIFIC GRAVITY	0.574	0.655	0.616

	INDEX 8452 SAMPLE 12431	INDEX 8453 SAMPLE 1091	INDEX 8454 SAMPLE 931
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NAVARRO	NAVARRO	NAVARRO
FIELD	NAN-SU-GAIL	OLD RICHLAND	POWELL
WELL NAME	STEWART HUNT NO. 1	ERNEST SWANK NO. 1	W. J. MCKIE NO. 3
LOCATION	20 MI. SE CORSICANA	WM. HUDSON SUR.	NOT GIVEN
OWNER	DELTA DRILLING CO.	SUN OIL CO.	GULF PRODUCTION CO.
COMPLETED	10/17/61	01/--/25	09/20/24
SAMPLED	10/--/70	07/11/25	-3060
FORMATION	CRET-SUB-CLARKSVILLE	CRET-WOODBINE	260
GEOLOGIC PROVINCE CODE	260	2979	3060
DEPTH, FEET	3356	770	125
WELLHEAD PRESSURE,PSIG	400	6976	600000
OPEN FLOW, MCFD	5400		
COMPONENT, MOLE PCT			
METHANE	77.8	84.7	83.8
ETHANE	8.0	12.6	14.1
PROPANE	4.8	---	---
N-BUTANE	2.3	---	---
ISOBUTANE	2.0	---	---
N-PENTANE	0.9	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.7	---	---
NITROGEN	0.6	1.7	1.6
OXYGEN	TRACE	0.5	0.0
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.5	0.4
HELIUM	0.02	0.05	0.00
HEATING VALUE*	1352	1084	1102
SPECIFIC GRAVITY	0.776	0.651	0.634

	INDEX 8455 SAMPLE 12430	INDEX 8456 SAMPLE 11672	INDEX 8457 SAMPLE 15153
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NAVARRO	NAVARRO	NEWTON
FIELD	REKA	ROUNDHOUSE	BLUE MARSH
WELL NAME	ANDERSON NO. 1	J. B. FORTSON NO. 1	B.E. QUINN NO. 3
LOCATION	J. W. ORR SUR. A-625	R. CARADINE SUR. A-139	GB&CNRR SUR. A-562
OWNER	DELTA DRILLING CO.	TEXACO INC.	NORTH CENTRAL OIL CORP.
COMPLETED	05/03/69	10/25/67	04/28/76
SAMPLED	NOT GIVEN	10/23/68	11/19/77
FORMATION	JURA-COTTON VALLEY	JURA-HAYNESVILLE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	10170	10342	3882
WELLHEAD PRESSURE,PSIG	2450	4300	500
OPEN FLOW, MCFD	6750	17000	108000
COMPONENT, MOLE PCT			
METHANE	81.7	88.8	98.5
ETHANE	8.4	5.5	0.2
PROPANE	3.9	1.7	0.1
N-BUTANE	1.0	0.6	0.0
ISOBUTANE	1.2	0.5	TRACE
N-PENTANE	0.6	0.2	TRACE
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.6	0.3	0.1
NITROGEN	0.9	0.7	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.3	0.3
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1221	1116	1009
SPECIFIC GRAVITY	0.714	0.647	0.565

	INDEX 8458 SAMPLE 5256	INDEX 8459 SAMPLE 13215	INDEX 8460 SAMPLE 13216
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	CALL	CAMPTOWN E	CAMPTOWN E
WELL NAME	J. W. KURTH, JR. NO. 1	C.A. DYER A NO. 1	DYER A NO. 1
LOCATION	NOT GIVEN	4MI. NW DEWEYVILLE	4MI NW DEWEYVILLE
OWNER	HOUSTON OIL CO. OF TEXAS	BIG 6 DRILLING CO.	BIG 6 DRILLING CO.
COMPLETED	03/06/52	08/15/71	08/15/71
SAMPLED	06/21/52	05/19/72	05/19/72
FORMATION	FRIO-YEGUA	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7462	7195	6699
WELLHEAD PRESSURE,PSIG	3262	2350	2500
OPEN FLOW, MCFD	21000	10650	6600
COMPONENT, MOLE PCT			
METHANE	88.7	93.3	92.6
ETHANE	5.5	4.1	3.4
PROPANE	3.1	1.0	1.6
N-BUTANE	0.9	0.2	0.5
ISOBUTANE	1.1	0.4	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.5	0.2	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.3	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1141	1092	1105
SPECIFIC GRAVITY	0.681	0.608	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8461 SAMPLE 12416	INDEX 8462 SAMPLE 13554	INDEX 8463 SAMPLE 13555
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	CYPRESS CREEK	DEVIL'S POCKET	DEVIL'S POCKET
WELL NAME	HANKAMER NO. 1	E.C. HANKAMER NO. 1	E.C. HANKAMER NO. 2
LOCATION	W. A. SMITH SUR. NO. 32	HT&B RR CO SUR NO 31, A-196	HT&B RR SUR. NO. 31
OWNER	BRIGHT & SCHIFF	BUTTES GAS + OIL CO.	BUTTES GAS & OIL CO.
COMPLETED	09/15/70	01/15/71	08/26/71
SAMPLED	07/--/70	03/01/73	03/01/73
FORMATION	EOCE-YEGUA Y-7	EOCE-YEGUA Y-3	EOCE-YEGUA Y-7
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8620	8050	8507
WELLHEAD PRESSURE,PSIG	2784	2790	2450
OPEN FLOW, MCFD	12250	11200	2800
COMPONENT, MOLE PCT			
METHANE	86.6	89.1	86.7
ETHANE	6.0	3.5	6.6
PROPANE	3.4	2.4	3.4
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	1.1	1.1	0.9
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.4	0.1
NITROGEN	0.5	0.9	0.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1183	1162	1168
SPECIFIC GRAVITY	0.673	0.666	0.665

	INDEX 8464 SAMPLE 4467	INDEX 8465 SAMPLE 13748	INDEX 8466 SAMPLE 12441
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	GIST	GIST	HARTBURG
WELL NAME	HARTBURG LUMBER CO. NO. 1	B.E. QUINN ET AL NO. 6	C. A. MORGAN NO. 2-B
LOCATION	SEC. 3; ABST 235; HT&B SUR.	A.W. WYMAN SUR., A-1026	A. SCHMIDT SUR. A-906
OWNER	STANDARD OIL CO. OF TEXAS	CHEVRON OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/13/47	03/17/72	09/25/69
SAMPLED	04/21/48	10/09/73	10/--/70
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5611	5242	7490
WELLHEAD PRESSURE,PSIG	2533	2035	2943
OPEN FLOW, MCFD	231	9100	12799
COMPONENT, MOLE PCT			
METHANE	96.6	98.4	91.6
ETHANE	2.4	0.6	3.8
PROPANE	---	0.1	2.2
N-BUTANE	---	0.0	0.7
ISOBUTANE	---	0.0	0.7
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.2
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.2
NITROGEN	0.3	0.6	0.0
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1022	1010	1132
SPECIFIC GRAVITY	0.573	0.562	0.632

	INDEX 8467 SAMPLE 14188	INDEX 8468 SAMPLE 14519	INDEX 8469 SAMPLE 12806
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NOLAN
FIELD	HARTBURG NW	HARTBURG NW	BLOODWORTH NE
WELL NAME	R.A. MOORE NO. 5	E. C. HANKAMER B NO. 9	B. N. E. C. U. NO. 3-1 UT
LOCATION	SEC. 1; HT&B RR SUR. A-264	SEC. 14; H&TBRR SUR. 912	NOT GIVEN
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	SUN OIL CO.
COMPLETED	06/20/73	03/15/74	07/27/67
SAMPLED	10/23/74	10/30/75	04/27/71
FORMATION	OLIG-STRUMA	OLIG-FRIO	PERM-BLOODWORTH
GEOLOGIC PROVINCE CODE	220	220	430
DEPTH, FEET	7245	7347	5788
WELLHEAD PRESSURE,PSIG	2676	1367	525
OPEN FLOW, MCFD	31920	2575	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	91.2	64.3
ETHANE	3.3	4.8	14.0
PROPANE	1.3	2.0	8.1
N-BUTANE	0.2	0.5	1.9
ISOBUTANE	0.3	0.4	1.0
N-PENTANE	0.1	0.1	0.7
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.3	0.4	9.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	TRACE	TRACE	0.12
HEATING VALUE*	1080	1114	1268
SPECIFIC GRAVITY	0.602	0.626	0.815

	INDEX 8470 SAMPLE 8161	INDEX 8471 SAMPLE 13342	INDEX 8472 SAMPLE 11564
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NOLAN	NOLAN	NUECES
FIELD	GROUP 4000	WATTS	AGUA DULCE
WELL NAME	ALDERMAN NO. 1	J. P. HUTCHINS EST. NO. 1	H. C. PYLE NO. 5
LOCATION	SEC. 65, H&TC SUR.	SEC. 188, BLK. 64, H&TC SUR.	NOT GIVEN
OWNER	LONE STAR GAS CO.	CLIFTON THOMAS	UNION PRODUCING CO.
COMPLETED	04/04/57	08/25/71	07/13/66
SAMPLED	08/12/61	07/28/72	07/09/68
FORMATION	PENN-CISCO	CRET-GARDNER	OLIG-FRIO-5900 FT. SAND
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	4034	5418	5903
WELLHEAD PRESSURE,PSIG	985	545	1134
OPEN FLOW, MCFD	4167	5648	650
COMPONENT, MOLE PCT			
METHANE	70.1	69.9	90.3
ETHANE	10.6	11.2	4.7
PROPANE	5.7	6.7	1.8
N-BUTANE	1.4	2.1	0.5
ISOBUTANE	0.7	1.0	0.5
N-PENTANE	0.2	0.6	0.3
ISOPENTANE	0.3	0.0	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.3	0.6
NITROGEN	10.2	7.7	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.25	0.18	0.01
HEATING VALUE*	1154	1232	1143
SPECIFIC GRAVITY	0.753	0.778	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8473 SAMPLE 11565		INDEX 8474 SAMPLE 11566		INDEX 8475 SAMPLE 11567	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	NUECES		NUECES		NUECES	
FIELD	AGUA DULCE		AGUA DULCE		AGUA DULCE	
WELL NAME	J. O. SPONBERG NO. 3		M. L. RIVERS NO. A-9		M. L. RIVERS NO. A-8	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	UNION PRODUCING CO.		UNION PRODUCING CO.		UNION PRODUCING CO.	
COMPLETED	12/22/66		06/04/66		05/25/66	
SAMPLED	07/09/68		07/09/68		07/09/68	
FORMATION	OLIG-FRIO-6490 FT. SAND		OLIG-FRIO-2500 FT. SAND		OLIG-FRIO-5300 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6497		2542		5348	
WELLHEAD PRESSURE,PSIG	1331		1036		926	
OPEN FLOW, MCFD	4700		30100		2200	
COMPONENT, MOLE PCT						
METHANE	90.0		90.7		94.2	
ETHANE	4.9		4.6		0.7	
PROPANE	2.A		1.5		0.1	
N-BUTANE	0.7		0.4		0.0	
ISOBUTANE	0.6		0.7		0.0	
N-PENTANE	0.2		0.4		0.0	
ISOPENTANE	0.3		0.0		0.0	
CYCLOPENTANE	0.1		0.5		0.0	
HEXANES PLUS	0.3		1.1		0.0	
NITROGEN	0.0		0.1		4.4	
OXYGEN	0.1		0.0		0.5	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.1	
HELIUM	0.01		TRACE		0.02	
HEATING VALUE*	1156		1169		969	
SPECIFIC GRAVITY	0.646		0.653		0.581	

	INDEX 8476 SAMPLE 11568		INDEX 8477 SAMPLE 11569		INDEX 8478 SAMPLE 4343	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	NUECES		NUECES		NUECES	
FIELD	AGUA DULCE		AGUA DULCE		AGUA DULCE W	
WELL NAME	M. C. PYLE NO. 5		M. L. RIVERS A-10		LORUTH SMITH RIVER NO. 1	
LOCATION	NOT GIVEN		NOT GIVEN		SEC.26, RICHARD KING FARM	
OWNER	UNION PRODUCING CO.		UNION PRODUCING CO.		PAN AMERICAN PETROLEUM CO.	
COMPLETED	07/14/66		06/06/66		04/18/47	
SAMPLED	07/09/68		07/09/68		08/14/47	
FORMATION	OLIG-EAST HARPER		OLIG-FRIO-2600 FT. SAND		TERT-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5579		2621		5528	
WELLHEAD PRESSURE,PSIG	1260		970		1815	
OPEN FLOW, MCFD	980		3980		7800	
COMPONENT, MOLE PCT						
METHANE	90.4		91.7		85.8	
ETHANE	4.5		4.3		11.5	
PROPANE	1.A		1.5		---	
N-BUTANE	0.5		0.4		---	
ISOBUTANE	0.4		0.5		---	
N-PENTANE	0.2		0.1		---	
ISOPENTANE	0.3		0.3		---	
CYCLOPENTANE	0.1		0.2		---	
HEXANES PLUS	0.2		0.4		---	
NITROGEN	1.3		0.6		2.4	
OXYGEN	0.2		0.0		0.1	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.0		0.0		0.2	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1109		1120		1075	
SPECIFIC GRAVITY	0.631		0.628		0.624	

	INDEX 8479 SAMPLE 15203		INDEX 8480 SAMPLE 15236		INDEX 8481 SAMPLE 5026	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	NUECES		NUECES		NUECES	
FIELD	ARNOLD-DAVID		ARNOLD-DAVID		BISHOP	
WELL NAME	CHAPMAN HEIRS "A" NO. 94-1		CHAPMAN HEIRS "A" NO. 114-1		ADOLPH TILL NO. 1	
LOCATION	CHAPMAN RANCH		CORPUS CHRISTI GRANT A-411		SEC. 161, PALO ALTO GRANT	
OWNER	HNG OIL CO.		HNG OIL CO.		EASTERN STATES PETROLEUM CO.	
COMPLETED	07/01/76		10/24/77		11/12/50	
SAMPLED	01/30/78		03/20/78		03/22/51	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-PFLUGER L	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	10000		10124		7240	
WELLHEAD PRESSURE,PSIG	4725		7000		3150	
OPEN FLOW, MCFD	7000		20500		1400	
COMPONENT, MOLE PCT						
METHANE	91.7		93.1		90.8	
ETHANE	4.4		3.9		4.6	
PROPANE	1.6		1.1		1.8	
N-BUTANE	0.4		0.3		0.4	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.2		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	0.3		0.3		1.1	
OXYGEN	0.0		0.0		0.4	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.A		0.5		0.2	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1100		1081		1094	
SPECIFIC GRAVITY	0.625		0.608		0.626	

	INDEX 8482 SAMPLE 14592		INDEX 8483 SAMPLE 13878		INDEX 8484 SAMPLE 14267	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	NUECES		NUECES		NUECES	
FIELD	BISHOP W		BLOCK 889		BRAYTON	
WELL NAME	W. BISHOP G.U. NO.1 NO.1		T.S.L.& 1338 NO. 8-1		DRISCOLL-SEVIER NO. 3	
LOCATION	PALO ALTO GRANT, A-116		MUSTANG ISLAND AREA		SEC. 303, PALO ALTO GRANT	
OWNER	HOUSTON OIL & MINERALS CORP.		GULF OIL CO.-U.S.		HNG OIL CO.	
COMPLETED	NOT GIVEN		10/05/72		07/16/73	
SAMPLED	02/24/75		01/29/74		02/17/75	
FORMATION	OLIG-VICKSBURG		OLIG-PARGINULINA		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9087		11452		7429	
WELLHEAD PRESSURE,PSIG	4400		35 0		2654	
OPEN FLOW, MCFD	2250		13300		8200	
COMPONENT, MOLE PCT						
METHANE	91.1		90.7		89.8	
ETHANE	4.5		4.7		5.3	
PROPANE	1.9		2.0		2.0	
N-BUTANE	0.A		0.8		0.4	
ISOBUTANE	0.5		1.0		0.6	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	0.1		TRACE		0.3	
HEXANES PLUS	0.2		0.1		0.6	
NITROGEN	TRACE		0.6		0.2	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.1		0.4	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1110		1123		1149	
SPECIFIC GRAVITY	0.630		0.632		0.648	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8485 SAMPLE 13142	INDEX 8486 SAMPLE 15987	INDEX 8487 SAMPLE 4948
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	CHAPMAN	CHAPMAN RANCH	CLARKWOOD S
WELL NAME	J. O. CHAPMAN NO. 43	CHAPMAN J NO. 1	JONAS WEIL NO. 1
LOCATION	SEC.46, LAURELES FARM TRACTS	SEC. 82, LAURELES FARM TRACT	J. H. GALLAGHER SUR. NO. 318
OWNER	TEXACO INC.	MORGAN ENTERPRISES, INC.	CHICAGO CORP.
COMPLETED	04/02/70	01/10/80	06/10/50
SAMPLED	02/03/72	06/20/80	08/04/50
FORMATION	OLIG-FRIO L-24	OLIG-FRIO	OLIG-FRIO L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3170	13668	9085
WELLHEAD PRESSURE,PSIG	600	9025	3912
OPEN FLOW, MCFD	2700	3200	20000
COMPONENT, MOLE PCT			
METHANE	97.4	84.8	92.8
ETHANE	0.2	7.1	4.1
PROPANE	TRACE	3.2	1.5
N-BUTANE	0.0	0.8	0.4
ISOBUTANE	0.0	1.1	0.2
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.5	0.2
NITROGEN	2.1	0.2	0.0
OXYGEN	0.2	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	1.6	0.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	990	1184	1091
SPECIFIC GRAVITY	0.565	0.690	0.613

	INDEX 8488 SAMPLE 13920	INDEX 8489 SAMPLE 13921	INDEX 8490 SAMPLE 4695
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	CORPUS CHANNEL NW	CORPUS CHANNEL NW	CORPUS CHRISTI W
WELL NAME	STATE TRACT 15 NO. 3U	STATE TRACT 15 NO. 3L	GUARANTY TITLE&TRUST NO. 2
LOCATION	CORPUS CHRISTI BAY	CORPUS CHRISTI BAY	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	TIDEWATER OIL CO.
COMPLETED	06/28/72	06/28/72	12/--/48
SAMPLED	01/31/74	01/31/74	04/12/49
FORMATION	OLIG-M-4	OLIG-M-10	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9903	11182	9873
WELLHEAD PRESSURE,PSIG	6115	7325	3700
OPEN FLOW, MCFD	40000	5400	2900
COMPONENT, MOLE PCT			
METHANE	88.9	82.2	89.5
ETHANE	5.2	6.9	5.6
PROPANE	2.4	4.5	2.2
N-BUTANE	0.7	1.2	0.6
ISOBUTANE	1.2	1.7	0.4
N-PENTANE	0.2	0.5	0.1
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	1.0	0.2
NITROGEN	0.8	0.9	0.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1147	1272	1126
SPECIFIC GRAVITY	0.649	0.731	0.642

	INDEX 8491 SAMPLE 15919	INDEX 8492 SAMPLE 10832	INDEX 8493 SAMPLE 10635
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	COTTON	ENCINAL CHANNEL	INDIAN POINT
WELL NAME	THOMAS L. BUSENLEHNER NO. 1	STATE TRACT 49 NO. 1-UT	STATE TRACT 786-NO. 8
LOCATION	G. FARIAS GRANT, A-592	STATE TRACT 49	NUECES BAY
OWNER	HUGHES & HUGHES	CITIES SERVICE OIL CO.	FOREST OIL CORP., ET AL.
COMPLETED	08/07/79	10/15/65	09/06/65
SAMPLED	03/13/80	01/03/67	06/30/66
FORMATION	OLIG-VICKSBURG	OLIG-N-1 & N-2	OLIG-WATSON
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8518	12200	11562
WELLHEAD PRESSURE,PSIG	3411	7742	7273
OPEN FLOW, MCFD	31000	750	12000
COMPONENT, MOLE PCT			
METHANE	91.4	89.5	88.7
ETHANE	4.9	5.1	5.9
PROPANE	1.8	1.8	2.1
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.1	0.8	0.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.3	1.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1118	1097	1136
SPECIFIC GRAVITY	0.628	0.637	0.650

	INDEX 8494 SAMPLE 10636	INDEX 8495 SAMPLE 12104	INDEX 8496 SAMPLE 4461
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	INDIAN POINT	INDIAN POINT	J. O. CHAPMAN RANCH
WELL NAME	STATE TRACT 786-NO.8	STATE TRACT 786 NO. 8	J. O. CHAPMAN NO. 15
LOCATION	NUECES BAY	NUECES BAY	NO. 46 SUR.
OWNER	FOREST OIL CORP., ET AL.	FOREST OIL CORP.	SEABOARD OIL CO.
COMPLETED	09/06/65	03/23/69	12/03/47
SAMPLED	06/30/66	11/06/69	03/13/48
FORMATION	OLIG-COMMONWEALTH	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11784	10210	4560
WELLHEAD PRESSURE,PSIG	7303	4500	2500
OPEN FLOW, MCFD	33000	1352	33000
COMPONENT, MOLE PCT			
METHANE	87.3	90.8	93.2
ETHANE	6.0	4.6	5.4
PROPANE	2.4	1.8	---
N-BUTANE	0.9	0.5	---
ISOBUTANE	0.7	0.5	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	0.0	0.5	0.7
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.4	0.6	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1172	1114	1041
SPECIFIC GRAVITY	0.680	0.633	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8497 SAMPLE 5110	INDEX 8498 SAMPLE 4873	INDEX 8499 SAMPLE 4354
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	KNOLLE FARMS	LONDON	LUBY
WELL NAME	KNOLLE NO. 1	C. N. COOKE NO. 4	W. M. SPESSARD NO. 16
LOCATION	ORANGE GROVE	BLK. 1, JONES SUBDIVISION	CANUTILLO COL. DITCH CO. SUR
OWNER	PANHANDLE PROD. & REF. CO.	BARNSDALL OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	06/01/51	01/09/50	07/07/47
SAMPLED	09/25/51	05/02/50	09/26/47
FORMATION	OLIG-KOEHLER	MIOC-CATAHOULA	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5160	4834	4316
WELLHEAD PRESSURE,PSIG	2200	NOT GIVEN	1450
OPEN FLOW, MCFD	120000	4400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	91.8	62.0
ETHANE	3.0	4.1	36.5
PROPANE	0.2	0.9	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	TRACE	0.9	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.7	---
NITROGEN	0.7	0.6	0.5
OXYGEN	0.1	0.1	0.8
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.5	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1043	1108	1262
SPECIFIC GRAVITY	0.588	0.629	0.744

	INDEX 8500 SAMPLE 4356	INDEX 8501 SAMPLE 4357	INDEX 8502 SAMPLE 4359
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	LUBY	LUBY	LUBY
WELL NAME	JOHN M. LUBY NO. 11	G. H. MCCANN NO. 3	JAMES P. LUBY NO. 16
LOCATION	MARY J. LUBY SUBDIVISION	CANUTILLO COL. DITCH CO. SUR	MARY J. LUBY SUBDIVISION
OWNER	SEABOARD OIL CO.	STANOLIND OIL & GAS CO.	SEABOARD OIL CO.
COMPLETED	07/13/38	10/26/37	03/21/38
SAMPLED	09/25/47	09/26/47	09/25/47
FORMATION	MIOC-CATAHOULA	MIOC-CATAHOULA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4365	4336	5062
WELLHEAD PRESSURE,PSIG	1200	1382	2075
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.3	70.2	73.0
ETHANE	62.3	27.6	25.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.7	1.6	1.1
OXYGEN	0.4	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1488	1206	1198
SPECIFIC GRAVITY	0.671	0.702	0.688

	INDEX 8503 SAMPLE 4360	INDEX 8504 SAMPLE 12508	INDEX 8505 SAMPLE 12094
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	LUBY	LUBY N	MINNIE ROCK
WELL NAME	JAMES P. LUBY NO. 15	J. M. LUBY NO. 24-J	GUARANTY TITLE NO. 1
LOCATION	MARY J. LUBY SUBDIVISION	C.C.D. CO. SUR. A-646	NOT GIVEN
OWNER	SEABOARD OIL CO.	TEXACO INC.	MERIDIAN EXPLORATION CO.
COMPLETED	04/24/47	02/13/70	01/11/69
SAMPLED	09/25/47	11/05/70	11/--/69
FORMATION	MIOC-CATAHOULA	OLIG-6900	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4359	6950	5962
WELLHEAD PRESSURE,PSIG	1300	2200	2200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	535
COMPONENT, MOLE PCT			
METHANE	53.9	92.1	90.0
ETHANE	45.5	4.1	4.7
PROPANE	---	1.6	2.0
N-BUTANE	---	0.3	0.6
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.1	0.5
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	0.2
HEXANES PLUS	---	0.3	0.6
NITROGEN	0.1	0.7	0.8
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1361	1102	1148
SPECIFIC GRAVITY	0.784	0.618	0.647

	INDEX 8506 SAMPLE 4449	INDEX 8507 SAMPLE 12042	INDEX 8508 SAMPLE 4879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	MINNIE ROCK N	MOBIL-DAVID	MUSTANG ISLAND
WELL NAME	BICKLER & MOSELEY NO. 1	A. C. MANLEY NO. 3	STATE NO. 430-1
LOCATION	SEC. 93	LAURELES FARM TRACT, SEC. 2	NOT GIVEN
OWNER	ATLANTIC REFINING CO.	SUN OIL CO.	ATLANTIC REFINING CO.
COMPLETED	10/09/48	05/25/69	08/29/49
SAMPLED	01/17/49	09/15/69	03/27/50
FORMATION	OLIG-FRIO	OLIG-MANLEY	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7956	10409	6818
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2395	NOT GIVEN
OPEN FLOW, MCFD	9500	13000	1500
COMPONENT, MOLE PCT			
METHANE	75.2	84.8	92.0
ETHANE	22.6	7.5	3.6
PROPANE	---	3.6	1.3
N-BUTANE	---	0.6	0.4
ISOBUTANE	---	1.2	0.5
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.3	0.2
NITROGEN	1.0	1.3	1.2
OXYGEN	0.5	0.1	0.3
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.7	0.0	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1167	1194	1079
SPECIFIC GRAVITY	0.680	0.677	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8509 SAMPLE 2539	INDEX 8510 SAMPLE 12565	INDEX 8511 SAMPLE 13570
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	NOT GIVEN	PETRONILLA	PETRONILLA
WELL NAME	KING NO. 2	ROBERT LA PRELLE NO. 7	JOHN LAPRELLE EST. A NO. 12
LOCATION	SEC. 23, RICHARD KING FARM	BLK. A. CCD CO. SUR. A-464	CCC COMPANY SUR. A-464
OWNER	STANOLIND OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.
COMPLETED	07/15/32	08/20/63	05/27/71
SAMPLED	08/21/32	11/06/70	03/26/73
FORMATION	OLIG-	OLIG-PETRONILLA	OLIG-PETRONILLA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4022	6665	5294
WELLHEAD PRESSURE,PSIG	1680	1020	1700
OPEN FLOW, MCFD	20000	10000	69000
COMPONENT, MOLE PCT			
METHANE	99.3	91.7	87.5
ETHANE	0.0	4.5	5.9
PROPANE	---	1.5	2.6
N-BUTANE	---	0.4	0.6
ISOBUTANE	---	0.5	0.9
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.0	0.9	1.5
OXYGEN	0.4	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1006	1093	1142
SPECIFIC GRAVITY	0.560	0.616	0.653

	INDEX 8512 SAMPLE 5175	INDEX 8513 SAMPLE 15571	INDEX 8514 SAMPLE 15572
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	RED FISH BAY	RED FISH BAY	RED FISH BAY
WELL NAME	STATE 411 NO. 1	STATE TRACT 445 NO. 1 LT	STATE TRACT 445 NO. 1 UT
LOCATION	STATE TRACT 411	TEXAS STATE TRACT 445	TEXAS STATE TRACT 445
OWNER	ATLANTIC REFINING CO.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	10/09/51	01/12/77	01/12/77
SAMPLED	01/15/52	02/26/79	02/26/79
FORMATION	OLIG-MARGINULINA	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7125	11540	9338
WELLHEAD PRESSURE,PSIG	3300	7500	6200
OPEN FLOW, MCFD	15000	3784	1669
COMPONENT, MOLE PCT			
METHANE	91.6	87.1	72.5
ETHANE	3.9	6.5	6.6
PROPANE	1.5	2.6	6.2
N-BUTANE	0.5	0.6	2.4
ISOBUTANE	0.3	1.0	5.9
N-PENTANE	0.2	0.2	1.1
ISOPENTANE	0.2	0.2	1.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.3	3.1
NITROGEN	1.1	1.1	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1089	1156	1566
SPECIFIC GRAVITY	0.622	0.661	0.906

	INDEX 8515 SAMPLE 16094	INDEX 8516 SAMPLE 16095	INDEX 8517 SAMPLE 13969
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	RED FISH BAY N	RED FISH BAY N	RIVERSIDE
WELL NAME	STATE TRACT 351 NO. 2	STATE TRACT 342 NO. 2	E.C. WILSON NO. 10
LOCATION	S.T. 451, CORPUS CHRISTI BAY	3 MI. E ENGLESIDE	SHARE 6 OF THE WRIGHT LANDS
OWNER	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.	SOUTH STATES OIL & GAS CO.
COMPLETED	02/99/79	11/99/79	03/21/74
SAMPLED	10/13/80	10/13/80	03/27/74
FORMATION	OLIG-FRIO	OLIG-FRIO D-1	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7058	9550	6749
WELLHEAD PRESSURE,PSIG	450	2300	2030
OPEN FLOW, MCFD	3289	4604	12700
COMPONENT, MOLE PCT			
METHANE	91.8	91.1	91.2
ETHANE	3.8	3.7	4.6
PROPANE	1.5	1.5	2.0
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.5	1.1	0.3
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1093	1126
SPECIFIC GRAVITY	0.628	0.628	0.632

	INDEX 8518 SAMPLE 13143	INDEX 8519 SAMPLE 15407	INDEX 8520 SAMPLE 15551
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	RIVERSIDE-AGUA DULCE	ROCKETT	SOUTH BAY
WELL NAME	E. C. WILSON NO. 5	L. R. STANOLEE NO. 1	STATE TRACT 286 NO. 1
LOCATION	PALO ALTO GRANT A-116	W. L. DEHERRERA GT. A-2661	CORPUS CHRISTI BAY
OWNER	TEXACO INC.	MCCORMICK OIL & GAS CORP.	TAMARACK PETROLEUM, INC.
COMPLETED	05/23/70	08/20/77	10/07/76
SAMPLED	02/02/72	10/10/78	12/29/78
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4660	6800	9865
WELLHEAD PRESSURE,PSIG	1700	2625	6357
OPEN FLOW, MCFD	15000	13000	22000
COMPONENT, MOLE PCT			
METHANE	94.8	81.6	91.5
ETHANE	3.6	4.9	4.3
PROPANE	0.5	3.4	1.7
N-BUTANE	0.1	1.5	0.5
ISOBUTANE	0.0	2.0	0.6
N-PENTANE	0.0	1.0	0.2
ISOPENTANE	0.2	2.1	0.2
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.1	1.8	0.2
NITROGEN	0.5	1.1	0.3
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1059	1357	1112
SPECIFIC GRAVITY	0.591	0.780	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8521 SAMPLE 5292	INDEX 8522 SAMPLE 11233	INDEX 8523 SAMPLE 11234
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	STEDMAN ISLAND	STEDMAN ISLAND	STEDMAN ISLAND
WELL NAME	ARANSAS DOCK & CHANNEL NO. 1	ST.OF TEX.53065 TR.309 NO.1	ST. OF TEX.53065 TR.309 NO.1
LOCATION	SUR. NO. 652	STEADMAN ISLAND BLK. 309	STEDMAN ISLAND BLK. 309
OWNER	ARANSAS DOCK & CHANNEL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	10/--/51	12/2A/65	12/28/65
SAMPLED	10/30/52	11/2A/67	11/28/67
FORMATION	OLIG-FRIO	OLIG-9500 FOOT SAND	OLIG-C-3 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7300	9406	8969
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5066	2958
OPEN FLOW, MCFD	NOT GIVEN	63000	56000
COMPONENT, MOLE PCT			
METHANE	90.4	90.3	91.2
ETHANE	4.1	4.6	4.5
PROPANE	1.8	1.7	1.5
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.9	0.8	0.6
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	1.0	0.6	0.5
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.6
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1124	1117	1101
SPECIFIC GRAVITY	0.640	0.636	0.626

	INDEX 8524 SAMPLE 15445	INDEX 8525 SAMPLE 5040	INDEX 8526 SAMPLE 4604
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	STRATTON	TURKEY CREEK N	WILDCAT
WELL NAME	G. P. WARDNER NO. 128	TURK NO. 1	NUECES BAY STATE NO. 1
LOCATION	SEC. 14,STRATTON SUBDIVSN	BLK. 745, STATE LEASE 30398	TEXAS STATE TRACT NO. 706
OWNER	CHAMPLIN PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	03/18/77	01/05/51	04/10/48
SAMPLED	10/19/78	05/01/51	10/20/48
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8260	9480	3315
WELLHEAD PRESSURE,PSIG	2145	6752	1500
OPEN FLOW, MCFD	42000	5400	10050
COMPONENT, MOLE PCT			
METHANE	62.6	90.8	98.5
ETHANE	8.2	4.5	1.1
PROPANE	8.4	1.7	---
N-BUTANE	4.1	0.5	---
ISOBUTANE	4.1	0.4	---
N-PENTANE	1.5	0.2	---
ISOPENTANE	3.5	0.1	---
CYCLOPENTANE	0.6	TRACE	---
HEXANES PLUS	2.1	0.2	---
NITROGEN	0.4	0.2	0.0
OXYGEN	TRACE	0.1	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	4.5	1.2	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1419	1098	1018
SPECIFIC GRAVITY	1.008	0.631	0.563

	INDEX 8527 SAMPLE 11263	INDEX 8528 SAMPLE 15291	INDEX 8529 SAMPLE 5975
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	OCHILTREE
FIELD	WILDCAT	WILDCAT	BARLOW
WELL NAME	VERONICA D. MCCULLOUGH NO. 1	CHAPMAN RANCH NO. 4	BARLOW NO. 1
LOCATION	SEC. 19 AGUA DULCE GRANT A120	SEC. 80, LAURELES FARM TR.	SEC. 929, BLK. 43, H&TC SUR.
OWNER	HAAS BROTHERS	CHAMPLIN PETROLEUM CO.	TEXAS CO.
COMPLETED	NOT GIVEN	09/02/76	07/19/55
SAMPLED	01/28/69	05/--/78	11/23/55
FORMATION	OLIG-FRIO	-LAGARTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	220	220	360
DEPTH, FEET	5452	3518	7962
WELLHEAD PRESSURE,PSIG	1488	1393	1415
OPEN FLOW, MCFD	3230	9000	1563
COMPONENT, MOLE PCT			
METHANE	91.9	93.6	89.9
ETHANE	4.2	0.5	5.3
PROPANE	1.5	0.1	2.2
N-BUTANE	0.4	0.0	0.7
ISOBUTANE	0.5	0.0	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.7	5.7	0.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.01	0.03	0.13
HEATING VALUE*	1102	960	1107
SPECIFIC GRAVITY	0.621	0.582	0.629

	INDEX 8530 SAMPLE 7392	INDEX 8531 SAMPLE 14318	INDEX 8532 SAMPLE 12209
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	BARLOW	BULER N	CAMBRIDGE
WELL NAME	C. H. KELLN NO. 2	GLORIA GRIFFIN NO. 1	WOLF CREEK NO. 1
LOCATION	SEC. 919, BLK. 43, H&TC SUR.	SEC. 67, BLK. 13, T&NO SUR.	SEC. 49A, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	COTTON PETROLEUM CORP.	EARL T. SMITH & ASSOC.
COMPLETED	11/04/59	NOT GIVEN	01/26/70
SAMPLED	02/02/60	04/16/75	02/24/70
FORMATION	MISS-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8498	8501	9032
WELLHEAD PRESSURE,PSIG	2200	2192	2900
OPEN FLOW, MCFD	2050	2420	14500
COMPONENT, MOLE PCT			
METHANE	96.2	85.5	81.2
ETHANE	1.9	6.4	8.1
PROPANE	0.4	3.7	5.1
N-BUTANE	0.2	0.9	1.3
ISOBUTANE	TRACE	0.4	0.8
N-PENTANE	0.0	0.1	0.5
ISOPENTANE	0.1	0.3	0.6
CYCLOPENTANE	0.0	TRACE	0.3
HEXANES PLUS	.2	0.1	0.6
NITROGEN	0.8	1.9	1.1
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.02	0.08	0.05
HEATING VALUE*	1036	1143	1269
SPECIFIC GRAVITY	0.580	0.665	0.726

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8533 SAMPLE 6356	INDEX 8534 SAMPLE 7008	INDEX 8535 SAMPLE 7009
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	DOUGLAS-NORTHRUP	DUDE WILSON	DUDE WILSON
WELL NAME	PERCY POWERS	LACKEY-WILSON	D. C. WILSON A NO. 1-750
LOCATION	SEC. 652, BLK. 43, H&TCSUR.	SEC. 748, BLK. 43	SEC. 750, BLK. 43
OWNER	BAKER & TAYLOR DRILLING CO.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	07/08/57	09/23/58	11/21/58
SAMPLED	08/09/57	03/13/59	03/13/59
FORMATION	PENN-DOUGLAS	PENN-CLEVELAND	PENN-NOVI LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5720	7001	7838
WELLHEAD PRESSURE,PSIG	1595	1605	2217
OPEN FLOW, MCFD	19000	5600	5000
COMPONENT, MOLE PCT			
METHANE	85.4	95.6	83.4
ETHANE	6.1	0.9	9.1
PROPANE	2.9	0.5	3.2
N-BUTANE	0.9	0.5	1.0
ISOBUTANE	0.5	0.1	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	2.8	1.1	1.1
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.19	0.10	0.10
HEATING VALUE*	1133	1053	1184
SPECIFIC GRAVITY	0.663	0.593	0.683

	INDEX 8536 SAMPLE 7456	INDEX 8537 SAMPLE 7457	INDEX 8538 SAMPLE 15952
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	DUDE WILSON	DUDE WILSON	DUDE WILSON
WELL NAME	J. KIRMSE LEASE NO. 1-839	JIM DODSON NO. 1-834	FIRST NATIONAL TRUST NO. 1
LOCATION	SEC. 839, BLK. 43, H&TC SUR.	SEC. 834, BLK. 43, H&TC SUR.	SEC. 571, BLK. 43, H&TC SUR.
OWNER	MAYFLO OIL CO.	MAYFLO OIL CO.	COURSON OIL & GAS INC.
COMPLETED	11/--/59	01/--/60	07/30/79
SAMPLED	03/26/60	03/26/60	04/28/80
FORMATION	PENN-CLEVELAND	PENN-MORROW B	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6643	7870	6955
WELLHEAD PRESSURE,PSIG	2000	1731	1604
OPEN FLOW, MCFD	560	1400	4000
COMPONENT, MOLE PCT			
METHANE	84.5	90.6	83.2
ETHANE	6.7	5.7	6.3
PROPANE	4.2	2.0	4.6
N-BUTANE	1.4	0.4	1.4
ISOBUTANE	0.6	0.2	0.5
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.3	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.6	0.4	2.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.10	0.10	0.15
HEATING VALUE*	1192	1101	1183
SPECIFIC GRAVITY	0.688	0.620	0.692

	INDEX 8539 SAMPLE 15605	INDEX 8540 SAMPLE 7277	INDEX 8541 SAMPLE 7402
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	OUTCHER	ELLIS RANCH	ELLIS RANCH
WELL NAME	LUTH "A" NO. 1	W. T. TREGELLAS NO. 1	D. E. KUNKEL NO.1
LOCATION	SEC. 401, BLK. 43, H&TC SUR.	SEC. 757, BLK. 43, H&TC SUR.	SEC. 739, BLK. 43, H&TC SUR.
OWNER	NATOMAS NORTH AMERICA, INC.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	NOT GIVEN	09/--/59	12/09/59
SAMPLED	04/26/79	11/09/59	02/02/60
FORMATION	PENN-CLEVELAND	MISS-	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7196
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2900	1560
OPEN FLOW, MCFD	NOT GIVEN	7500	1590
COMPONENT, MOLE PCT			
METHANE	70.4	86.5	85.8
ETHANE	8.3	5.2	6.3
PROPANE	11.0	3.1	3.5
N-BUTANE	4.0	0.6	1.2
ISOBUTANE	1.4	0.6	0.5
N-PENTANE	0.7	0.4	0.3
ISOPENTANE	0.8	0.9	0.3
CYCLOPENTANE	0.3	0.3	0.1
HEXANES PLUS	0.4	1.5	0.2
NITROGEN	2.1	0.3	1.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1425	1234	1170
SPECIFIC GRAVITY	0.845	0.701	0.673

	INDEX 8542 SAMPLE 7759	INDEX 8543 SAMPLE 12948	INDEX 8544 SAMPLE 16058
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	ELLIS RANCH	ELLIS RANCH	ELLIS RANCH
WELL NAME	DREW ELLIS NO. C-1	HERNDON NO. 1	ODC "A" NO. 2
LOCATION	SEC. 842, BLK. 43, H&TC SUR.	SEC. 489 BLK. 43 H&TC SUR.	SEC. 760, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	AMAREX INC.	DIAMOND SHAMROCK CORP.
COMPLETED	07/28/60	01/20/71	07/28/80
SAMPLED	11/02/60	07/26/71	09/04/80
FORMATION	PENN-CLEVELAND	PENN-MORROW	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6783	9055	7098
WELLHEAD PRESSURE,PSIG	1101	2200	1530
OPEN FLOW, MCFD	5700	60	6100
COMPONENT, MOLE PCT			
METHANE	77.9	84.2	88.4
ETHANE	9.0	7.9	6.1
PROPANE	4.7	3.9	2.5
N-BUTANE	1.9	0.4	0.8
ISOBUTANE	1.2	0.6	0.3
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	3.0	1.4	0.8
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.4
HELIUM	0.10	0.02	0.07
HEATING VALUE*	1236	1161	1138
SPECIFIC GRAVITY	0.733	0.679	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8545 SAMPLE 7192	INDEX 8546 SAMPLE 6557	INDEX 8547 SAMPLE 7290
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH	FARNSWORTH E	FARNSWORTH E
WELL NAME	E. HIGGINBOTHAM NO. 2	G. E. IRVIN NO. 1	RICHARDSON NO. 1
LOCATION	TRACT 5, XIMENES SUR.	SEC. 54, BLK. 13, T&NO SUR.	SEC. 45, BLK. 13, T&NO SUR.
OWNER	SINCLAIR OIL & GAS CO.	SUN OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/17/57	01/08/58	09/30/59
SAMPLED	08/28/59	04/15/58	11/23/59
FORMATION	PENN-JONES	PENN-MORROW L	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7970	8712	8826
WELLHEAD PRESSURE,PSIG	869	2631	2663
OPEN FLOW, MCFD	3953	15000	11969
COMPONENT, MOLE PCT			
METHANE	86.0	84.4	92.9
ETHANE	6.9	6.8	3.2
PROPANE	3.9	4.5	1.9
N-BUTANE	0.8	1.3	0.4
ISOBUTANE	0.4	0.7	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE		0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.7	0.6	0.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1162	1206	1105
SPECIFIC GRAVITY	0.663	0.692	0.620

	INDEX 8548 SAMPLE 7303	INDEX 8549 SAMPLE 10853	INDEX 8550 SAMPLE 11639
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH E	FARNSWORTH N	FARNSWORTH N
WELL NAME	WRIGHT	O. M. NEUFELD NO. 1	FEE 12-1
LOCATION	SEC. 44, BLK. 13, T&NO SUR.	SEC. 10, BLK. 4, GH&H SUR.	7.6 MILES NW FARNSWORTH
OWNER	HORIZON OIL & GAS CO.	TEXAS PACIFIC OIL CO.	OIL DEVELOPEMENT CO. OF TEX.
COMPLETED	06/04/59	06/28/66	02/03/68
SAMPLED	12/09/59	01/26/67	09/12/68
FORMATION	MISS-	MISS-	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7815	6238
WELLHEAD PRESSURE,PSIG	2622	2056	360
OPEN FLOW, MCFD	9900	15500	3000
COMPONENT, MOLE PCT			
METHANE	93.2	95.0	71.9
ETHANE	3.4	2.4	7.3
PROPANE	1.6	0.9	6.6
N-BUTANE	0.3	0.3	1.7
ISOBUTANE	0.2	0.1	0.6
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.4	0.5	9.9
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.1
HELIUM	0.07	0.06	0.25
HEATING VALUE*	1086	1056	1162
SPECIFIC GRAVITY	0.608	0.596	0.759

	INDEX 8551 SAMPLE 12167	INDEX 8552 SAMPLE 13598	INDEX 8553 SAMPLE 10192
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH N	FARNSWORTH SE	FRANTZ
WELL NAME	MASON NO. 1	BUZZARD NO. 1	R. H. HOLLAND NO. 1
LOCATION	G. C. WOODS SUR.	SEC. 76, BLK. 43, H&TC SUR.	H. C. DAY SUR. A-72
OWNER	TEXAS PACIFIC OIL CO., INC.	ALLEN & PARKER	GULF OIL CORP.
COMPLETED	10/06/69	06/07/72	12/21/64
SAMPLED	01/02/70	05/--/73	09/06/65
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7282	6952	7497
WELLHEAD PRESSURE,PSIG	1625	1628	1918
OPEN FLOW, MCFD	9600	5100	7500
COMPONENT, MOLE PCT			
METHANE	85.0	83.7	95.5
ETHANE	5.9	5.9	2.2
PROPANE	4.0	4.8	0.8
N-BUTANE	0.9	1.3	0.2
ISOBUTANE	0.5	0.6	0.1
N-PENTANE	0.3	0.2	TRACE
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.4	2.7	0.5
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.20	0.16	0.08
HEATING VALUE*	1153	1172	1052
SPECIFIC GRAVITY	0.669	0.687	0.587

	INDEX 8554 SAMPLE 15691	INDEX 8555 SAMPLE 15951	INDEX 8556 SAMPLE 16136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	HANNA LAKE	HANNA LAKE	HARRIS
WELL NAME	WAGGONER NO. 1	RAY NO. 1	HARRIS "G" NO.1
LOCATION	SEC. 43, BLK. 10, HT&B SUR.	SEC. 43, BLK. 10, H&TB SUR.	SEC. 1175, BLK. 43, H&TC SUR
OWNER	COURSON OIL & GAS INC.	COURSON OIL & GAS INC.	TEXAS OIL & GAS CORP.
COMPLETED	06/11/79	06/11/79	08/21/80
SAMPLED	07/12/73	04/18/80	12/04/80
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8092	8068	8319
WELLHEAD PRESSURE,PSIG	1348	1748	2000
OPEN FLOW, MCFD	5700	7670	7000
COMPONENT, MOLE PCT			
METHANE	80.8	81.1	79.2
ETHANE	7.5	7.2	9.8
PROPANE	6.7	5.7	5.9
N-BUTANE	1.9	1.7	1.5
ISOBUTANE	1.6	0.7	0.6
N-PENTANE	0.5	0.3	0.3
ISOPENTANE	0.6	0.4	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	1.8	1.8	1.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.6
HELIUM	0.14	0.14	0.10
HEATING VALUE*	1367	1237	1241
SPECIFIC GRAVITY	0.778	0.720	0.726

* DRY BASIS, BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8557 SAMPLE 10704	INDEX 8558 SAMPLE 10851	INDEX 8559 SAMPLE 7315
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	KIOWA CREEK	KIOWA CREEK	LIPS
WELL NAME	S.L. BRILLHART NO. 2	DUKE NO. 1	J. E. WILSON A-1
LOCATION	SEC. 823, BLK.43, H&TC SUR.	SEC. 850, BLK. 43, H&TC SUR.	SEC. 45, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	MONSANTO CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	03/25/66	02/15/66	10/20/59
SAMPLED	09/02/66	01/24/67	12/21/59
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8943	8900	9019
WELLHEAD PRESSURE,PSIG	2620	2662	2343
OPEN FLOW, MCFD	2850	9200	29000
COMPONENT, MOLE PCT			
METHANE	85.6	85.1	84.8
ETHANE	7.5	7.6	8.4
PROPANE	4.0	3.9	4.2
N-BUTANE	0.8	1.0	0.8
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	0.9	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.5
HELIUM	0.06	0.05	0.10
HEATING VALUE*	1161	1166	1166
SPECIFIC GRAVITY	0.670	0.676	0.666

	INDEX 8560 SAMPLE 15689	INDEX 8561 SAMPLE 15953	INDEX 8562 SAMPLE 7474
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	MARSH	MARSH	MCGARRAUGH
WELL NAME	PARNELL NO. 1	POWERS NO. 1	C. S. MCGARRAUGH B NO. 3-C
LOCATION	SEC. 474, BLK. 43, H&TC SUR.	SEC. 496, BLK. 43, H&TC SUR.	SEC. 139, BLK. 13, T&NO SUR.
OWNER	NATURAL GAS ANADARKO	NATURAL GAS ANADARKO, INC.	TEXACO INC.
COMPLETED	06/02/78	06/25/79	08/20/59
SAMPLED	07/12/79	04/28/80	03/29/60
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5826	5802	8096
WELLHEAD PRESSURE,PSIG	1545	1585	1982
OPEN FLOW, MCFD	1980	3250	5200
COMPONENT, MOLE PCT			
METHANE	76.5	77.6	85.7
ETHANE	4.9	6.1	6.8
PROPANE	4.6	4.8	2.7
N-BUTANE	1.4	1.4	0.9
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.5	0.3	0.3
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	10.4	8.1	2.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.28	0.26	0.10
HEATING VALUE*	1098	1127	1150
SPECIFIC GRAVITY	0.719	0.714	0.667

	INDEX 8563 SAMPLE 14194	INDEX 8564 SAMPLE 8064	INDEX 8565 SAMPLE 11665
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NORTHROP	NORTHRUP	NORTHRUP
WELL NAME	CHARLES H. ELLZEY NO.1	J. W. DANIEL NO. 1	AUTHUR MORGAN A NO. 1
LOCATION	SEC.583, BLK.43, H&TC SUR.	SEC. 585, BLK. 43, H&TC SUR.	SEC. 827, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	SINCLAIR OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	09/13/74	05/06/61	08/13/68
SAMPLED	10/29/74	07/10/61	10/10/68
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7092	7351	5808
WELLHEAD PRESSURE,PSIG	1717	1519	1499
OPEN FLOW, MCFD	6200	4200	9500
COMPONENT, MOLE PCT			
METHANE	86.6	85.4	83.6
ETHANE	6.2	6.7	6.9
PROPANE	3.5	3.7	3.8
N-BUTANE	0.9	1.1	1.0
ISOBUTANE	0.4	0.7	0.7
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.5	1.3	2.8
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.12	0.10	0.15
HEATING VALUE*	1145	1173	1163
SPECIFIC GRAVITY	0.659	0.674	0.682

	INDEX 8566 SAMPLE 15688	INDEX 8567 SAMPLE 12804	INDEX 8568 SAMPLE 6089
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NORTHRUP	NORTHRUP S	NOT GIVEN
WELL NAME	PARNELL NO. 1	CONNER NO. 1	IRENE CHUNN
LOCATION	SEC. 474, BLK. 43, H&TC SUR.	SEC. 385, BLK. 43, H&TC SUR.	SEC. 76, BLK. 4T, T&NO SUR.
OWNER	NATURAL GAS ANADARKO	SIDWELL OIL & GAS, INC.	HONOLULU OIL CORP.
COMPLETED	06/02/78	01/31/71	NOT GIVEN
SAMPLED	07/12/79	04/30/71	06/20/56
FORMATION	PENN-CLEVELAND	PENN-MORROW L	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7278	9932	8078
WELLHEAD PRESSURE,PSIG	1728	3150	1799
OPEN FLOW, MCFD	2100	3300	10400
COMPONENT, MOLE PCT			
METHANE	85.0	88.9	90.3
ETHANE	7.1	5.0	4.6
PROPANE	4.0	2.2	2.2
N-BUTANE	1.2	0.6	0.6
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	1.2	0.6	0.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.1	0.4
HELIUM	0.10	0.04	0.12
HEATING VALUE*	1181	1126	1100
SPECIFIC GRAVITY	0.676	0.649	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8569 SAMPLE 6091		INDEX 8570 SAMPLE 6474		INDEX 8571 SAMPLE 7529	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	OCHILTREE		OCHILTREE		OCHILTREE	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	GREERER		CONLEY A NO. 1		WOOTEN NO. 1	
LOCATION	SEC. 52, BLK. 4, T&NO SUR.		SEC. 18, BLK. J, TTRR SUR.		SEC. 837, BLK. 43, H&TC SUR.	
OWNER	HONOLULU OIL CORP.		J. M. HUBER CORP.		J. M. HUBER CORP.	
COMPLETED	NOT GIVEN		01/17/57		03/16/60	
SAMPLED	06/20/56		01/13/58		04/27/60	
FORMATION	NOT GIVEN		PENN-DES MOINES		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8341		6759		8883	
WELLHEAD PRESSURE,PSIG	2510		1620		2182	
OPEN FLOW, MCFD	NOT GIVEN		17000		6300	
COMPONENT, MOLE PCT						
METHANE	93.8		83.5		94.3	
ETHANE	2.8		6.0		3.1	
PROPANE	1.3		4.5		1.0	
N-BUTANE	0.3		1.4		0.2	
ISOBUTANE	0.2		0.6		0.2	
N-PENTANE	TRACE		0.2		TRACE	
ISOPENTANE	0.1		0.3		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	0.4		2.8		0.3	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.2		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.3		0.5	
HELIUM	0.06		0.20		0.10	
HEATING VALUE*	1074		1173		1060	
SPECIFIC GRAVITY	0.605		0.690		0.595	

	INDEX 8572 SAMPLE 8542		INDEX 8573 SAMPLE 8544		INDEX 8574 SAMPLE 13206	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	OCHILTREE		OCHILTREE		OCHILTREE	
FIELD	NOTLA		NOTLA		NOTLA	
WELL NAME	LELAND E. MEKEEL NO. D-1		MARY T. MORRISON NO. 1		HOOVER NO. 1	
LOCATION	SEC. 140, BLK. 43, H&TC SUR.		SEC. 125, BLK. 43, H&TC SUR.		SEC. 216, BLK. 43, H&TC SUR.	
OWNER	SHAMROCK OIL & GAS CORP.		SHAMROCK OIL & GAS CORP.		PHILCON DEVELOPMENT CO.	
COMPLETED	09/06/61		11/07/61		11/11/71	
SAMPLED	05/07/62		05/07/62		05/11/72	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10367		10503		10232	
WELLHEAD PRESSURE,PSIG	4795		5396		2930	
OPEN FLOW, MCFD	5400		15100		7600	
COMPONENT, MOLE PCT						
METHANE	93.9		97.3		96.4	
ETHANE	2.7		0.6		1.6	
PROPANE	1.0		0.1		0.3	
N-BUTANE	0.2		TRACE		TRACE	
ISOBUTANE	0.2		0.0		0.1	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.2		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.2		0.0		0.1	
NITROGEN	0.3		0.3		0.6	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		1.7		0.9	
HELIUM	0.04		0.03		0.04	
HEATING VALUE*	1062		999		1021	
SPECIFIC GRAVITY	0.604		0.576		0.582	

	INDEX 8575 SAMPLE 13165		INDEX 8576 SAMPLE 13223		INDEX 8577 SAMPLE 13306	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	OCHILTREE		OCHILTREE		OCHILTREE	
FIELD	PAN PETRO		PAN PETRO		PAN PETRO	
WELL NAME	JINES NO. 1		URBAN NO. 1		IRVIN NO. 1	
LOCATION	SEC. 100, BLK. 13, T&NO SUR.		SEC. 93, BLK. 13, T&NO SUR.		SEC. 109, BLK. 13, T&NO SUR.	
OWNER	COTTON PETROLEUM CO.		COTTON PETROLEUM CO.		WESTERN STATES PRODUCTION CO	
COMPLETED	01/07/71		12/15/71		08/11/71	
SAMPLED	03/02/72		05/31/72		07/--/72	
FORMATION	PENN-MORROW U		PENN-MORROW U		PENN-MORROW U	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8610		NOT GIVEN		8500	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1400		1600	
OPEN FLOW, MCFD	1300		10500		5300	
COMPONENT, MOLE PCT						
METHANE	92.7		88.0		92.0	
ETHANE	3.6		6.5		3.6	
PROPANE	1.3		2.7		1.5	
N-BUTANE	0.4		0.6		0.4	
ISOBUTANE	0.2		0.2		0.4	
N-PENTANE	0.1		0.1		0.3	
ISOPENTANE	0.1		0.2		0.0	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.1		0.1		0.5	
NITROGEN	0.9		0.9		0.6	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.5		0.6	
HELIUM	0.08		0.12		0.07	
HEATING VALUE*	1075		1123		1108	
SPECIFIC GRAVITY	0.611		0.642		0.630	

	INDEX 8578 SAMPLE 11976		INDEX 8579 SAMPLE 6111		INDEX 8580 SAMPLE 8516	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	OCHILTREE		OCHILTREE		OCHILTREE	
FIELD	PARCELL		PARNELL		PARNELL	
WELL NAME	FLOWERS NO. 1		PARNELL NO. 1		LIZZIE E. PINCKARD A-1	
LOCATION	SEC. 58, BLK. 43, H&TC SUR.		SEC. 494, BLK. 43, H&TC SUR.		SEC. 399, BLK. 43, H&TC SUR.	
OWNER	MONSANTO CO.		MAGNOLIA PETROLEUM CO.		SHAMROCK OIL & GAS CORP.	
COMPLETED	NOT GIVEN		12/12/55		11/08/61	
SAMPLED	07/22/69		07/20/56		04/23/62	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		8992		9264	
WELLHEAD PRESSURE,PSIG	4730		2767		3600	
OPEN FLOW, MCFD	7000		900		21000	
COMPONENT, MOLE PCT						
METHANE	94.0		85.9		96.8	
ETHANE	2.8		5.4		1.5	
PROPANE	1.1		5.1		0.3	
N-BUTANE	0.0		0.9		0.1	
ISOBUTANE	0.0		0.6		0.0	
N-PENTANE	0.0		0.4		TRACE	
ISOPENTANE	0.0		0.2		TRACE	
CYCLOPENTANE	0.0		0.1		0.0	
HEXANES PLUS	0.0		0.4		0.0	
NITROGEN	2.7		1.9		0.4	
OXYGEN	0.6		0.3		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.0		0.6		0.7	
HELIUM	0.03		0.06		0.05	
HEATING VALUE*	962		1148		1019	
SPECIFIC GRAVITY	0.598		0.672		0.574	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8581 SAMPLE 11580	INDEX 8582 SAMPLE 6992	INDEX 8583 SAMPLE 11433
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PARSELL	PERRYTON	PERRYTON
WELL NAME	EVA PARSELL B NO. 1	SCHNEIDNER NO. 1-LT	H. C. BRILLHART NO. 1
LOCATION	SEC. 58, BLK. 43, H&TC SUR.	SEC. 77, BLK. 11	SEC. 925, BLK. 43, H&TC SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	SINCLAIR OIL & GAS CO.	TEXAS PACIFIC OIL CO.
COMPLETED	NOT GIVEN	01/13/59	01/15/68
SAMPLED	07/16/68	03/06/59	04/05/68
FORMATION	PENN-MORROW	PENN-MORROW L	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11059	8001	9879
WELLHEAD PRESSURE,PSIG	2457	2094	2182
OPEN FLOW, MCFD	24100	16500	1470
COMPONENT, MOLE PCT			
METHANE	97.2	90.3	82.6
ETHANE	1.0	4.4	7.9
PROPANE	0.1	2.3	2.8
N-BUTANE	0.0	0.7	1.0
ISOBUTANE	0.0	0.3	0.2
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.1	1.0	4.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.4	0.2
HELIUM	0.04	0.10	0.17
HEATING VALUE*	1005	1105	1114
SPECIFIC GRAVITY	0.575	0.630	0.669

	INDEX 8584 SAMPLE 9679	INDEX 8585 SAMPLE 7528	INDEX 8586 SAMPLE 15069
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PERRYTON NW	PERRYTON W	PERRYTON W
WELL NAME	JOE STOREY NO. 1	BLACKBURN NO. 1	MCLARTY NO. 1
LOCATION	SEC. 2, BLK. 11W, AHRENBECK SUR	SEC. 1, BLK. 13, T&NO SUR.	SEC. 86, BLK. 11, H&TG SUR.
OWNER	AMBASSADOR OIL CORP.	J. M. HUBER CORP.	H&L OPERATING
COMPLETED	10/06/64	01/06/60	05/23/77
SAMPLED	12/28/64	04/27/60	08/04/77
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7877	8542	8189
WELLHEAD PRESSURE,PSIG	2100	2052	804
OPEN FLOW, MCFD	14700	6700	1850
COMPONENT, MOLE PCT			
METHANE	89.6	96.3	92.3
ETHANE	4.2	1.8	3.0
PROPANE	1.8	0.7	1.1
N-BUTANE	1.0	0.1	0.4
ISOBUTANE	0.4	0.1	0.1
N-PENTANE	0.5	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	0.8	0.1	0.2
NITROGEN	0.9	0.2	2.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.6
HELIUM	0.10	0.05	0.08
HEATING VALUE*	1154	1038	1065
SPECIFIC GRAVITY	0.657	0.582	0.618

	INDEX 8587 SAMPLE 7458	INDEX 8588 SAMPLE 8112	INDEX 8589 SAMPLE 15312
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PERRYTOWN S	PSHIGODA	SHARE
WELL NAME	HELEN ROGERS NO. 1-15	LINA B NO. 1	DAVOL NO. 1
LOCATION	SEC. 15, BLK. 12, H&GNRR SUR	SEC. 570, BLK. 43, H&TC SUR.	SEC. 59, BLK. 4, GH&H SUR.
OWNER	MAYFLO OIL CO.	PHILLIPS PETROLEUM CO.	KENNEDY & MITCHELL
COMPLETED	03-??-60	12/19/60	08/25/77
SAMPLED	03/26/60	08/09/61	06/26/78
FORMATION	PENN-MORROW L	MISS-	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8716	9166	7488
WELLHEAD PRESSURE,PSIG	2135	2862	800
OPEN FLOW, MCFD	6693	1335	450
COMPONENT, MOLE PCT			
METHANE	95.5	95.1	89.9
ETHANE	2.3	2.4	4.9
PROPANE	0.8	0.8	2.2
N-BUTANE	0.2	0.2	0.7
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.3	0.2	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.6
HELIUM	0.10	0.10	0.04
HEATING VALUE*	1053	1047	1130
SPECIFIC GRAVITY	0.591	0.591	0.643

	INDEX 8590 SAMPLE 6767	INDEX 8591 SAMPLE 5683	INDEX 8592 SAMPLE 5684
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	SPOONY	WILDCAT	WILDCAT
WELL NAME	HOGHLAND NO. 1	S. P. DANIEL A NO. 1	S. P. DANIEL A
LOCATION	WILLMUTH SUR.	SEC. 139, BLK. 4T, T&NO SUR.	SEC. 139, BLK. 4T, T&NO SUR.
OWNER	HORIZON OIL & GAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	10/01/57	07/01/54	07/01/54
SAMPLED	07/18/58	09/03/54	09/03/54
FORMATION	PENN-MORROW U	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6792	7342	7550
WELLHEAD PRESSURE,PSIG	1205	1796	2129
OPEN FLOW, MCFD	5800	4390	4750
COMPONENT, MOLE PCT			
METHANE	96.3	85.8	86.7
ETHANE	2.0	7.3	7.2
PROPANE	0.6	3.3	2.9
N-BUTANE	0.2	0.9	0.7
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.3	1.0	1.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.10	0.08	0.08
HEATING VALUE*	1047	1163	1149
SPECIFIC GRAVITY	0.582	0.664	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8593 SAMPLE 6255	INDEX 8594 SAMPLE 15295	INDEX 8595 SAMPLE 6331
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OLDHAM
FIELD	WILDCAT	WYATT	ALAMOSA
WELL NAME	THERESA WRIGHT NO. 1	LESLIE NO. 1	ALAMOSA RANCH NO. A-1
LOCATION	SEC. 13, BLK. 13, T&NO SUR.	SEC. 134, BLK. 43, H&TC SUR.	SEC. 41, BLK. M-3, CL SUR.
OWNER	SUN OIL CO.	HORIZON O & G CO. OF TEXAS	SHELL OIL CO.
COMPLETED	01/10/57	10/23/77	05/13/57
SAMPLED	02/19/57	05/30/78	05/28/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-VIRGIL L
GEOLOGIC PROVINCE CODE	360	360	435
DEPTH, FEET	8672	10072	6101
WELLHEAD PRESSURE,PSIG	2000	3523	NOT GIVEN
OPEN FLOW, MCFD	33000	2300	40
COMPONENT, MOLE PCT			
METHANE	87.3	22.9	30.2
ETHANE	6.0	16.6	12.3
PROPANE	3.2	27.0	21.9
N-BUTANE	1.1	14.6	7.3
ISOBUTANE	0.6	4.7	3.3
N-PENTANE	0.3	3.8	1.1
ISOPENTANE	0.2	5.3	1.7
CYCLOPENTANE	0.1	0.4	0.3
HEXANES PLUS	0.3	2.3	0.7
NITROGEN	0.8	0.0	20.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	0.05	TRACE	0.16
HEATING VALUE*	1173	2471	1619
SPECIFIC GRAVITY	0.667	1.477	1.159

	INDEX 8596 SAMPLE 6425	INDEX 8597 SAMPLE 15875	INDEX 8598 SAMPLE 5578
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	ALAMOSA E	LAMBERT	PANHANDLE W
WELL NAME	ALAMOSA RANCH B NO. 1	JAY TAYLOR NO. A-1	BIVINS NO. A-111
LOCATION	SEC. 13, BLK. M-3, CL SUR.	SEC. 82, BLK. GMS, LEE SUR.	SEC. 22, BLK. 2, G&M SUR.
OWNER	SHELL OIL CO.	BAKER & TAYLOR DRILLING CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/57	01/11/79	12/07/53
SAMPLED	10/04/57	11/09/79	12/11/53
FORMATION	PENN-MISSOURI L	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	7122	6776	3095
WELLHEAD PRESSURE,PSIG	140	120	355
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12800
COMPONENT, MOLE PCT			
METHANE	19.9	33.6	70.0
ETHANE	9.7	10.6	4.9
PROPANE	21.7	14.8	2.7
N-BUTANE	8.9	3.9	0.6
ISOBUTANE	4.7	1.7	0.2
N-PENTANE	1.9	1.0	0.2
ISOPENTANE	2.4	0.5	0.1
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.9	0.2	0.2
NITROGEN	27.9	32.8	18.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.3	0.2	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.2	0.5
HELIUM	0.30	0.42	1.31
HEATING VALUE*	1617	1181	924
SPECIFIC GRAVITY	1.257	1.013	0.708

	INDEX 8599 SAMPLE 8059	INDEX 8600 SAMPLE 9351	INDEX 8601 SAMPLE 9561
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CHANNING NO. 1	BIVINS D NO. 3	CHANNING NO. 1
LOCATION	SEC. 69, BLK. 2, G&M SUR.	SEC. 47, BLK. O-18, D&P SUR.	SEC. 69, BLK. 2, G&M SUR.
OWNER	BIVINS INTERESTS	AMARILLO OIL CO.	BIVINS INTERESTS
COMPLETED	07/07/61	04/06/64	NOT GIVEN
SAMPLED	07/12/61	05/20/64	09/18/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2716	2956	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	296	NOT GIVEN
OPEN FLOW, MCFD	8500	18000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.5	70.6	69.9
ETHANE	5.2	5.1	5.0
PROPANE	2.7	2.4	2.7
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.9	18.1	18.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.5
HELIUM	1.20	1.28	1.24
HEATING VALUE*	948	933	934
SPECIFIC GRAVITY	0.714	0.710	0.715

	INDEX 8602 SAMPLE 11893	INDEX 8603 SAMPLE 6978	INDEX 8604 SAMPLE 7226
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	PANHANDLE W	WILDCAT	WILDCAT
WELL NAME	BIVINS A-111	TAYLOR NO. 1-H	FULTON NO. 1A-84
LOCATION	SEC. 22, BLK. 2, G&M SUR.	SEC. 41	SEC. 84, FULTON RANCH SUBDIV
OWNER	COLORADO INTERSTATE GAS CO.	HUMBLE OIL & REFINING CO.	SHELL OIL CO.& ATLANTIC REF.
COMPLETED	12/07/53	NOT GIVEN	NOT GIVEN
SAMPLED	05/21/69	02/21/59	10/01/59
FORMATION	PERM-WICHITA-ALBANY	PERM-PEASE RIVER	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3195	1058	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	NOT GIVEN
OPEN FLOW, MCFD	12400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	0.3	40.2
ETHANE	5.0	0.1	5.1
PROPANE	2.7	0.1	2.1
N-BUTANE	0.9	0.0	0.9
ISOBUTANE	0.3	0.0	0.6
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.1	0.0	0.6
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	20.3	99.2	49.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.2	0.9
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.2
HELIUM	1.27	0.10	2.70
HEATING VALUE*	918	7	599
SPECIFIC GRAVITY	0.721	0.965	0.823

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8605 SAMPLE 7242	INDEX 8606 SAMPLE 12578	INDEX 8607 SAMPLE 12579
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FULTON RANCH 1A-84	BRAVO NO. 1	BRAVO NO. 1
LOCATION	SEC. 84,FULTON RANCH SUBDIV.	SEC. 41, BLK. 5 GC&F RR SUR.	SEC. 41, BLK.5, GC&FRR SUR.
OWNER	SHELL OIL CO.& ATLANTIC REF.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	01/03/71	01/03/71
SAMPLED	10/03/59	12/16/70	12/16/70
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3680	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.7	1.0	1.0
ETHANE	3.1	0.0	0.0
PROPANE	1.7	TRACE	TRACE
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	52.1	98.8	98.7
OXYGEN	0.0	0.0	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.0	0.0
HELIUM	2.30	0.08	0.07
HEATING VALUE*	378	10	10
SPECIFIC GRAVITY	0.820	0.963	0.963

	INDEX 8608 SAMPLE 12612	INDEX 8609 SAMPLE 11632	INDEX 8610 SAMPLE 13575
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	ORANGE	ORANGE
FIELD	WILDCAT	BRIDGE CITY	TEN MILE CREEK
WELL NAME	BRAVO NO. 1	H.J.&L. STARK B NCT NO. 1	HYER FEE GAS UNIT 1 NO. 1
LOCATION	SEC. 41, BLK.5, GC&FRR SUR.	J. H. FORSYTH SUR. A-79	SEC.4,ANN A.HYER SUR.,A-101
OWNER	SHELL OIL CO.	TEXACO INC.	ATLANTIC RICHFIELD CO.
COMPLETED	01/03/71	03/29/67	01/12/71
SAMPLED	12/21/70	08/19/68	04/09/73
FORMATION	NOT GIVEN	OLIG-VICKSBURG	OLIG-NODOSARIO
GEOLOGIC PROVINCE CODE	435	220	220
DEPTH, FEET	2200	10136	7084
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5980	2192
OPEN FLOW, MCFD	NOT GIVEN	44800	25600
COMPONENT, MOLE PCT			
METHANE	1.1	82.6	96.0
ETHANE	0.0	7.7	2.1
PROPANE	0.1	4.8	0.4
N-BUTANE	0.0	1.4	TRACE
ISOBUTANE	0.0	1.1	0.4
N-PENTANE	0.0	0.5	TRACE
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.0	0.2	0.1
HEXANES PLUS	0.0	0.6	0.1
NITROGEN	98.6	0.1	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.2
HELIUM	0.07	TRACE	0.01
HEATING VALUE*	14	1259	1051
SPECIFIC GRAVITY	0.963	0.718	0.587

	INDEX 8611 SAMPLE 4308	INDEX 8612 SAMPLE 8126	INDEX 8613 SAMPLE 8128
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ORANGE	PALO PINTO	PALO PINTO
FIELD	VIDOR DOME	BRAD	BRAD
WELL NAME	MILLER-VIDOR LAND CO. NO. 1	HART NO. 1	E. T. HART NO. 1
LOCATION	J.M. SWISHER SUR. NO. 1	SEC. 29, BLK. 3, TP SUR.	SEC. 43, BLK. 3, TP SUR.
OWNER	GULF OIL CORP.	LONE STAR GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/14/47	10/27/27	08/07/59
SAMPLED	05/22/47	08/08/61	08/09/61
FORMATION	OLIG-M	PENN-MARBLE FALLS	PENN-CONG. & BIG SALINE
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	6932	3890	3515
WELLHEAD PRESSURE,PSIG	2600	935	950
OPEN FLOW, MCFD	2200	1903	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	78.9	79.1
ETHANE	7.7	10.6	10.2
PROPANE	---	4.2	4.2
N-BUTANE	---	1.1	1.1
ISOBUTANE	---	0.7	0.7
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.4	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.1	3.2	3.6
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.01	0.10	0.10
HEATING VALUE*	1067	1195	1189
SPECIFIC GRAVITY	0.597	0.708	0.707

	INDEX 8614 SAMPLE 12736	INDEX 8615 SAMPLE 15071	INDEX 8616 SAMPLE 6615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	BRAD SW	CAMILLE	EMORY
WELL NAME	B. SLEMMONS NO. 1	BRANNON NO. 1	S. B. CANTEY ESTATE NO. 1
LOCATION	NOT GIVEN	LEWIS P. COOKE SUR. A-122	SEC. 19, BLK. 2, T&P RR SUR.
OWNER	CLINTON OIL CO.	W. L. PENNINGTON	TEXOMA PRODUCTION CO.
COMPLETED	02/09/59	05/20/76	05/15/58
SAMPLED	03/--/71	08/10/77	06/02/58
FORMATION	PENN-BIG SALINE	PENN-CONGLOMERATE	PENN-L
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3600	3670	3673
WELLHEAD PRESSURE,PSIG	380	650	1650
OPEN FLOW, MCFD	NOT GIVEN	80	7500
COMPONENT, MOLE PCT			
METHANE	76.9	83.5	80.8
ETHANE	10.1	8.9	10.1
PROPANE	5.1	2.5	3.6
N-BUTANE	1.2	0.4	0.7
ISOBUTANE	0.8	0.2	0.7
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.6	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	4.4	3.4	3.2
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.10	0.12	0.10
HEATING VALUE*	1213	1117	1158
SPECIFIC GRAVITY	0.731	0.663	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8617 SAMPLE 8129		INDEX 8618 SAMPLE 12646		INDEX 8619 SAMPLE 12647	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PALO PINTO		PALO PINTO		PALO PINTO	
FIELD	EMORY		EMORY		EMORY	
WELL NAME	CANTEY C-4		MONTY WATSON CONE NO. 1		STATE OF TEXAS UNIT NO. 1	
LOCATION	SEC. 24, BLK. 3, TP SUR.		NOT GIVEN		NOT GIVEN	
OWNER	TEXOMA PROD. CO.		RIDDLE OIL CO.		RIDDLE OIL CO.	
COMPLETED	10/24/59		12/21/69		05/05/70	
SAMPLED	08/08/61		01/22/71		01/22/71	
FORMATION	PENN-LAKE		PENN-BIG SALINE		PENN-BIG SALINE	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3798		3738		3683	
WELLHEAD PRESSURE,PSIG	1220		1600		1220	
OPEN FLOW, MCFD	4400		1920		1486	
COMPONENT, MOLE PCT						
METHANE	80.8		76.3		80.0	
ETHANE	10.1		9.4		9.3	
PROPANE	3.6		5.9		4.4	
N-BUTANE	0.8		0.7		0.9	
ISOBUTANE	0.6		0.6		0.8	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.3		0.2		0.4	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	3.0		7.0		3.4	
OXYGEN	TRACE		0.9		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.2	
HELIUM	0.10		0.13		0.10	
HEATING VALUE*	1171		1114		1188	
SPECIFIC GRAVITY	0.691		0.708		0.704	

	INDEX 8620 SAMPLE 12636		INDEX 8621 SAMPLE 7208		INDEX 8622 SAMPLE 10544	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PALO PINTO		PALO PINTO		PALO PINTO	
FIELD	GRAFORD		HINKSON RANCH		JOHNSTON GAP	
WELL NAME	R. H. GAULDIN NO. 3		R. D. HINKSON NO. 1		T. D. WILLIAMS NO. 1	
LOCATION	4 MI. NW GRAFORD		SEC. 71, BLK. 3, TP&RR SUR.		SEC. 58, BLK. 3, T&P RR SUR.	
OWNER	GEORGE MITCHELL & ASSOC.		TEXOMA PRODUCTION CO.		E. C. JOHNSTON CO., ET AL.	
COMPLETED	NOT GIVEN		07/11/58		09/12/65	
SAMPLED	01/20/71		09/04/59		05/02/66	
FORMATION	PENN-ATOKA		PENN-BIG SALINE		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4147		3310		3717	
WELLHEAD PRESSURE,PSIG	1405		1103		1600	
OPEN FLOW, MCFD	722		7400		12200	
COMPONENT, MOLE PCT						
METHANE	79.7		79.8		78.0	
ETHANE	9.0		10.0		10.3	
PROPANE	4.1		3.5		4.0	
N-BUTANE	0.9		0.9		1.1	
ISOBUTANE	0.6		0.5		0.6	
N-PENTANE	0.2		TRACE		0.4	
ISOPENTANE	0.3		0.6		0.3	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	4.4		4.1		4.4	
OXYGEN	0.3		TRACE		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.4		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	0.13		0.10		0.14	
HEATING VALUE*	1156		1163		1185	
SPECIFIC GRAVITY	0.698		0.693		0.715	

	INDEX 8623 SAMPLE 640		INDEX 8624 SAMPLE 643		INDEX 8625 SAMPLE 644	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PALO PINTO		PALO PINTO		PALO PINTO	
FIELD	MINERAL WELLS		MINERAL WELLS		MINERAL WELLS	
WELL NAME	WHARTON NO. 1		KEOWN NO. 9		OAKS NO. 6	
LOCATION	SEC. 49		NOT GIVEN		DENNIS MAHONEY SUR	
OWNER	D. A. UPHAM		LONE STAR GAS CO.		LONE STAR GAS CO.	
COMPLETED	10/--/20		04/28/20		10/17/19	
SAMPLED	08/24/21		08/23/21		09/07/21	
FORMATION	PENN-MARBLE FALLS		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3665		999		1055	
WELLHEAD PRESSURE,PSIG	410		171		200	
OPEN FLOW, MCFD	4150		1666		1666	
COMPONENT, MOLE PCT						
METHANE	71.7		78.5		79.9	
ETHANE	26.6		18.9		17.8	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	1.6		2.3		1.7	
OXYGEN	0.0		0.0		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	1.0		0.2		0.2	
HELIUM	0.08		0.06		0.18	
HEATING VALUE*	1333		1134		1128	
SPECIFIC GRAVITY	0.692		0.659		0.652	

	INDEX 8626 SAMPLE 12735		INDEX 8627 SAMPLE 14621		INDEX 8628 SAMPLE 15221	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PALO PINTO		PALO PINTO		PALO PINTO	
FIELD	MINERAL WELLS N		MINERAL WELLS, BIG SALINE		PALO PINTO REGULAR	
WELL NAME	#AGLEY MAY NO. 1		HART NO. 1-2		R. J. ANDERSON NO. 1	
LOCATION	NOT GIVEN		2 MI. SE ORAN		WILLIAM PRIEST SUR, A-363	
OWNER	CLINTON OIL CO.		DALLAS PRODUCTION, INC.		RHODES DRILLING CO.	
COMPLETED	03/0A/60		05/--/75		05/18/71	
SAMPLED	04/--/71		03/23/76		05/25/72	
FORMATION	PENN-BIG SALINE		PENN-CONGLOMERATE		-ANDY	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4700		4800		814	
WELLHEAD PRESSURE,PSIG	195		1670		420	
OPEN FLOW, MCFD	NOT GIVEN		3000		5170	
COMPONENT, MOLE PCT						
METHANE	77.1		79.7		88.9	
ETHANE	9.5		10.5		4.5	
PROPANE	5.8		4.6		1.2	
N-BUTANE	1.0		1.3		0.2	
ISOBUTANE	1.7		0.6		0.4	
N-PENTANE	0.4		0.2		TRACE	
ISOPENTANE	0.5		0.6		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.3		0.3		0.1	
NITROGEN	3.7		1.6		4.3	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.3		0.1	
HELIUM	0.11		0.09		0.17	
HEATING VALUE*	1176		1232		1042	
SPECIFIC GRAVITY	0.718		0.715		0.620	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8629 SAMPLE 13283	INDEX 8630 SAMPLE 14109	INDEX 8631 SAMPLE 14767
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	PALO PINTO REGULAR	PALO PINTO REGULAR	PENNINGTON
WELL NAME	R. J. ANDERSON NO. 1	LESLIE CRUM NO. 1	T&PRR NO. 1-29
LOCATION	WILLIAM PRIEST SUR. A-363	SEC. 2542, TE&L SUR.	SEC. 1, T&NO SUR. A-694
OWNER	RHODES DRILLING CO.	UPHAM OIL & GAS CO.	W. L. PENNINGTON
COMPLETED	05/18/71	06/04/73	05/09/75
SAMPLED	06/26/72	07/--/74	09/20/76
FORMATION	-ANDY	PENN-BEND CONGLOMERATE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	813	4602	3436
WELLHEAD PRESSURE,PSIG	420	1750	1650
OPEN FLOW, MCFD	5368	4200	3500
COMPONENT, MOLE PCT			
METHANE	88.1	75.1	77.8
ETHANE	4.5	10.8	11.2
PROPANE	1.3	5.8	5.0
N-BUTANE	0.2	1.9	1.3
ISOBUTANE	0.4	0.9	0.7
N-PENTANE	0.1	0.5	0.3
ISOPENTANE	0.1	1.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	4.8	2.7	2.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.17	0.12	0.10
HEATING VALUE*	1041	1301	1230
SPECIFIC GRAVITY	0.626	0.769	0.724

	INDEX 8632 SAMPLE 12934	INDEX 8633 SAMPLE 12635	INDEX 8634 SAMPLE 11590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	SANTO S	STRAWN N	STRAWN NW
WELL NAME	GEORGIA POTTER NO. 1	JOHN RITCHIE NO. 1	ELLEN G. STUART B NO. 1
LOCATION	L. A. BRADLEY SUR. A-1956	1 MI. S METCALF GAP	SEC 73, BLK B-4
OWNER	LONE STAR PRODUCING CO.	GEORGE MITCHELL & ASSOC.	TEXAS PACIFIC OIL CO.
COMPLETED	01/21/70	NOT GIVEN	03/16/59
SAMPLED	07/19/71	01/20/71	07/22/68
FORMATION	MISS-REEF	NOT GIVEN	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4191	3751	3859
WELLHEAD PRESSURE,PSIG	1410	660	985
OPEN FLOW, MCFD	12051	204	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	77.5	78.6
ETHANE	12.0	9.7	9.9
PROPANE	5.2	3.9	4.2
N-BUTANE	1.1	1.0	1.2
ISOBUTANE	0.7	0.6	0.3
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	5.2	4.4
OXYGEN	0.0	0.4	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.5	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.12	0.14	0.12
HEATING VALUE*	1229	1151	1169
SPECIFIC GRAVITY	0.723	0.706	0.704

	INDEX 8635 SAMPLE 11591	INDEX 8636 SAMPLE 12642	INDEX 8637 SAMPLE 7051
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	STUART	STUART	WILDCAT
WELL NAME	J. G. STUART NO. 167	ELLEN G. STUART B NO. 1	W. J. RHODES NO. 1
LOCATION	SEC. 74, BLK. 4, T&PRR SUR.	T&P R&R SUR.	SEC. 11, BLK. 1, T&P SUR.
OWNER	TEXAS PACIFIC OIL CO.	TEXAS PACIFIC OIL CO., INC.	SKELLY OIL CO.
COMPLETED	03/18/58	03/16/59	02/14/59
SAMPLED	07/26/68	01/27/71	04/29/59
FORMATION	PENN-MARBLE FALLS	PENN-BIG SALINE	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3513	3870	4254
WELLHEAD PRESSURE,PSIG	708	340	1766
OPEN FLOW, MCFD	NOT GIVEN	2000	5200
COMPONENT, MOLE PCT			
METHANE	77.7	78.7	76.6
ETHANE	10.3	10.2	10.9
PROPANE	5.1	4.6	3.5
N-BUTANE	1.3	1.1	4.2
ISOBUTANE	0.4	0.6	0.0
N-PENTANE	0.5	0.2	0.7
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.2	0.2	1.9
NITROGEN	3.8	3.6	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.10	0.11	0.10
HEATING VALUE*	1209	1196	1351
SPECIFIC GRAVITY	0.722	0.711	0.783

	INDEX 8638 SAMPLE 14754	INDEX 8639 SAMPLE 15078	INDEX 8640 SAMPLE 12126
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PANOLA	PANOLA
FIELD	WILDCAT	BECKVILLE W	BELLE BOWER
WELL NAME	WALTERS NO. 1	ELVE TOMKINS NO. 1	J. D. ADAMS ET AL. NO. 1
LOCATION	SEC. 2593, TE&L SUR., A664	W.C. BAINS SUR. A-64	JOSEPH HUMPHRIES SUR. A-281
OWNER	TIPPERARY OIL & GAS CORP.	MCCORMICK OIL & GAS CO.	MARSHALL EXPLORATION INC.
COMPLETED	04/26/75	12/23/75	02/25/68
SAMPLED	09/13/76	08/22/77	12/02/69
FORMATION	PENN-ATOKA	JURA-COTTON VALLEY	CRET-PALUXY
GEOLOGIC PROVINCE CODE	425	260	260
DEPTH, FEET	4944	9864	3211
WELLHEAD PRESSURE,PSIG	1320	4010	1348
OPEN FLOW, MCFD	5200	5200	18750
COMPONENT, MOLE PCT			
METHANE	81.0	90.8	86.0
ETHANE	9.5	5.0	2.7
PROPANE	4.4	1.4	0.9
N-BUTANE	0.8	0.4	0.2
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.9	0.3	9.2
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.3	0.2
HELIUM	0.14	0.01	0.04
HEATING VALUE*	1167	1092	970
SPECIFIC GRAVITY	0.686	0.628	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8641 SAMPLE 12127	INDEX 8642 SAMPLE 958	INDEX 8643 SAMPLE 2068
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BELLE BOWER	BETHANY	BETHANY
WELL NAME	REED ROYALTY TRUST NO. 1	J. O. FUNK NO. 1	H. L. BRUMBLE NO. 4
LOCATION	W. G. BOOKER SUR. A-87	COORDINATES 2-14	E. F. MITCHESON SUR.
OWNER	MARSHALL EXPLORATION INC.	MAGNOLIA PETROLEUM CO.	TEXAS CO.
COMPLETED	04/01/68	07/--/24	03/01/30
SAMPLED	12/02/69	12/30/24	06/19/30
FORMATION	CRET-PALUXY	CRET-WOODBINE	NOT GIVEN
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	3201	1923	2250
WELLHEAD PRESSURE,PSIG	1410	350	725
OPEN FLOW, MCFD	10500	65000	1120
COMPONENT, MOLE PCT			
METHANE	85.5	88.0	84.0
ETHANE	2.7	6.2	9.9
PROPANE	1.0	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	9.7	5.4	5.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.04	0.05	0.06
HEATING VALUE*	980	1003	1028
SPECIFIC GRAVITY	0.637	0.610	0.633

	INDEX 8644 SAMPLE 2476	INDEX 8645 SAMPLE 3940	INDEX 8646 SAMPLE 4276
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY	BETHANY
WELL NAME	W. C. AGURS NO. 5	G. W. BRUMBLE NO. 13	E. JOHNSON NO. 1
LOCATION	JACOB WOMAC SUR.	MITCHERSON SUR.	MESSER FAIN SUR.
OWNER	F. W. TINNIN	TEXAS CO.	ROBERTS & MURPHY ET AL.
COMPLETED	07/26/29	12/29/44	10/02/45
SAMPLED	NOT GIVEN	12/29/44	12/30/46
FORMATION	NOT GIVEN	CRET-PETTIT	CRET-
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	2990	5778	6093
WELLHEAD PRESSURE,PSIG	1200	1900	2186
OPEN FLOW, MCFD	26000	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	84.7	90.4	86.1
ETHANE	10.3	4.2	11.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.2	1.3	1.3
OXYGEN	0.3	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	1.0	1.1
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1043	1063	1069
SPECIFIC GRAVITY	0.628	0.607	0.628

	INDEX 8647 SAMPLE 4277	INDEX 8648 SAMPLE 10016	INDEX 8649 SAMPLE 12455
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY	BETHANY
WELL NAME	E. JOHNSON NO. 1	ROQUEMORE NO. A-3	T. C. ADAMS NO. 1-C
LOCATION	MESSER FAIN SUR.	BEN C. JORDAN SUR. A-348	EZEKIEL JONES SUR.
OWNER	ROBERTS & MURPHY	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	10/02/45	11/08/63	05/17/47
SAMPLED	12/30/46	07/28/65	10/15/70
FORMATION	CRET-	CRET-GLEN ROSE	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5706	3558	5660
WELLHEAD PRESSURE,PSIG	2304	803	460
OPEN FLOW, MCFD	8000	10050	910
COMPONENT, MOLE PCT			
METHANE	82.2	88.5	90.9
ETHANE	14.7	2.4	4.4
PROPANE	---	0.9	1.4
N-BUTANE	---	0.5	0.4
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.4	0.3
NITROGEN	1.9	6.3	1.2
OXYGEN	0.2	0.0	1.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.5
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1096	1023	1195
SPECIFIC GRAVITY	0.646	0.631	0.627

	INDEX 8650 SAMPLE 14153	INDEX 8651 SAMPLE 12456	INDEX 8652 SAMPLE 3775
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY NE	CARTHAGE
WELL NAME	B. CRENSHAW G U 1 NO. 1	T. C. ADAMS C NO. 9	C. BLACK ESTATE NO. 1
LOCATION	BEN C. JORDAN SUR. A-348	EZEKIEL JONES SUR.	BLACK SUR.
OWNER	TEXACO INC.	TENNECO OIL CO.	UNION PRODUCING CO.
COMPLETED	05/07/74	07/19/65	06/23/43
SAMPLED	09/23/74	10/15/70	04/05/44
FORMATION	JURA-COTTON VALLEY	CRET-PALUXY	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8096	2639	5695
WELLHEAD PRESSURE,PSIG	1150	165	2635
OPEN FLOW, MCFD	9180	586	22
COMPONENT, MOLE PCT			
METHANE	85.7	66.8	80.0
ETHANE	7.5	2.5	17.9
PROPANE	2.7	0.9	---
N-BUTANE	0.7	0.2	---
ISOBUTANE	0.7	0.4	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	0.5	8.4	1.1
OXYGEN	TRACE	0.2	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.3	0.2	0.6
HELIUM	0.01	0.06	0.00
HEATING VALUE*	1163	991	1171
SPECIFIC GRAVITY	0.673	0.632	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8653 SAMPLE 4150	INDEX 8654 SAMPLE 4151	INDEX 8655 SAMPLE 12445
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE
WELL NAME	LOUIS WERNER B NO. 1-C	LOUIS WERNER B NO. 1-T	A. R. CURTIS NO. 1
LOCATION	NOT GIVEN	3 MI. S OF DEADWOOD	CARTHAGE
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	09/26/45	09/26/45	03/12/52
SAMPLED	10/29/46	10/29/46	10/14/70
FORMATION	CRET-PETTIT	CRET-PETTIT	CRET-HILL SE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5760	6008	6247
WELLHEAD PRESSURE,PSIG	2706	2753	250
OPEN FLOW, MCFD	1118	17116	3950
COMPONENT, MOLE PCT			
METHANE	83.4	82.2	87.6
ETHANE	14.8	15.4	4.3
PROPANE	---	---	1.9
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.5
NITROGEN	0.9	1.2	3.0
OXYGEN	0.2	0.4	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	0.8	0.5
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1110	1109	1112
SPECIFIC GRAVITY	0.639	0.646	0.656

	INDEX 8656 SAMPLE 12446	INDEX 8657 SAMPLE 12447	INDEX 8658 SAMPLE 12448
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE
WELL NAME	WERNER SMITH NO. 2	PENN-SIKES	WERNER SHAW NO. 1
LOCATION	CARTHAGE	CARTHAGE	CARTHAGE
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	02/05/64	10/20/66	09/13/66
SAMPLED	10/14/70	10/14/70	10/14/70
FORMATION	CRET-BLOSSOM	CRET-PALUXY	CRET-GLEN ROSE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	2100	3218	6056
WELLHEAD PRESSURE,PSIG	400	300	500
OPEN FLOW, MCFD	1375	4650	1020
COMPONENT, MOLE PCT			
METHANE	89.8	86.2	85.7
ETHANE	2.3	2.1	2.9
PROPANE	0.7	0.7	1.0
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	6.0	9.9	8.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.07	0.06	0.06
HEATING VALUE*	1001	961	998
SPECIFIC GRAVITY	0.611	0.629	0.641

	INDEX 8659 SAMPLE 12476	INDEX 8660 SAMPLE 12497	INDEX 8661 SAMPLE 12500
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE
WELL NAME	CARTHAGE GAS UNIT NO. 35	BURNETT BROS. NO. 3-T	BURNETT BROS. NO. 6-C
LOCATION	HAMPTON-WEST SUR. A-697	THOMAS SUR. A-530	J. F. CHEAIRS SUR.
OWNER	CHAMPLIN PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/16/50	03/19/48	12/05/49
SAMPLED	10/21/70	10/26/70	10/26/70
FORMATION	CRET-HILL S	CRET-TRAVIS PEAK	CRET-HILL N
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5152	6051	4999
WELLHEAD PRESSURE,PSIG	317	2483	2521
OPEN FLOW, MCFD	100	7600	10500
COMPONENT, MOLE PCT			
METHANE	82.5	88.2	77.4
ETHANE	4.4	4.6	7.1
PROPANE	1.6	1.7	5.1
N-BUTANE	0.6	0.6	2.4
ISOBUTANE	0.5	0.7	2.4
N-PENTANE	0.3	0.5	1.4
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.2	0.5
HEXANES PLUS	0.4	0.7	2.0
NITROGEN	8.6	1.9	7.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	1.0	0.7	0.6
HELIUM	0.06	0.02	0.01
HEATING VALUE*	1031	1129	1396
SPECIFIC GRAVITY	0.672	0.659	0.810

	INDEX 8662 SAMPLE 12461	INDEX 8663 SAMPLE 15357	INDEX 8664 SAMPLE 2350
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE N	CARTHAGE SE	PANOLA
WELL NAME	MANGHAM NO. 2	KNIGHT-STRONG GU NO. 1	WERNER NO. 13
LOCATION	NOT GIVEN	GEORGE GILLASPY SUR. A-222	BEN C. JORDAN SUR.
OWNER	PENNZOIL PRODUCING CO.	DELTA DRILLING CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	08/31/66	03/--/77	04/28/31
SAMPLED	10/19/70	08/30/78	05/23/31
FORMATION	CRET-GLEN ROSE	JURA-COTTON VALLEY	CRET-
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	3817	9030	4718
WELLHEAD PRESSURE,PSIG	175	3500	1800
OPEN FLOW, MCFD	320	9800	26000
COMPONENT, MOLE PCT			
METHANE	87.9	85.1	89.2
ETHANE	3.5	7.7	6.9
PROPANE	1.8	2.6	---
N-BUTANE	0.5	0.7	---
ISOBUTANE	0.7	0.6	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.2	---
NITROGEN	4.4	0.8	3.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	1.7	0.8
HELIUM	0.05	0.01	0.04
HEATING VALUE*	1087	1143	1027
SPECIFIC GRAVITY	0.650	0.672	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8665 SAMPLE 4720	INDEX 8666 SAMPLE 12459	INDEX 8667 SAMPLE 14804
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PARKER
FIELD	WASKOM	WASKOM	ALEDO
WELL NAME	J. D. WOOLWORTH NO. 1-C	JERNIGAN A UNIT NO. 1	WINSTON NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	BERT FIELDS	PENNZOIL PRODUCING CO.	W. A. MONCRIEF
COMPLETED	11/29/48	05/14/56	NOT GIVEN
SAMPLED	04/30/49	10/19/70	10/05/76
FORMATION	CRET-RODESSA	JURA-COTTON VALLEY	PENN-BIG SALINE
GEOLOGIC PROVINCE CODE	260	260	420
DEPTH, FEET	4910	8474	5500
WELLHEAD PRESSURE,PSIG	2945	765	1985
OPEN FLOW, MCFD	10000	213	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	87.5	76.6
ETHANE	3.6	6.3	11.2
PROPANE	1.0	2.2	5.8
N-BUTANE	---	0.6	1.3
ISOBUTANE	0.0	0.4	1.0
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.4	0.7	0.2
NITROGEN	3.1	0.2	1.5
OXYGEN	0.1	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	1.2	1.5
HELIUM	0.03	0.01	0.06
HEATING VALUE*	1066	1144	1245
SPECIFIC GRAVITY	0.616	0.670	0.742

	INDEX 8668 SAMPLE 14805	INDEX 8669 SAMPLE 15546	INDEX 8670 SAMPLE 15324
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	ALEDO	COYLE	LAKE MINERAL WELLS
WELL NAME	WINSTON NO. 1	GROLEAU NO. 1	N. G. WATKINS NO. 1
LOCATION	J. W. JONES SUR., A-2010	G. W. COLE SUR. A-333	MEP&PRR SUR. 357, A-1543
OWNER	W. A. MONCRIEF	WORLD PRODUCERS, INC.	MITCHELL ENERGY CORP.
COMPLETED	03/08/75	12/02/77	10/11/77
SAMPLED	10/05/76	12/28/78	08/02/78
FORMATION	PENN-STRAWN	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	1286	4201	4178
WELLHEAD PRESSURE,PSIG	560	1727	1650
OPEN FLOW, MCFD	2400	4600	25750
COMPONENT, MOLE PCT			
METHANE	86.6	77.4	75.9
ETHANE	5.7	11.0	10.6
PROPANE	2.7	5.1	6.7
N-BUTANE	0.6	1.3	1.6
ISOBUTANE	0.4	0.9	1.0
N-PENTANE	0.1	0.5	0.3
ISOPENTANE	0.2	0.2	0.5
CYCLOPENTANE	0.0	0.2	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	3.1	2.4	2.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.04	0.11	0.11
HEATING VALUE*	1103	1256	1268
SPECIFIC GRAVITY	0.644	0.736	0.750

	INDEX 8671 SAMPLE 15344	INDEX 8672 SAMPLE 16065	INDEX 8673 SAMPLE 15881
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	LAKE MINERAL WELLS	LAKE MINERAL WELLS	LAKE WEATHERFORD
WELL NAME	T. W. CHRISTIAN NO. 1	J. C. PETPELMAN NO. 2-C	YEARY NO. 1
LOCATION	SEC. 358, T&P RR CO. SUR.	MEP SUR. NO. 341, A1493	W. FRANKLIN SUR. A-468
OWNER	TEXAS PACIFIC OIL CO., INC.	MITCHELL ENERGY CORP.	DALLAS PRODUCTION, INC.
COMPLETED	04/01/77	05/11/79	06/--/77
SAMPLED	08/12/78	09/12/80	01/16/80
FORMATION	PENN-CONGLOMERATE	PENN-ATOKA	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4086	4191	5600
WELLHEAD PRESSURE,PSIG	1471	1516	1500
OPEN FLOW, MCFD	3389	4300	2106
COMPONENT, MOLE PCT			
METHANE	78.8	77.7	83.3
ETHANE	11.0	11.7	9.6
PROPANE	7.1	4.9	2.8
N-BUTANE	1.7	1.3	0.5
ISOBUTANE	1.0	0.8	0.5
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.6	0.5	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.5	2.0	2.3
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1292	1248	1145
SPECIFIC GRAVITY	0.760	0.729	0.668

	INDEX 8674 SAMPLE 8368	INDEX 8675 SAMPLE 8369	INDEX 8676 SAMPLE 12653
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	MEEKER	MEEKER	MEEKER
WELL NAME	BOYD UNIT NO. 1-A	O. E. DOSS NO. 1-B	O. E. DOSS
LOCATION	SEC. 351, HT&W RR SUR.	SEC. 2551, TE&L SUR.	NOT GIVEN
OWNER	J. R. MEEKER	J. R. MEEKER	MEEKER & CO.
COMPLETED	12/01/60	08/09/59	NOT GIVEN
SAMPLED	01/17/62	01/17/62	01/30/71
FORMATION	PENN-CONGLOMERATE	PENN-CONGLOMERATE	PENN-ATOKA U
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	3360	3998	3850
WELLHEAD PRESSURE,PSIG	1212	1212	500
OPEN FLOW, MCFD	6200	4300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	81.4	79.2
ETHANE	6.8	7.9	8.1
PROPANE	3.8	3.9	5.5
N-BUTANE	1.3	1.1	1.4
ISOBUTANE	0.6	0.6	0.9
N-PENTANE	0.2	0.8	0.5
ISOPENTANE	0.3	TRACE	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	3.4	3.9	3.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.15	0.15	0.14
HEATING VALUE*	1145	1156	1221
SPECIFIC GRAVITY	0.682	0.691	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8677 SAMPLE 12654	INDEX 8678 SAMPLE 12655	INDEX 8679 SAMPLE 15362
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	MEEKER	MEEKER	MONCRIEF RANCH
WELL NAME	ED W. PEARSON	A. F. BOYD NO. B	MONCRIEF RANCH NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	T. H. WOOLEY SUR., A-1674
OWNER	MEEKER & CO.	MEEKER & CO.	W. A. MONCRIEF, JR.
COMPLETED	NOT GIVEN	NOT GIVEN	05/19/75
SAMPLED	01/20/70	01/30/71	08/24/76
FORMATION	PENN-BRYSON	PENN-ATOKA L	PENN-STRAWN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	2200	4000	2768
WELLHEAD PRESSURE,PSIG	500	600	880
OPEN FLOW, MCFD	600	200	8000
COMPONENT, MOLE PCT			
METHANE	86.1	81.5	89.2
ETHANE	4.1	8.0	3.8
PROPANE	2.1	4.8	1.6
N-BUTANE	0.6	1.0	0.4
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.0	3.3	3.8
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.25	0.15	0.31
HEATING VALUE*	1044	1175	1047
SPECIFIC GRAVITY	0.642	0.694	0.618

	INDEX 8680 SAMPLE 5104	INDEX 8681 SAMPLE 12255	INDEX 8682 SAMPLE 14305
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PECOS	PECOS
FIELD	NOT GIVEN	ABELL	APACHE CAMP
WELL NAME	SCOTT-WOOD WELL NO. 1	BOYS RANCH NO. 1	WHITE ESTATE A NO. 1
LOCATION	T&P SUR. NO. 121	SEC. 32, BLK. 9, H&GN SUR.	SEC. 97,BLK.194,G&R SUR.
OWNER	LVO CORP	TEXAS OIL & GAS CORP.	TEXAS OIL AND GAS CORP.
COMPLETED	NOT GIVEN	01/20/69	02/15/74
SAMPLED	11/29/51	05/05/70	03/13/75
FORMATION	NOT GIVEN	PERM-CLEAR FORK	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	420	430	430
DEPTH, FEET	NOT GIVEN	3455	9534
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1615	2740
OPEN FLOW, MCFD	NOT GIVEN	2750	3250
COMPONENT, MOLE PCT			
METHANE	81.8	90.2	83.8
ETHANE	7.6	5.0	5.3
PROPANE	4.2	2.1	3.4
N-BUTANE	1.2	0.6	1.2
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.3	0.1	0.5
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	3.9	1.5	3.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	1.2
HELIUM	0.13	0.01	0.08
HEATING VALUE*	1156	1098	1152
SPECIFIC GRAVITY	0.688	0.625	0.695

	INDEX 8683 SAMPLE 13268	INDEX 8684 SAMPLE 12095	INDEX 8685 SAMPLE 7701
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	APCO-WARNER	CARDINAL	CHENOT
WELL NAME	CROCKETT STATE NO. 2	CARDINAL UNIVERSITY NO. 1	SOUTHLAND ROYALTY ET AL NO.1
LOCATION	SEC. A-2, PINK PHELPS SUR.	SEC. 4, BLK.17,UNIV.LDS SUR.	SEC. 76, BLK. 11, H&GN SUR.
OWNER	SUN OIL CO.	ADOBE OIL CO.	STANDARD OIL CO. OF TEXAS
COMPLETED	01/09/71	11/25/67	11/29/58
SAMPLED	06/16/72	11/03/69	09/26/60
FORMATION	PERM-CLEARFORK	PERM-QUEEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3149	1543	4936
WELLHEAD PRESSURE,PSIG	1285	568	1925
OPEN FLOW, MCFD	1560	3480	14250
COMPONENT, MOLE PCT			
METHANE	83.9	88.6	96.1
ETHANE	7.8	3.3	1.7
PROPANE	2.7	1.7	0.4
N-BUTANE	0.6	0.5	0.1
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.6	1.0	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.1	1.1	0.0
CARBON DIOXIDE	0.4	3.2	0.4
HELIUM	0.05	TRACE	0.05
HEATING VALUE*	1115	1045	1030
SPECIFIC GRAVITY	0.664	0.646	0.581

	INDEX 8686 SAMPLE 11027	INDEX 8687 SAMPLE 14260	INDEX 8688 SAMPLE 14261
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	COYANOSA	COYANOSA	COYANOSA
WELL NAME	EFFIE POTTS SIBLEY NO. 2C	J. O. NEAL 42 NO. 4	J. O. NEAL 42 NO. 4
LOCATION	SEC. 19, BLK.C-2,PSL SUR.	SEC. 42, BLK. OW, TTRR SUR.	SEC. 42, BLK. OW, TTRR SUR.
OWNER	MOBIL OIL CORP.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	07/23/66	06/24/74	06/24/74
SAMPLED	07/10/67	02/13/75	02/13/75
FORMATION	MISS-	DEVO-	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10475	11996	11156
WELLHEAD PRESSURE,PSIG	4673	1613	5552
OPEN FLOW, MCFD	16300	4056	24000
COMPONENT, MOLE PCT			
METHANE	83.0	92.9	92.7
ETHANE	6.8	3.1	3.9
PROPANE	3.8	1.0	1.2
N-BUTANE	1.1	0.2	0.3
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.4	0.8	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.4	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1192	1050	1071
SPECIFIC GRAVITY	0.688	0.609	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8689 SAMPLE 14501		INDEX 8690 SAMPLE 8442		INDEX 8691 SAMPLE 14638	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	COYANOSA		COYANOSO		DAMERON	
WELL NAME	J. O. NEAL 42 NO. 5		EFFIE POTTS SIBLEY NO. 1		SIDLO NO. 2	
LOCATION	SEC. 42, BLK.OW, TTRRCO.SUR.		SEC. 48, BLK. OW		SEC. 18, BLK. 3, HATC SUR.	
OWNER	ATLANTIC RICHFIELD CO.		SOCONY MOBIL OIL CO., INC.		GEORGE H. MITCHELL	
COMPLETED	04/16/75		02/14/62		08/13/74	
SAMPLED	10/14/75		02/14/62		04/19/76	
FORMATION	PERM-BELL CANYON		PERM-WICHITA-ALBANY		PERM-CLEARFORK	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	5172		9657		3227	
WELLHEAD PRESSURE,PSIG	2350		4172		1000	
OPEN FLOW, MCFD	14975		240200		3800	
COMPONENT, MOLE PCT						
METHANE	89.8		83.9		89.5	
ETHANE	4.4		8.1		5.2	
PROPANE	1.5		3.0		1.7	
N-BUTANE	0.4		0.8		0.5	
ISOBUTANE	0.4		0.6		0.2	
N-PENTANE	0.1		0.3		0.1	
ISOPENTANE	0.1		0.6		0.1	
CYCLOPENTANE	0.1		0.3		TRACE	
HEXANES PLUS	0.1		0.7		0.1	
NITROGEN	2.9		1.5		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		1.0	
CARBON DIOXIDE	0.1		0.2		0.7	
HELIUM	0.03		0.02		0.01	
HEATING VALUE*	1072		1206		1088	
SPECIFIC GRAVITY	0.624		0.694		0.630	

	INDEX 8692 SAMPLE 12423		INDEX 8693 SAMPLE 15320		INDEX 8694 SAMPLE 14505	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	EL CINCO		ELSINORE		GMW	
WELL NAME	RUTH MARY PRICE NO. 1		MONTGOMERY-FULK NO. 11		ALLISON RANCH 3-170 NO. 1	
LOCATION	SEC. 9, BLK. 12, H+GN SUR.		SEC. 9, BLK. 170, TTRR CO.		SEC. 3, BLK. 170, TTRRCO.SUR	
OWNER	J. M. HUBER CORP.		TEXAS PACIFIC OIL CO., INC.		CONTINENTAL OIL CO.	
COMPLETED	09/05/69		01/15/78		08/05/74	
SAMPLED	09/28/78		07/13/78		10/-/75	
FORMATION	PERM-LEONARD L		SILU-FUSSELMAN		SILU-MONTOYA	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	6678		13365		12999	
WELLHEAD PRESSURE,PSIG	1462		1868		NOT GIVEN	
OPEN FLOW, MCFD	4450		89536		21000	
COMPONENT, MOLE PCT						
METHANE	80.2		51.9		56.1	
ETHANE	9.4		0.2		0.2	
PROPANE	4.9		0.1		0.1	
N-BUTANE	1.3		TRACE		0.0	
ISOBUTANE	0.7		TRACE		0.0	
N-PENTANE	0.3		TRACE		0.0	
ISOPENTANE	0.4		TRACE		0.0	
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.2		0.1		0.0	
NITROGEN	2.3		0.8		1.1	
OXYGEN	0.1		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		46.6		42.5	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1220		541		574	
SPECIFIC GRAVITY	0.710		1.017		0.975	

	INDEX 8695 SAMPLE 11789		INDEX 8696 SAMPLE 12142		INDEX 8697 SAMPLE 14128	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	GOMEZ		GOMEZ		GOMEZ	
WELL NAME	W. H. PALMER NO. 1		ABELL EAST UNIT NO. 1		DIXEL RESOURCES NO. 2	
LOCATION	SEC. 22, BLK. OW, TCRR SUR.		JEFFERSON RICHARDS SUR. 222		SEC 1, BLK203, SA HOPSON SUR	
OWNER	FOREST OIL CORP.		GULF OIL CORP.		LADD PETROLEUM CORP.	
COMPLETED	11/21/68		01/05/68		04/27/73	
SAMPLED	03/07/69		12/15/69		08/12/74	
FORMATION	ORDO-ELLENBURGER		ORDO-ELLENBURGER		PENN-ATOKA (FUSSELMAN)	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	21539		21018		16250	
WELLHEAD PRESSURE,PSIG	7400		7209		11792	
OPEN FLOW, MCFD	40000		130000		14096	
COMPONENT, MOLE PCT						
METHANE	95.5		96.5		96.2	
ETHANE	0.1		0.1		0.1	
PROPANE	0.1		TRACE		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	3.3		0.4		0.4	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		2.9		3.3	
HELIUM	0.01		0.02		0.02	
HEATING VALUE*	972		980		976	
SPECIFIC GRAVITY	0.579		0.584		0.589	

	INDEX 8698 SAMPLE 15522		INDEX 8699 SAMPLE 12742		INDEX 8700 SAMPLE 13296	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	GOMEZ		GREY RANCH		GREY RANCH W	
WELL NAME	RAYMAL EAGLE NO. 1		BLACKSTONE-SLAUGHTER G NO. 1		BLACKSTONE-SLAUGHTER NO. 1	
LOCATION	SEC. 3, BLK. 142, T&STL SUR.		SEC. 16, BLK.129, T&STL SUR.		SEC. 1, BLK. 131, T&STL SUR.	
OWNER	GIFFORD-MITCHELL-WISENBAKER		SUPERIOR OIL CO.		CHEVRON OIL CO.	
COMPLETED	07/31/78		10/31/67		09/20/71	
SAMPLED	11/22/78		03/27/71		07/11/72	
FORMATION	DEVO-		ORDO-ELLENBURGER		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	18900		14567		18348	
WELLHEAD PRESSURE,PSIG	7039		2360		4000	
OPEN FLOW, MCFD	15100		24164		184000	
COMPONENT, MOLE PCT						
METHANE	95.1		95.6		91.6	
ETHANE	0.3		1.1		TRACE	
PROPANE	TRACE		0.2		TRACE	
N-BUTANE	TRACE		TRACE		0.0	
ISOBUTANE	0.0		TRACE		0.0	
N-PENTANE	TRACE		TRACE		0.0	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.1		0.0	
NITROGEN	0.7		0.6		0.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.6		2.0		7.7	
HELIUM	0.01		0.02		0.03	
HEATING VALUE*	974		998		923	
SPECIFIC GRAVITY	0.595		0.590		1.020	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8701 SAMPLE 12780	INDEX 8702 SAMPLE 12781	INDEX 8703 SAMPLE 12782
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HERSHEY	HERSHEY	HERSHEY
WELL NAME	ELIZABETH LOUIS STATE	AUDIE LUCAS	J. C. KELLY
LOCATION	SEC. 18, BLK. 50, T&P SUR.	SEC. 8, BLK. 50, T&P SUR.	SEC. 8, BLK. 51, T&P SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	03/05/62	06/16/61	07/08/60
SAMPLED	04/21/71	04/21/71	04/21/71
FORMATION	SILU-FUSSELMAN&DEVO-MONTOYA	SILU-FUSSELMAN&DEVO-MONTOYA	SILU-FUSSELMAN&DEVO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15936	16030	15831
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	94.8	94.0
ETHANE	0.4	0.4	0.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.6	1.6
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	4.2	3.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	974	967	958
SPECIFIC GRAVITY	0.597	0.600	0.600

	INDEX 8704 SAMPLE 15328	INDEX 8705 SAMPLE 14175	INDEX 8706 SAMPLE 14266
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HERSHEY W	HOKIT	HOKIT E
WELL NAME	HERSHENSON NO. 1	HELLON HOKIT NO. 1	HARRAL NO. 23 NO. 1
LOCATION	SEC. 5, BLK. 51, T&PRR CO.	SEC. 17, BLK. 127, T&STL SUR	SEC. 23, BLK. 127, T&STL SUR
OWNER	NORTHERN NATURAL GAS CO.	ALLIED CHEMICAL CORP.	UNION TEXAS PETROLEUM
COMPLETED	09/25/77	12/06/73	06/04/74
SAMPLED	08/01/78	10/04/74	02/--/75
FORMATION	DEVO-MONTOYA	NOT GIVEN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15445	11038	9777
WELLHEAD PRESSURE,PSIG	4926	3200	3250
OPEN FLOW, MCFD	20500	65000	23000
COMPONENT, MOLE PCT			
METHANE	94.9	77.1	49.8
ETHANE	0.4	3.2	13.7
PROPANE	0.0	1.4	14.3
N-BUTANE	0.1	0.5	9.3
ISOBUTANE	0.0	0.3	3.5
N-PENTANE	0.2	0.2	3.3
ISOPENTANE	TRACE	0.2	3.0
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	0.1	0.2	1.6
NITROGEN	0.6	2.1	0.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	14.7	0.8
HELIUM	0.01	0.08	TRACE
HEATING VALUE*	986	929	1919
SPECIFIC GRAVITY	0.603	0.762	1.137

	INDEX 8707 SAMPLE 10366	INDEX 8708 SAMPLE 10367	INDEX 8709 SAMPLE 13272
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HOKIT NW	HOKIT NW	HUBER
WELL NAME	MARY MCKENZIE NO. 1-UT	MARY MCKENZIE NO. 1-LT	V. G. NEVILLE-STATE NO. 1
LOCATION	SEC.2,BLK.180-1/2,TCRR SUR.	SEC.2,BLK.180-1/2,TC RR SUR.	SEC. 70, BLK. 194, GC+SF RR
OWNER	REDCO CORP.	REDCO CORP.	GULF OIL CO. - U.S.
COMPLETED	01/12/64	10/18/63	07/21/71
SAMPLED	01/18/66	01/18/66	06/20/72
FORMATION	PERM-WICHITA-ALBANY	PENN-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6572	6936	5070
WELLHEAD PRESSURE,PSIG	2163	2150	2049
OPEN FLOW, MCFD	3000	19915	28000
COMPONENT, MOLE PCT			
METHANE	84.6	86.0	71.0
ETHANE	7.5	7.2	8.7
PROPANE	2.8	2.6	4.8
N-BUTANE	1.0	0.9	1.5
ISOBUTANE	0.2	0.4	0.7
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.5	0.2
NITROGEN	1.4	0.8	10.7
OXYGEN	0.0	0.0	1.7
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.1
HELIUM	0.04	0.05	0.07
HEATING VALUE*	1173	1167	1114
SPECIFIC GRAVITY	0.685	0.674	0.754

	INDEX 8710 SAMPLE 12820	INDEX 8711 SAMPLE 5640	INDEX 8712 SAMPLE 13006
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	LEHN-APCO N	LEON VALLEY	LEON VALLEY
WELL NAME	SHEARER NO. 1	STATE D.U. NO. 1	STATE NO. 2-DV
LOCATION	SEC. 37, BLK. 10, H&GN SUR.	SEC. 7, BLK. 28	SEC.7, BLK.28, UNIV.LD.SUR.
OWNER	LARIO OIL & GAS CO.	GULF OIL CORP.	COMANCHE GAS CO.
COMPLETED	09/23/70	02/11/54	04/06/55
SAMPLED	05/13/71	06/18/54	08/30/71
FORMATION	ORDO-MONTOYA	PERM-YATES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4963	2552	2690
WELLHEAD PRESSURE,PSIG	1970	NOT GIVEN	150
OPEN FLOW, MCFD	9500	6500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	96.4	94.1
ETHANE	9.0	0.5	2.1
PROPANE	3.8	0.0	0.9
N-BUTANE	1.1	0.1	0.4
ISOBUTANE	0.7	0.0	0.2
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.2	0.0	TRACE
HEXANES PLUS	0.5	TRACE	0.1
NITROGEN	3.4	2.2	1.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.3
CARBON DIOXIDE	0.5	0.6	0.4
HELIUM	0.04	0.03	0.02
HEATING VALUE*	1190	990	1050
SPECIFIC GRAVITY	0.712	0.572	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8713 SAMPLE 10726	INDEX 8714 SAMPLE 7885	INDEX 8715 SAMPLE 12115
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	LINTERNA	NOT GIVEN	NOT GIVEN
WELL NAME	CHARLES J. WALKER NO. 1	MCDONALD NO. 1	NEAL ESTATE NO. 1
LOCATION	SEC. 19, BLK. 49, T&P SUR.	SEC. 124, BLK. 11, H&GN SUR.	SEC. 14, BLK. 142, T&STL SUR
OWNER	FOREST OIL CORP.	CLARK OIL CO.	WM. MOSS PROPERTIES, INC.
COMPLETED	03/09/66	02/--/61	12/11/68
SAMPLED	09/20/66	05/01/61	11/15/69
FORMATION	ORDO-ELLENBURGER	PERM-WOLFCAMP L	PERM-CAPITAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	21526	5076	3060
WELLHEAD PRESSURE,PSIG	3984	2100	1200
OPEN FLOW, MCFD	30000	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	87.4	88.8
ETHANE	0.1	5.4	3.5
PROPANE	TRACE	2.1	1.1
N-BUTANE	0.0	0.7	0.2
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	9.7	3.2	5.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.4
HELIUM	0.03	0.10	0.04
HEATING VALUE*	910	1097	1020
SPECIFIC GRAVITY	0.650	0.642	0.620

	INDEX 8716 SAMPLE 12116	INDEX 8717 SAMPLE 16052	INDEX 8718 SAMPLE 11664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	NOT GIVEN	NOT GIVEN	OATES NE
WELL NAME	NEAL ESTATE NO. 1	UNIVERSITY 23-15 NO. 1	C. E. MCINTYRE NO. 1
LOCATION	SEC. 14, BLK. 142, T&STL SUR	SEC. 15, BLK. 23, U L SUR.	SEC. 139, BLK 3, T&PRR SUR.
OWNER	WM. MOSS PROPERTIES, INC.	EXXON CO., USA	HUMBLE OIL & REFINING CO.
COMPLETED	12/11/68	NOT GIVEN	03/22/67
SAMPLED	11/15/69	08/21/80	10/08/67
FORMATION	PERM-YATES	PENN-MORROW	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2846	17916	15466
WELLHEAD PRESSURE,PSIG	1400	9950	4093
OPEN FLOW, MCFD	6000	2692	36500
COMPONENT, MOLE PCT			
METHANE	87.7	96.6	60.2
ETHANE	3.6	0.6	0.1
PROPANE	1.5	0.1	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	6.0	0.4	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	2.3	36.3
HELIUM	0.05	0.01	0.00
HEATING VALUE*	1035	992	612
SPECIFIC GRAVITY	0.632	0.582	0.934

	INDEX 8719 SAMPLE 11752	INDEX 8720 SAMPLE 12760	INDEX 8721 SAMPLE 12761
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	OATES NE	OWEGO	OWEGO
WELL NAME	PAUL DAVIS NO. 1	VALLEY A NO. 2	VALLEY B NO. 1
LOCATION	BLK. 3, T&PRR SUR.	SEC. 115, BLK. 11, H&GN SUR.	SEC. 115, BLK. 11, H&GN SUR.
OWNER	HUMBLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	11/05/68	07/24/58	07/29/59
SAMPLED	02/03/69	04/12/71	04/12/71
FORMATION	DEVO-	PERM-TUBB	PERM-GLORIETA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13302	2900	2250
WELLHEAD PRESSURE,PSIG	4492	215	375
OPEN FLOW, MCFD	27000	2425	2232
COMPONENT, MOLE PCT			
METHANE	85.7	86.9	86.1
ETHANE	0.2	5.6	6.5
PROPANE	0.0	2.1	2.7
N-BUTANE	0.1	0.6	0.7
ISOBUTANE	0.0	0.1	0.6
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.0	0.5	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	1.7	1.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.4	0.3
CARBON DIOXIDE	12.7	1.6	0.5
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	897	1097	1118
SPECIFIC GRAVITY	0.693	0.654	0.653

	INDEX 8722 SAMPLE 12762	INDEX 8723 SAMPLE 5642	INDEX 8724 SAMPLE 9976
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	OWEGO	PAYTON	PAYTON
WELL NAME	VALLEY A NO. 2	H. J. EATON NO. 1	PAYTON NO. 1
LOCATION	SEC. 115, BLK. 11, H&GN SUR.	SEC. 1, BLK. 9, H&GN SUR.	SEC. 99, BLK 8, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	12/07/66	02/04/54	07/09/60
SAMPLED	04/12/71	06/22/54	07/16/68
FORMATION	PERM-CLEARFORK	MISS-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2439	6598	9814
WELLHEAD PRESSURE,PSIG	495	1734	600
OPEN FLOW, MCFD	1414	3100	197
COMPONENT, MOLE PCT			
METHANE	87.6	84.9	86.6
ETHANE	6.0	3.7	5.9
PROPANE	2.4	2.3	2.7
N-BUTANE	0.7	0.7	1.3
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.1	1.0
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	1.6	0.9	1.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.2
HELIUM	0.02	0.04	0.10
HEATING VALUE*	1118	1154	1193
SPECIFIC GRAVITY	0.648	0.636	0.640

* DRY GASES GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8725 SAMPLE 2034	INDEX 8726 SAMPLE 2035	INDEX 8727 SAMPLE 5091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PECOS VALLEY	PECOS VALLEY	PECOS VALLEY
WELL NAME	BUELL & HAGAN NO. 2	BUELL & HAGAN NO. 1	H. J. EATON A NO. 1
LOCATION	SEC. 22, BLK. 10, H&GN	SEC. 21, BLK. 10, H&GN	SEC. 27, BLK. 3, H&TC SUR.
OWNER	BUELL & HAGAN	BUELL & HAGAN	CALLERY & HURT, INC.
COMPLETED	03/01/29	05/06/30	11/18/50
SAMPLED	06/09/30	06/12/30	07/30/51
FORMATION	PERM-YATES	PERM-YATES	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1612	1528	5340
WELLHEAD PRESSURE,PSIG	15	500	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7770	24000
COMPONENT, MOLE PCT			
METHANE	67.7	85.4	84.5
ETHANE	27.9	13.6	7.0
PROPANE	---	---	3.0
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	2.9	0.6	2.3
OXYGEN	1.1	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.00	TRACE	0.04
HEATING VALUE*	1146	1109	1160
SPECIFIC GRAVITY	0.714	0.627	0.680

	INDEX 8728 SAMPLE 10023	INDEX 8729 SAMPLE 13493	INDEX 8730 SAMPLE 11647
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PECOS VALLEY	PECOS VALLEY	PERRY BASS
WELL NAME	BERTHA D. YOUNG NO. 2	BYRNE NO. 1	TEXAS AMERICAN SYND. NO. 1
LOCATION	SEC. 49, BLK. 10, H&GN SUR.	SEC. 54, BLK. 10 H&GNRR SUR.	SEC.213,BLK.10,GH&SARR SUR.
OWNER	HUMBLE OIL & REFINING CO.	HANSON OIL CO.	PERRY R. BASS
COMPLETED	08/14/64	07/15/71	02/21/68
SAMPLED	07/31/65	12/23/72	09/18/68
FORMATION	DEVO-	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5223	7099	13260
WELLHEAD PRESSURE,PSIG	2080	2000	4300
OPEN FLOW, MCFD	35000	11500	85000
COMPONENT, MOLE PCT			
METHANE	86.1	87.7	91.1
ETHANE	6.9	5.3	2.5
PROPANE	3.0	2.6	0.6
N-BUTANE	0.9	1.0	0.3
ISOBUTANE	0.5	0.4	TRACE
N-PENTANE	0.3	0.6	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	1.6	1.3	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.1	0.3	3.9
HELIUM	0.04	0.05	0.02
HEATING VALUE*	1157	1149	1025
SPECIFIC GRAVITY	0.664	0.659	0.635

	INDEX 8731 SAMPLE 13091	INDEX 8732 SAMPLE 13092	INDEX 8733 SAMPLE 12287
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PETCO	PETCO	PIKES PEAK
WELL NAME	NEAL ESTATE NO. 1	NEAL ESTATE NO. 1	ELSINORE CATTLE CO. NO. 1
LOCATION	SEC.22,BLK.142,T&STL RR SUR.	SEC.22,BLK.142,T&STL RR SUR.	SEC. 10, BLK. C, GC&SF SUR.
OWNER	THE PETROLEUM CORP.	THE PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	05/17/70	05/17/70	03/20/70
SAMPLED	10/21/71	10/21/71	06/05/70
FORMATION	DEVO-	ORDO-ELLENBURGER	ORDO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11128	13717	14172
WELLHEAD PRESSURE,PSIG	4031	4818	4583
OPEN FLOW, MCFD	15500	22200	20200
COMPONENT, MOLE PCT			
METHANE	92.7	96.1	87.8
ETHANE	3.0	1.6	0.4
PROPANE	1.0	0.5	TRACE
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.6	0.7	0.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.2	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.9	0.0	0.0
CARBON DIOXIDE	0.6	0.4	10.7
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1049	1039	897
SPECIFIC GRAVITY	0.605	0.587	0.663

	INDEX 8734 SAMPLE 13557	INDEX 8735 SAMPLE 5284	INDEX 8736 SAMPLE 5644
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PIKES PEAK E	PUCKETT	PUCKETT
WELL NAME	EISINORE CATTLE CO. NO. 1	GLENNA NO. 1	PUCKETT K-1
LOCATION	SEC. 25 BLK. C, GC&SF SUR.	SEC. 28, BLK. 101, TCRR SUR.	SEC. 39, BLK. 101, TCRR SUR.
OWNER	TEXAS PACIFIC OIL CO. INC.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/01/72	08/01/52	04/10/54
SAMPLED	03/01/73	10/10/62	06/22/54
FORMATION	DEVO-	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12654	13600	12358
WELLHEAD PRESSURE,PSIG	2950	4550	4558
OPEN FLOW, MCFD	28000	50000	33000
COMPONENT, MOLE PCT			
METHANE	56.6	69.6	70.9
ETHANE	0.3	1.1	1.0
PROPANE	0.1	0.5	0.2
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.0	0.6	0.5
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	41.6	28.0	26.9
HELIUM	0.03	0.03	0.03
HEATING VALUE*	597	747	754
SPECIFIC GRAVITY	0.975	0.845	0.830

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8737 SAMPLE 12848		INDEX 8738 SAMPLE 12849		INDEX 8739 SAMPLE 14685	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	PUCKETT		PUCKETT		PUCKETT E	
WELL NAME	ROBBINS 1A NO. 5-D		MITCHELL-THOMAS 1 NO. 1		MITCHELL "E" NO. 1	
LOCATION	SEC.24,BLK.126,T&STL RR SUR.		SEC. 23, BLK. 100, ELRR SUR.		SEC. 9, BLK. 102, J. GIBSON	
OWNER	CHEVRON OIL CO.		CHEVRON OIL CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	--/--/59		--/--/58		09/09/75	
SAMPLED	06/10/71		06/10/71		05/28/76	
FORMATION	DEVO-		ORDO-ELLENBURGER		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	11650		14500		11328	
WELLHEAD PRESSURE,PSIG	700		2215		3722	
OPEN FLOW, MCFD	48000		66000		67500	
COMPONENT, MOLE PCT						
METHANE	93.0		70.6		84.4	
ETHANE	2.5		1.0		9.2	
PROPANE	0.6		0.4		3.3	
N-BUTANE	0.1		TRACE		0.7	
ISOBUTANE	0.1		0.1		0.3	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.6		0.8		0.9	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.8		26.7		0.7	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1023		766		1157	
SPECIFIC GRAVITY	0.612		0.837		0.666	

	INDEX 8740 SAMPLE 12756		INDEX 8741 SAMPLE 7789		INDEX 8742 SAMPLE 13834	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	PUCKETT N		ROJO CABALLOS		ROJO CABALLOS S	
WELL NAME	H. A. WIMBERLY NO. 2		IVY B. WEATHERBY NO. 1		FRED SCHLOSSER ESTATE NO. 1	
LOCATION	SEC. 4, BLK. 100		SEC. 20, BLK. 48, T&PRR SUR.		SEC. 25, BLK. 49, T&PRR SUR.	
OWNER	HASSIE HUNT TRUST		MOBIL OIL CO.		GULF OIL CO.-U.S.	
COMPLETED	--/--/62		12/05/60		03/31/73	
SAMPLED	04/06/71		12/05/60		12/05/73	
FORMATION	ORDO-ELLENBURGER		PENN-		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	10004		15117		21630	
WELLHEAD PRESSURE,PSIG	2750		10460		6505	
OPEN FLOW, MCFD	11400		NOT GIVEN		84000	
COMPONENT, MOLE PCT						
METHANE	91.9		91.4		98.0	
ETHANE	2.6		4.8		0.1	
PROPANE	1.0		1.3		TRACE	
N-BUTANE	0.3		0.3		0.0	
ISOBUTANE	0.2		0.4		0.0	
N-PENTANE	0.2		0.2		0.0	
ISOPENTANE	TRACE		TRACE		0.0	
CYCLOPENTANE	TRACE		0.1		0.0	
HEXANES PLUS	0.2		0.3		0.0	
NITROGEN	1.7		0.4		0.3	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		0.7		1.5	
HELIUM	0.05		0.01		0.02	
HEATING VALUE*	1039		1097		995	
SPECIFIC GRAVITY	0.618		0.623		0.570	

	INDEX 8743 SAMPLE 4835		INDEX 8744 SAMPLE 9977		INDEX 8745 SAMPLE 15302	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	SANTA ROSA		SHEFFIELD		SIERRA MADERA	
WELL NAME	PEERLESS NO. 1		CANON 10-1		SIERRA MADERA NO. 1	
LOCATION	SEC. 106, BLK. 8, H&GN SUR.		SEC. 10, BLK 178, TCRR SUR.		SEC. 68, BLK. D, GS&SF SUR.	
OWNER	SLICK-MOORMAN OIL CO.		SHELL OIL CO.		L. R. FRENCH, JR.	
COMPLETED	04/24/49		10/07/63		03/22/77	
SAMPLED	12/07/49		07/09/65		06/01/78	
FORMATION	ORDO-ELLENBURGER		ORDO-MCKEE		DEVO-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	8995		8328		12700	
WELLHEAD PRESSURE,PSIG	4390		2166		3000	
OPEN FLOW, MCFD	24250		3600		8000	
COMPONENT, MOLE PCT						
METHANE	91.4		78.0		92.0	
ETHANE	3.4		9.7		0.2	
PROPANE	1.4		4.3		0.1	
N-BUTANE	0.7		2.2		0.0	
ISOBUTANE	0.2		0.5		0.0	
N-PENTANE	0.5		0.3		0.0	
ISOPENTANE	0.1		0.7		0.0	
CYCLOPENTANE	0.1		TRACE		0.0	
HEXANES PLUS	0.5		0.2		0.0	
NITROGEN	1.0		3.4		1.1	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.4		0.5		6.6	
HELIUM	0.03		0.03		0.02	
HEATING VALUE*	1117		1220		938	
SPECIFIC GRAVITY	0.632		0.730		0.625	

	INDEX 8746 SAMPLE 12953		INDEX 8747 SAMPLE 2036		INDEX 8748 SAMPLE 2038	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	PECOS		PECOS		PECOS	
FIELD	SURVEY 16		TAYLOR-LINK		TAYLOR-LINK	
WELL NAME	COYANOSA GAS NO.2, WELL NO.3		UNIVERSITY NO. 1		UNIVERSITY C-3	
LOCATION	SEC. 46, BLK. OW,T,T.RR SUR.		SEC. 36, BLK. 18, UNIV. LAND		SEC. 31, BLK. 16, UNIV. LAND	
OWNER	HUMBLE OIL & REFINING CO.		BUELL & HAGAN		LANDRETH PRODUCTION CORP.	
COMPLETED	10/13/69		05/31/29		11/16/29	
SAMPLED	08/17/71		06/13/30		06/12/30	
FORMATION	PERM-WOLFCAMP		PERM-		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	10998		1313		915	
WELLHEAD PRESSURE,PSIG	1736		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	85000		NOT GIVEN		2000	
COMPONENT, MOLE PCT						
METHANE	83.6		38.6		60.9	
ETHANE	8.4		31.8		33.9	
PROPANE	3.1		---		---	
N-BUTANE	2.9		---		---	
ISOBUTANE	1.6		---		---	
N-PENTANE	1.4		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.2		---		---	
NITROGEN	1.6		29.9		4.5	
OXYGEN	1.2		0.3		0.4	
ARGON	1.2		---		---	
HYDROGEN	4.6		---		---	
HYDROGEN SULFIDE**	0.2		---		---	
CARBON DIOXIDE	TRACE		1.2		0.2	
HELIUM	0.2		0.17		0.06	
HEATING VALUE*	1185		961		1224	
SPECIFIC GRAVITY	0.682		0.835		0.744	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8749 SAMPLE 2039	INDEX 8750 SAMPLE 2040	INDEX 8751 SAMPLE 12812
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	TAYLOR-LINK	TAYLOR-LINK	TCI
WELL NAME	BOWERS UE NO. 1	BOWERS U NO. 2	O. W. WILLIAMS NET-11
LOCATION	SEC. 31, BLK. 16, UNIV. LAND	SEC. 31, BLK. 16	SEC. 13, BLK. 3, H&TC SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	TEXACO INC.
COMPLETED	05/01/30	11/19/29	NOT GIVEN
SAMPLED	06/13/30	06/13/30	04/30/71
FORMATION	PERM-	PERM-	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1651	1633	2084
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	376
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	340
COMPONENT, MOLE PCT			
METHANE	44.7	63.9	85.1
ETHANE	49.2	31.8	6.7
PROPANE	---	---	2.5
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.4	0.3	1.8
OXYGEN	0.2	0.1	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	1.2
CARBON DIOXIDE	5.5	4.0	1.1
HELIUM	0.02	0.00	0.02
HEATING VALUE*	1334	1217	1116
SPECIFIC GRAVITY	0.854	0.753	0.667

	INDEX 8752 SAMPLE 13968	INDEX 8753 SAMPLE 10187	INDEX 8754 SAMPLE 12749
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	THUNDERBIRD	WAHA	WAHA
WELL NAME	BLOWING SAND NO. 1	WAYNE MOORE NO. 6	WAYNE MOORE NO. 3
LOCATION	SEC. 37, BLK. 3, H&TC SUR.	SEC. 5, BLK C-3, PSL SUR.	SEC. 6, BLK. C-3, PSL SUR.
OWNER	THUNNERBIRD OIL CO.	MOBIL OIL	MOBIL OIL CORP.
COMPLETED	--/--/73	10/04/65	11/26/62
SAMPLED	NOT GIVEN	10/05/65	04/02/71
FORMATION	DEVO-	DEVO-	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5600	11025	4918
WELLHEAD PRESSURE,PSIG	1200	6028	898
OPEN FLOW, MCFD	20000	6190	433
COMPONENT, MOLE PCT			
METHANE	81.7	92.0	89.6
ETHANE	8.8	3.0	4.9
PROPANE	4.0	1.1	1.6
N-BUTANE	1.1	0.3	0.5
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.9	1.8	2.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	0.1
HELIUM	0.05	0.02	0.03
HEATING VALUE*	1166	1054	1085
SPECIFIC GRAVITY	0.687	0.617	0.629

	INDEX 8755 SAMPLE 12750	INDEX 8756 SAMPLE 12751	INDEX 8757 SAMPLE 3824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WAHA	WAHA	WILDCAT
WELL NAME	J. H. HODGE NO. 2	WAYNE MOORE NO. 14	MAC DER NO. 4
LOCATION	SEC. 8, BLK. C-3, PSL SUR.	SEC. 6, BLK. C-3, PSL SUR.	SEC. 36, BLK. 144, T&SL SUR.
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	STANDARD OIL CO. OF TEXAS
COMPLETED	06/04/68	04/16/68	03/15/44
SAMPLED	04/02/71	04/02/71	04/27/44
FORMATION	MISS-	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9937	12147	4706
WELLHEAD PRESSURE,PSIG	3673	3853	1900
OPEN FLOW, MCFD	15925	10610	17300
COMPONENT, MOLE PCT			
METHANE	86.5	93.9	90.8
ETHANE	7.6	2.3	3.7
PROPANE	2.7	0.7	---
N-BUTANE	0.8	0.1	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	0.9	0.7	4.7
OXYGEN	0.0	0.0	0.3
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	1.8	0.5
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1158	1030	986
SPECIFIC GRAVITY	0.660	0.602	0.599

	INDEX 8758 SAMPLE 4455	INDEX 8759 SAMPLE 5375	INDEX 8760 SAMPLE 8827
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	OMEGA NO. 1	LILLIAN RUDICIL NO. 1	E. P. SIBLEY B NO. 1
LOCATION	SEC.11, BLK.134, T&SL RY SUR	H&GN SUR. NO. 541	SEC. 45, BLK. OW, T&TRR SUR.
OWNER	PHILLIPS PETROLEUM CO.	TEXAS CO.	MOBIL OIL CO.
COMPLETED	10/28/47	10/19/52	01/06/63
SAMPLED	04/08/48	01/07/53	01/13/63
FORMATION	NOT GIVEN	PERM-YATES	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1460	3007	15000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1225	5398
OPEN FLOW, MCFD	687	1110	21730
COMPONENT, MOLE PCT			
METHANE	89.4	90.8	95.6
ETHANE	0.0	2.6	1.6
PROPANE	---	0.5	0.3
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.1	TRACE
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	8.0	4.6	0.6
OXYGEN	1.0	0.1	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.2	0.0
CARBON DIOXIDE	1.5	0.7	1.3
HELIUM	0.08	0.03	0.03
HEATING VALUE*	906	993	1022
SPECIFIC GRAVITY	0.607	0.604	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8761 SAMPLE 9056	INDEX 8762 SAMPLE 15030	INDEX 8763 SAMPLE 2042
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	YATES
FIELD	WILDCAT	WILDCAT	YATES NO. 11
WELL NAME	W. C. TYRRELL NO. 1	ARCO-TERRAZAS NO. 1	SEC. 61, BLK. 1, I&GN
LOCATION	SEC. 2, BLK. 115, GC&SF SUR.	SEC.1,BLK.103 W.P. HOWARD	MID-KANSASATRANSCONTINENTAL
OWNER	PURE OIL CO.	C & K PETROLEUM, INC.	02/08/28
COMPLETED	NOT GIVEN	07/30/76	06/13/30
SAMPLED	07/29/63	06/22/77	NOT GIVEN
FORMATION	ORDO-ELLENBURGER	PERM-WOLFCAMP	430
GEOLOGIC PROVINCE CODE	430	430	1305
DEPTH, FEET	19826	9660	20
WELLHEAD PRESSURE,PSIG	7400	3836	NOT GIVEN
OPEN FLOW, MCFD	68000	7606	
COMPONENT, MOLE PCT			
METHANE	97.0	85.4	84.6
ETHANE	0.1	7.1	9.9
PROPANE	0.1	3.6	---
N-BUTANE	TRACE	1.0	---
ISOBUTANE	0.0	0.3	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	0.2	1.7	1.1
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.5	0.3	4.3
HELIUM	0.01	0.02	0.00
HEATING VALUE*	987	1160	1034
SPECIFIC GRAVITY	0.581	0.670	0.652

	INDEX 8764 SAMPLE 2043	INDEX 8765 SAMPLE 12766	INDEX 8766 SAMPLE 13638
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	YATES	YUCCA BUTTE	YUCCA BUTTE
WELL NAME	YATES H NO. 2	BLACKSTONE SLAUGHTER	SLAUGHTER 66 NO. 1
LOCATION	SEC. 32, BLK. 194, GCSF SUR.	SEC. 19, BLK. 9-2, TCRR SUR.	SEC. 66, BLK. A-2, TCRR SUR.
OWNER	MID-KANSAS OIL & GAS CO.	SHELL OIL CO.	SKELLY OIL CO.
COMPLETED	08/05/28	09/12/60	02/10/73
SAMPLED	06/19/30	04/15/71	07/03/73
FORMATION	NOT GIVEN	PENN-DETRITAL	PENN-DETRITAL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1558	8190	8800
WELLHEAD PRESSURE,PSIG	500	2182	2450
OPEN FLOW, MCFD	NOT GIVEN	5600	3000
COMPONENT, MOLE PCT			
METHANE	87.0	88.7	82.7
ETHANE	86.8	5.6	8.1
PROPANE	---	1.7	4.0
N-BUTANE	---	0.5	1.2
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	TRACE	0.3
ISOPENTANE	---	0.2	0.5
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	0.2	2.1	1.7
OXYGEN	0.2	0.2	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	6.2	0.5	0.8
HELIUM	0.01	0.04	0.04
HEATING VALUE*	1308	1084	1184
SPECIFIC GRAVITY	0.846	0.632	0.693

	INDEX 8767 SAMPLE 15984	INDEX 8768 SAMPLE 14980	INDEX 8769 SAMPLE 11292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	DAMASCUS	HORTENSE	LIVINGSTON
WELL NAME	ANICO NO. 1	SOUTHLAND MILLS MUNIT NO. 1	C. B. GRANBURY NO. 56
LOCATION	I & G SUR., A-337	J. A. CUMMINGS SUR. A-647	A. VIESCA SUR. A-77
OWNER	HINTON PRODUCTION CO.	BELCO PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	10/01/75	03/29/67
SAMPLED	06/--/80	04/16/77	02/15/6A
FORMATION	CRET-WOODBINE	CRET-WOODBINE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9175	12578	2863
WELLHEAD PRESSURE,PSIG	3467	4400	677
OPEN FLOW, MCFD	37000	7526	180
COMPONENT, MOLE PCT			
METHANE	92.2	76.3	98.0
ETHANE	1.8	7.1	0.0
PROPANE	0.6	5.9	TRACE
N-BUTANE	0.3	2.2	0.0
ISOBUTANE	0.1	1.5	0.0
N-PENTANE	0.1	0.6	0.0
ISOPENTANE	0.1	0.7	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.4	0.0
NITROGEN	2.0	0.2	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	4.9	0.2
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1013	1258	993
SPECIFIC GRAVITY	0.616	0.790	0.563

	INDEX 8770 SAMPLE 14515	INDEX 8771 SAMPLE 15138	INDEX 8772 SAMPLE 14554
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	LIVINGSTON	LIVINGSTON	R. A. WOODBINE
WELL NAME	DR. H. J. PRATT NO. 16	DR. H.J. PRATT NO. 16	SOUTHLAND PAPER MILLS NO. 1
LOCATION	SWAHN CITY	9 MI. SE OF LIVINGSTON	JAMES CUMMINGS SUR. A-647
OWNER	SUN OIL CO.	SUN OIL CO.	BELCO PETROLEUM CORP.
COMPLETED	08/23/75	01/17/77	10/01/75
SAMPLED	10/30/75	11/03/77	12/23/75
FORMATION	EOCE-YEGUA	EOCE-YEGUA	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4614	4614	12577
WELLHEAD PRESSURE,PSIG	900	1740	6443
OPEN FLOW, MCFD	356	5867	7526
COMPONENT, MOLE PCT			
METHANE	90.3	77.9	89.6
ETHANE	3.3	5.5	4.0
PROPANE	1.7	1.6	1.6
N-BUTANE	0.3	0.5	0.3
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.1	12.8	0.4
OXYGEN	0.0	2.4	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	3.4
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1048	951	1058
SPECIFIC GRAVITY	0.622	0.685	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8773 SAMPLE 13783	INDEX 8774 SAMPLE 14239	INDEX 8775 SAMPLE 15152
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	SEVEN OAKS N	SEVEN OAKS N	SEVEN OAKS N
WELL NAME	SOUTHLAND PAPER MILLS NO.B-2	T. E. JONES UNIT NO. 1	SEVEN OAKS TOWNSITE NO. 1
LOCATION	H+TC RR SUR. A-314	JOS W. SCARES SUR. A-69	B.J. HARPER SUR. A-36
OWNER	GEORGE MITCHELL & ASSOC.	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.
COMPLETED	06/00/72	05/01/73	09/13/77
SAMPLED	10/26/73	12/03/74	11/21/77
FORMATION	CRET-WOODBINE	CRET-WOODBINE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12450	12270	12332
WELLHEAD PRESSURE,PSIG	2200	5215	3700
OPEN FLOW, MCFD	3425	6000	1750
COMPONENT, MOLE PCT			
METHANE	74.5	56.2	84.3
ETHANE	9.2	13.9	7.4
PROPANE	5.3	10.9	2.7
N-BUTANE	2.2	4.8	0.7
ISOBUTANE	1.9	3.5	0.4
N-PENTANE	1.1	1.7	0.2
ISOPENTANE	1.3	2.5	0.2
CYCLOPENTANE	0.4	0.3	TRACE
HEXANES PLUS	1.4	1.6	0.1
NITROGEN	0.3	0.2	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	4.5	3.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1367	1654	1116
SPECIFIC GRAVITY	0.831	1.029	0.681

	INDEX 8776 SAMPLE 7559	INDEX 8777 SAMPLE 7928	INDEX 8778 SAMPLE 8911
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BROOKESMITH	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS NO. 1-207	BIVINS A-7	BIVINS A-5
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	SHELL OIL CO.	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	05/18/60	08/16/58	03/13/42
SAMPLED	05/21/60	04/10/63	04/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3420	3360	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.3	1.9	66.8
ETHANE	3.6	0.1	3.5
PROPANE	2.4	TRACE	1.7
N-BUTANE	0.4	TRACE	0.6
ISOBUTANE	0.1	TRACE	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	22.7	97.6	24.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.6	0.1	0.7
HELIUM	1.48	0.10	1.86
HEATING VALUE*	794	21	827
SPECIFIC GRAVITY	0.750	0.960	0.712

	INDEX 8779 SAMPLE 8912	INDEX 8780 SAMPLE 8913	INDEX 8781 SAMPLE 8914
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-2	BIVINS A-7	BIVINS A-4
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	10/24/39	08/16/58	01/11/42
SAMPLED	04/10/63	04/10/63	04/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3297	NOT GIVEN	3413
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.6	65.7	66.2
ETHANE	3.6	3.5	3.6
PROPANE	1.6	1.6	1.7
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.4	25.3	24.3
OXYGEN	0.0	0.0	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.9
HELIUM	1.92	1.95	1.72
HEATING VALUE*	827	818	826
SPECIFIC GRAVITY	0.711	0.716	0.717

	INDEX 8782 SAMPLE 8915	INDEX 8783 SAMPLE 8916	INDEX 8784 SAMPLE 8917
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH B-1	BUSH A-5	BUSH A-3
LOCATION	SEC. 19, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	11/13/28	03/13/42	06/05/42
SAMPLED	04/10/63	04/10/63	04/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3394	3334
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.6	64.0	65.2
ETHANE	3.8	3.6	3.8
PROPANE	1.7	1.6	1.7
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	22.9	26.7	25.2
OXYGEN	0.0	0.7	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.8
HELIUM	1.78	1.65	1.83
HEATING VALUE*	845	802	824
SPECIFIC GRAVITY	0.713	0.725	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8785 SAMPLE 8918	INDEX 8786 SAMPLE 8919	INDEX 8787 SAMPLE 8925
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-2	BUSH A-4	BUSH NO. A-2
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	02/02/35	04/15/43	10/24/39
SAMPLED	04/10/63	04/10/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.2	66.3	66.7
ETHANE	3.6	3.6	3.6
PROPANE	1.7	1.7	1.5
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.7	24.6	24.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.5
HELIUM	1.80	1.85	1.87
HEATING VALUE*	834	830	824
SPECIFIC GRAVITY	0.709	0.715	0.709

	INDEX 8788 SAMPLE 8926	INDEX 8789 SAMPLE 8927	INDEX 8790 SAMPLE 8928
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-3	BUSH A-4	BUSH A-5
LOCATION	SEC. 27, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/05/62	04/15/43	10/11/43
SAMPLED	04/17/63	04/17/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3300	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.8	66.3	66.1
ETHANE	3.6	3.6	3.6
PROPANE	1.7	1.7	1.7
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.2	TRACE	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.9	24.7	24.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.5
HELIUM	1.86	1.83	1.87
HEATING VALUE*	834	829	828
SPECIFIC GRAVITY	0.710	0.712	0.714

	INDEX 8791 SAMPLE 8929	INDEX 8792 SAMPLE 8930	INDEX 8793 SAMPLE 8931
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-2	BIVINS A-4	BIVINS A-5
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	02/02/35	01/11/42	03/13/42
SAMPLED	04/17/63	04/17/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3313	NOT GIVEN	3267
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.3	67.4	66.4
ETHANE	3.6	3.7	3.6
PROPANE	1.9	1.7	1.7
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.3	23.1	24.4
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.7
HELIUM	1.78	1.79	1.79
HEATING VALUE*	839	840	830
SPECIFIC GRAVITY	0.712	0.711	0.712

	INDEX 8794 SAMPLE 8932	INDEX 8795 SAMPLE 8939	INDEX 8796 SAMPLE 8940
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-7	BIVINS A-2	BIVINS A-4
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	NOT GIVEN
OWNER	U.S. BUREAU OF MINES	U.S.B.M.	U.S.B.M.
COMPLETED	08/16/58	02/02/35	01/11/42
SAMPLED	04/17/63	07/10/63	07/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	3300	3412
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.3	65.9	67.3
ETHANE	3.6	3.7	3.6
PROPANE	1.4	1.4	1.7
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.6	24.9	23.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.9
HELIUM	1.97	1.87	1.78
HEATING VALUE*	816	822	850
SPECIFIC GRAVITY	0.714	0.713	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8797 SAMPLE 8941	INDEX 8798 SAMPLE 8942	INDEX 8799 SAMPLE 8943
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-5	BIVINS A-7	BUSH A-2
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	NOT GIVEN
COMPLETED	03/06/42	08/16/58	10/24/39
SAMPLED	07/10/63	07/10/63	07/15/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3275	3360	3320
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.6	65.5	67.3
ETHANE	4.0	3.6	3.6
PROPANE	1.7	1.7	2.1
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.8	25.5	23.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.7
HELIUM	1.88	1.88	1.79
HEATING VALUE*	837	818	845
SPECIFIC GRAVITY	0.712	0.717	0.713

	INDEX 8800 SAMPLE 8944	INDEX 8801 SAMPLE 8945	INDEX 8802 SAMPLE 9007
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-3	BUSH A-4	BIVINS A-8R
LOCATION	SEC. 27, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	U.S. BUREAU OF MINES
COMPLETED	06/05/62	04/15/43	05/15/63
SAMPLED	07/16/53	07/16/63	06/07/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3334	3300	2408
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	482
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	66.9	65.6	66.3
ETHANE	3.6	3.5	3.5
PROPANE	1.7	1.5	1.6
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	23.8	25.4	25.4
OXYGEN	0.0	0.2	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.2
HELIUM	1.83	1.83	1.90
HEATING VALUE*	834	817	807
SPECIFIC GRAVITY	0.711	0.715	0.701

	INDEX 8803 SAMPLE 9008	INDEX 8804 SAMPLE 9858	INDEX 8805 SAMPLE 9859
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-7	BIVINS NO. A-2	BIVINS NO. A-4
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/05/63	02/02/35	01/11/42
SAMPLED	06/06/63	04/01/65	02/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3477	3300	3412
WELLHEAD PRESSURE,PSIG	774	610	610
OPEN FLOW, MCFD	NOT GIVEN	6100	3700
COMPONENT, MOLE PCT			
METHANE	70.0	66.6	66.9
ETHANE	3.9	3.7	3.6
PROPANE	1.9	1.9	1.7
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	20.5	23.8	23.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.9
HELIUM	1.42	1.83	1.82
HEATING VALUE*	880	837	836
SPECIFIC GRAVITY	0.704	0.713	0.710

	INDEX 8806 SAMPLE 9860	INDEX 8807 SAMPLE 9861	INDEX 8808 SAMPLE 9862
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS NO. A-5	BIVINS NO. A-7	BIVINS NO. A-8R
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/12/42	08/16/58	05/15/63
SAMPLED	03/16/65	02/01/65	04/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3275	3360	2408
WELLHEAD PRESSURE,PSIG	612	615	482
OPEN FLOW, MCFD	6400	7000	20
COMPONENT, MOLE PCT			
METHANE	66.1	65.2	65.9
ETHANE	3.7	3.5	3.7
PROPANE	1.8	1.7	1.7
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.6	25.6	25.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.1
HELIUM	1.87	1.96	1.86
HEATING VALUE*	827	818	819
SPECIFIC GRAVITY	0.715	0.713	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8809 SAMPLE 9863	INDEX 8810 SAMPLE 9864	INDEX 8811 SAMPLE 9865
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH NO. A-2	BUSH NO. A-3	BUSH NO. A-4
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	10/20/39	06/05/62	04/15/43
SAMPLED	03/16/65	02/01/65	04/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3220	3334	3300
WELLHEAD PRESSURE,PSIG	612	614	612
OPEN FLOW, MCFD	3400	6800	3600
COMPONENT, MOLE PCT			
METHANE	64.9	66.9	65.4
ETHANE	3.6	3.7	3.7
PROPANE	1.7	1.8	1.7
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.7	23.7	25.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.5
HELIUM	3.21	1.82	1.90
HEATING VALUE*	410	436	422
SPECIFIC GRAVITY	0.707	0.713	0.716

	INDEX 8812 SAMPLE 9866	INDEX 8813 SAMPLE 9867	INDEX 8814 SAMPLE 9868
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH NO. A-5	BUSH NO. A-7	BUSH NO. A-8
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	10/11/43	06/05/63	06/25/63
SAMPLED	02/01/65	07/15/64	02/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3350	3477	3500
WELLHEAD PRESSURE,PSIG	624	684	618
OPEN FLOW, MCFD	12300	240	2200
COMPONENT, MOLE PCT			
METHANE	64.1	69.9	66.7
ETHANE	3.6	3.7	3.5
PROPANE	1.7	1.8	1.9
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	24.4	21.2	24.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	1.1
HELIUM	3.82	1.50	1.84
HEATING VALUE*	421	864	833
SPECIFIC GRAVITY	0.709	0.697	0.713

	INDEX 8815 SAMPLE 9869	INDEX 8816 SAMPLE 9870	INDEX 8817 SAMPLE 9871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH NO. A-9	BUSH NO. B-1	BUSH NO. B-2
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.	SEC. 30, BLK. M-19, G&M SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/09/65	07/12/28	01/--/65
SAMPLED	03/31/65	03/24/65	03/09/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3436	3342	2540
WELLHEAD PRESSURE,PSIG	625	567	501
OPEN FLOW, MCFD	5400	2300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	67.2	71.2
ETHANE	3.8	3.8	5.6
PROPANE	2.0	1.8	2.7
N-BUTANE	0.7	0.6	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	23.6	23.2	18.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.1
HELIUM	1.71	1.77	0.62
HEATING VALUE*	880	848	952
SPECIFIC GRAVITY	0.734	0.714	0.715

	INDEX 8818 SAMPLE 9872	INDEX 8819 SAMPLE 9873	INDEX 8820 SAMPLE 9874
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	FUQUA NO. A-1	FUQUA NO. A-2	FUQUA NO. D-1
LOCATION	SEC. 18, BLK. 6, BS&F SUR.	SEC. 24, BLK. 6, BS&F SUR.	SEC. 13, BLK. 21W,EL&RR SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	05/--/28	03/--/65	02/01/65
SAMPLED	03/02/65	03/22/65	03/23/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3585	3475	2630
WELLHEAD PRESSURE,PSIG	594	604	NOT GIVEN
OPEN FLOW, MCFD	1950	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.4	65.1	0.1
ETHANE	3.7	3.7	0.0
PROPANE	1.8	1.9	0.0
N-BUTANE	0.7	0.6	0.0
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	0.2	0.1	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	25.0	25.2	96.7
OXYGEN	0.0	0.0	3.0
ARGON	0.1	0.1	1.2
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.0	TRACE
HELIUM	1.96	1.84	0.01
HEATING VALUE*	932	920	1
SPECIFIC GRAVITY	0.726	0.721	0.976

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8821 SAMPLE 10797	INDEX 8822 SAMPLE 10798	INDEX 8823 SAMPLE 10799
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-4	BUSH A-5	BUSH A-9
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	10/11/43	02/04/65
SAMPLED	12/05/66	12/05/66	12/05/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3300	3350	3436
WELLHEAD PRESSURE,PSIG	643	642	640
OPEN FLOW, MCFD	3600	12300	5400
COMPONENT, MOLE PCT			
METHANE	64.5	55.9	65.3
ETHANE	3.7	3.3	3.7
PROPANE	1.9	1.7	1.8
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.4	26.0	25.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.3
HELIUM	2.60	11.10	1.90
HEATING VALUE*	821	717	823
SPECIFIC GRAVITY	0.716	0.676	0.714

	INDEX 8824 SAMPLE 10800	INDEX 8825 SAMPLE 10801	INDEX 8826 SAMPLE 10802
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-7	BIVINS A-5	BIVINS A-9
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 2, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	08/16/58	03/06/42	03/20/65
SAMPLED	12/05/66	12/05/66	12/05/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	3275	3464
WELLHEAD PRESSURE,PSIG	647	630	607
OPEN FLOW, MCFD	7000	6400	17000
COMPONENT, MOLE PCT			
METHANE	64.6	65.7	64.5
ETHANE	3.7	3.7	3.6
PROPANE	1.9	1.9	1.9
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.0	24.7	25.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.7
HELIUM	1.96	1.90	1.93
HEATING VALUE*	817	829	819
SPECIFIC GRAVITY	0.718	0.714	0.722

	INDEX 8827 SAMPLE 10803	INDEX 8828 SAMPLE 10804	INDEX 8829 SAMPLE 10805
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-3	BIVINS A-4	BIVINS A-2
LOCATION	SEC. 27, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/05/62	01/11/42	02/02/35
SAMPLED	12/05/66	12/05/66	12/05/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3334	3412	3300
WELLHEAD PRESSURE,PSIG	631	629	633
OPEN FLOW, MCFD	6800	3700	6100
COMPONENT, MOLE PCT			
METHANE	61.0	66.3	64.3
ETHANE	3.5	3.7	3.7
PROPANE	1.7	1.9	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.7	24.1	24.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.7
HELIUM	7.01	1.78	3.39
HEATING VALUE*	773	835	813
SPECIFIC GRAVITY	0.693	0.716	0.708

	INDEX 8830 SAMPLE 10808	INDEX 8831 SAMPLE 10811	INDEX 8832 SAMPLE 10838
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH B-3R	BUSH B-2R	BUSH B-1
LOCATION	SEC. 29, BLK. M-19, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.	SEC. 19, BLK. 6, BS&F SUR.
OWNER	U. S. BUREAU OF MINES	U. S. BUREAU OF MINES	U.S.B.M.
COMPLETED	12/02/66	01/01/65	11/01/28
SAMPLED	12/06/66	12/14/66	01/17/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2450	2540	3340
WELLHEAD PRESSURE,PSIG	515	497	633
OPEN FLOW, MCFD	NOT GIVEN	7500	2300
COMPONENT, MOLE PCT			
METHANE	70.5	70.1	66.2
ETHANE	5.6	5.6	3.7
PROPANE	2.9	3.0	1.8
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.0	19.0	24.1
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.9
HELIUM	0.62	0.63	1.78
HEATING VALUE*	937	940	831
SPECIFIC GRAVITY	0.709	0.712	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8833 SAMPLE 10839		INDEX 8834 SAMPLE 10840		INDEX 8835 SAMPLE 10841	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	CLIFFSIDE		CLIFFSIDE		CLIFFSIDE	
WELL NAME	FUQUA A-1		FUQUA A-2		BIVINS A-11	
LOCATION	SEC. 18, BLK. 6, BS&F SUR.		SEC. 24, BLK. 6, BS&F SUR.		SEC. 2, BLK. JAD, BS&F SUR.	
OWNER	U.S.A.M.		U.S.A.M.		U.S.A.M.	
COMPLETED	05/01/28		05/01/65		01/01/67	
SAMPLED	01/17/67		01/17/67		01/17/67	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3585		3475		3340	
WELLHEAD PRESSURE,PSIG	626		640		618	
OPEN FLOW, MCFD	1950		2000		6300	
COMPONENT, MOLE PCT						
METHANE	66.2		65.1		64.1	
ETHANE	3.8		3.8		3.7	
PROPANE	1.6		1.9		1.9	
N-BUTANE	0.4		0.5		0.6	
ISOBUTANE	0.2		0.3		0.4	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	24.9		25.5		26.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.4		0.5	
HELIUM	1.87		1.89		2.02	
HEATING VALUE*	818		831		820	
SPECIFIC GRAVITY	0.706		0.720		0.721	

	INDEX 8836 SAMPLE 10844		INDEX 8837 SAMPLE 10875		INDEX 8838 SAMPLE 10885	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	CLIFFSIDE		CLIFFSIDE		CLIFFSIDE	
WELL NAME	BUSH A-8		U.S.A.M. 2R		U.S.A.M. 1R	
LOCATION	SEC. 20, BLK. 6, BS&F SUR.		SEC. 37, BLK. 5, G&M SUR.		SEC. 37, BLK. 5, G&M SUR.	
OWNER	U.S.A.M.		U.S.A.M.		U.S.A.M.	
COMPLETED	06/01/63		11/12/66		11/04/66	
SAMPLED	01/20/67		02/23/67		03/08/67	
FORMATION	PERM-WICHITA-ALBANY		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3500		2507		2499	
WELLHEAD PRESSURE,PSIG	614		508		486	
OPEN FLOW, MCFD	2200		8300		2900	
COMPONENT, MOLE PCT						
METHANE	65.5		70.1		70.8	
ETHANE	3.7		5.7		5.7	
PROPANE	1.8		3.0		2.9	
N-BUTANE	0.6		0.9		0.7	
ISOBUTANE	0.3		0.2		0.4	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	24.8		18.8		18.4	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		TRACE		TRACE	
HELIUM	1.91		0.63		0.66	
HEATING VALUE*	829		958		949	
SPECIFIC GRAVITY	0.716		0.720		0.711	

	INDEX 8839 SAMPLE 11487		INDEX 8840 SAMPLE 11488		INDEX 8841 SAMPLE 11489	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	CLIFFSIDE		CLIFFSIDE		CLIFFSIDE	
WELL NAME	BIVINS A-9		BIVINS A-5		BUSH B-3R	
LOCATION	SEC. 22, BLK. 6, BS&F SUR.		SEC. 26, BLK. 6, BS&F SUR.		SEC. 29, BLK. M-19, G&M SUR.	
OWNER	U.S.A.M.		U.S.A.M.		U.S.A.M.	
COMPLETED	01/11/42		03/12/42		12/01/66	
SAMPLED	05/14/68		03/14/68		05/14/68	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3412		3275		2443	
WELLHEAD PRESSURE,PSIG	446		651		515	
OPEN FLOW, MCFD	13000		7300		8100	
COMPONENT, MOLE PCT						
METHANE	66.3		65.3		70.9	
ETHANE	3.8		3.9		5.6	
PROPANE	1.7		1.7		3.0	
N-BUTANE	0.6		0.7		0.7	
ISOBUTANE	0.1		0.1		0.3	
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.1		0.3		0.0	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	23.9		24.9		18.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.2		0.1		0.1	
HYDROGEN	TRACE		TRACE		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.6		TRACE	
HELIUM	1.92		2.14		0.65	
HEATING VALUE*	829		827		958	
SPECIFIC GRAVITY	0.710		0.715		0.712	

	INDEX 8842 SAMPLE 11491		INDEX 8843 SAMPLE 11492		INDEX 8844 SAMPLE 11493	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	CLIFFSIDE		CLIFFSIDE		CLIFFSIDE	
WELL NAME	BIVINS A-9		BUSH A-8		BUSH A-9	
LOCATION	SEC. 2, BLK. JAD, BS&F SUR.		SEC. 28, BLK. 6, BS&F SUR.		SEC. 25, BLK. 6, BS&F SUR.	
OWNER	U.S.A.M.		U.S.A.M.		U.S.A.M.	
COMPLETED	04/04/65		05/26/63		03/09/65	
SAMPLED	05/16/68		05/16/68		05/16/68	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3378		3500		3436	
WELLHEAD PRESSURE,PSIG	615		604		631	
OPEN FLOW, MCFD	17700		2400		5700	
COMPONENT, MOLE PCT						
METHANE	65.0		65.2		65.3	
ETHANE	3.8		3.7		3.8	
PROPANE	1.9		1.8		1.8	
N-BUTANE	0.6		0.6		0.6	
ISOBUTANE	0.3		0.3		0.1	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.2		0.2		0.4	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	25.1		24.7		25.1	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		1.2		0.5	
HELIUM	1.84		1.77		1.82	
HEATING VALUE*	828		835		830	
SPECIFIC GRAVITY	0.720		0.726		0.717	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8845 SAMPLE 11494	INDEX 8846 SAMPLE 11495	INDEX 8847 SAMPLE 11507
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH B-1	FUQUA A-1	BUSH A-3
LOCATION	SEC. 19, BLK. 6, BS&F SUR.*	SEC. 18, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	U.S.B.M.
COMPLETED	07/12/28	05/17/28	06/05/62
SAMPLED	05/16/68	05/16/68	05/23/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3342	3585	3334
WELLHEAD PRESSURE,PSIG	646	637	657
OPEN FLOW, MCFD	2300	2000	6800
COMPONENT, MOLE PCT			
METHANE	67.3	64.2	60.7
ETHANE	3.8	3.9	3.5
PROPANE	1.8	1.8	1.7
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.4	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	23.0	25.9	24.5
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.2	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.7
HELIUM	1.74	1.89	7.34
HEATING VALUE*	345	830	772
SPECIFIC GRAVITY	0.710	0.723	0.689

	INDEX 8848 SAMPLE 11510	INDEX 8849 SAMPLE 11511	INDEX 8850 SAMPLE 11515
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-2	BIVINS A-2	BUSH A-4
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	U.S.B.M.
COMPLETED	10/24/39	02/02/35	04/15/43
SAMPLED	05/24/68	05/24/68	05/27/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3220	3313	3300
WELLHEAD PRESSURE,PSIG	667	651	660
OPEN FLOW, MCFD	3400	7300	4200
COMPONENT, MOLE PCT			
METHANE	25.6	63.2	65.2
ETHANE	1.5	3.8	3.8
PROPANE	0.8	2.1	1.7
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.4	0.2	0.4
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	26.9	24.4	24.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.2
HYDROGEN	0.6	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.6
HELIUM	43.12	2.94	2.26
HEATING VALUE*	355	863	833
SPECIFIC GRAVITY	0.524	0.737	0.720

	INDEX 8851 SAMPLE 11516	INDEX 8852 SAMPLE 11517	INDEX 8853 SAMPLE 11525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-5	BIVINS A-7	BIVINS A-8R
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	U.S.B.M.
COMPLETED	10/11/43	08/16/58	05/15/63
SAMPLED	05/28/68	05/28/68	06/03/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3350	3360	2408
WELLHEAD PRESSURE,PSIG	659	655	449
OPEN FLOW, MCFD	12300	7000	600
COMPONENT, MOLE PCT			
METHANE	37.7	60.4	65.2
ETHANE	2.2	3.5	3.7
PROPANE	1.1	1.6	1.6
N-BUTANE	0.3	0.7	0.5
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.1	25.6	26.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	TRACE
HELIUM	30.13	6.76	1.79
HEATING VALUE*	491	769	814
SPECIFIC GRAVITY	0.583	0.694	0.710

	INDEX 8854 SAMPLE 11526	INDEX 8855 SAMPLE 11904	INDEX 8856 SAMPLE 11905
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-7	BIVINS A-4	BIVINS A-5
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S.B.M.	U.S.B.M.	U.S.B.M.
COMPLETED	06/05/63	01/11/42	03/06/42
SAMPLED	06/03/68	06/10/69	06/10/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3477	3412	3275
WELLHEAD PRESSURE,PSIG	692	675	672
OPEN FLOW, MCFD	200	20000	7000
COMPONENT, MOLE PCT			
METHANE	69.7	46.3	64.0
ETHANE	3.8	3.2	3.6
PROPANE	1.7	2.2	1.8
N-BUTANE	0.6	0.8	0.5
ISOBUTANE	0.1	0.6	0.3
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.3	0.3	TRACE
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	21.3	38.7	25.0
OXYGEN	0.0	0.3	0.0
ARGON	0.1	0.3	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.2	0.6
HELIUM	1.44	3.92	3.79
HEATING VALUE*	864	697	796
SPECIFIC GRAVITY	0.700	0.814	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8857 SAMPLE 11906	INDEX 8858 SAMPLE 11907	INDEX 8859 SAMPLE 11908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-7	BUSH A-5	BUSH A-4
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S.A.M.	U.S.B.M.	U.S.B.M.
COMPLETED	08/16/58	06/05/62	04/15/43
SAMPLED	06/10/69	06/10/69	06/10/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	3334	3300
WELLHEAD PRESSURE,PSIG	689	682	684
OPEN FLOW, MCFD	6000	5300	4000
COMPONENT, MOLE PCT			
METHANE	58.7	51.5	62.2
ETHANE	5.3	2.9	3.6
PROPANE	1.7	1.6	1.8
N-BUTANE	0.4	0.5	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	26.9	24.8	25.6
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.3
HELIUM	6.49	17.40	5.50
HEATING VALUE*	722	661	779
SPECIFIC GRAVITY	0.677	0.641	0.695

	INDEX 8860 SAMPLE 11909	INDEX 8861 SAMPLE 12408	INDEX 8862 SAMPLE 12409
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-5	U.S.B.M. 1R	BUSH B-3R
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 37, BLK. 5, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.
OWNER	U.S.A.M.	U.S.B.M.	U.S.B.M.
COMPLETED	10/11/43	11/04/66	02/01/66
SAMPLED	06/10/69	09/11/70	09/11/70
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3350	2499	2450
WELLHEAD PRESSURE,PSIG	700	498	528
OPEN FLOW, MCFD	10000	2900	8100
COMPONENT, MOLE PCT			
METHANE	28.8	70.7	70.6
ETHANE	1.7	5.4	5.4
PROPANE	0.7	2.9	2.9
N-BUTANE	0.3	0.7	0.6
ISOBUTANE	0.0	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.5	18.8	19.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.4	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	40.09	0.65	0.64
HEATING VALUE*	365	940	932
SPECIFIC GRAVITY	0.529	0.707	0.705

	INDEX 8863 SAMPLE 12410	INDEX 8864 SAMPLE 12411	INDEX 8865 SAMPLE 13364
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH B-2R	U.S.B.M. 2R	BIVINS A-9
LOCATION	SEC. 30, BLK. M-19, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.	SEC. 2, BLK. JAD, BS&F SUR.
OWNER	U.S.A.M.	U.S.B.M.	U.S.B.M.
COMPLETED	01/01/65	11/12/66	04/04/65
SAMPLED	09/11/70	09/11/70	08/31/72
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2440	2507	3401
WELLHEAD PRESSURE,PSIG	514	521	666
OPEN FLOW, MCFD	7400	8300	20000
COMPONENT, MOLE PCT			
METHANE	70.8	70.5	64.4
ETHANE	5.4	5.5	3.7
PROPANE	2.9	3.0	2.1
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	18.8	18.8	25.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.7
HELIUM	0.65	0.64	1.93
HEATING VALUE*	937	938	814
SPECIFIC GRAVITY	0.706	0.707	0.717

	INDEX 8866 SAMPLE 13365	INDEX 8867 SAMPLE 13366	INDEX 8868 SAMPLE 13367
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-11	BIVINS A-15	BIVINS B-2
LOCATION	SEC. 2, BLK. JAD, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.
OWNER	U.S.A.M.	U.S.B.M.	U.S.B.M.
COMPLETED	01/26/64	09/19/6	10/24/64
SAMPLED	08/36/72	08/31/72	08/31/72
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3340	34 6	3484
WELLHEAD PRESSURE,PSIG	660	6	650
OPEN FLOW, MCFD	8500	11000	6800
COMPONENT, MOLE PCT			
METHANE	64.3	65.2	63.2
ETHANE	5.9	4.1	3.8
PROPANE	1.9	1.9	1.8
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.8	24.2	27.0
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.1	1.2
HELIUM	1.88	2.26	1.91
HEATING VALUE*	815	824	788
SPECIFIC GRAVITY	0.722	0.714	0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8869 SAMPLE 13368	INDEX 8870 SAMPLE 13369	INDEX 8871 SAMPLE 13697
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BUSH A-9	FUQUA NO. 3	BIVINS A-2
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 18, BLK.6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S.A.M.	U.S.A.M.	U.S.A.M.
COMPLETED	03/09/65	09/08/67	02/02/35
SAMPLED	08/31/72	08/31/72	08/30/73
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3436	3352	3313
WELLHEAD PRESSURE,PSIG	689	664	732
OPEN FLOW, MCFD	5400	15500	7900
COMPONENT, MOLE PCT			
METHANE	63.8	62.3	40.5
ETHANE	3.9	3.9	2.4
PROPANE	2.0	2.0	1.2
N-BUTANE	0.5	0.6	0.4
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	26.3	26.7	25.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	2.17	2.96	28.45
HEATING VALUE*	816	817	518
SPECIFIC GRAVITY	0.721	0.723	0.585

	INDEX 8872 SAMPLE 13698	INDEX 8873 SAMPLE 13699	INDEX 8874 SAMPLE 13700
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-5	BIVINS A-11	BUSH A-5
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 2, BLK. JAD, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.
OWNER	U.S.A.M.	U.S.A.M.	U.S.A.M.
COMPLETED	03/06/42	01/01/67	10/11/43
SAMPLED	08/30/73	08/30/73	08/30/73
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3275	3340	3350
WELLHEAD PRESSURE,PSIG	715	677	724
OPEN FLOW, MCFD	7000	8600	17000
COMPONENT, MOLE PCT			
METHANE	48.2	64.9	30.3
ETHANE	2.8	3.8	1.8
PROPANE	1.4	2.2	0.9
N-BUTANE	0.4	0.0	0.3
ISOBUTANE	0.4	0.8	0.2
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	25.1	25.3	26.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	TRACE	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.1
HELIUM	20.59	1.91	39.51
HEATING VALUE*	616	823	385
SPECIFIC GRAVITY	0.623	0.716	0.525

	INDEX 8875 SAMPLE 13701	INDEX 8876 SAMPLE 13702	INDEX 8877 SAMPLE 13703
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
WELL NAME	BIVINS A-7	BIVINS A-9	BIVINS A-15
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 2, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S.A.M.	U.S.A.M.	U.S.A.M.
COMPLETED	08/16/58	03/20/65	09/19/67
SAMPLED	08/30/73	08/30/73	08/30/73
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	3464	3476
WELLHEAD PRESSURE,PSIG	715	684	711
OPEN FLOW, MCFD	8200	18500	11000
COMPONENT, MOLE PCT			
METHANE	44.4	65.0	65.5
ETHANE	2.6	3.7	3.7
PROPANE	1.4	1.9	1.9
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.6	25.6	23.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.9
HELIUM	23.35	1.94	2.98
HEATING VALUE*	571	818	827
SPECIFIC GRAVITY	0.613	0.716	0.709

	INDEX 8878 SAMPLE 13704	INDEX 8879 SAMPLE 13705	INDEX 8880 SAMPLE 16027
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	LAMBERT NO. 3
WELL NAME	BIVINS B-1	BUSH A-4	EMENY-O'BRIEN NO. 2
LOCATION	SEC. 28, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 30, BLK. M-19, G&M SUR.
OWNER	U.S.A.M.	U.S.A.M.	BAKER & TAYLOR DRILLING CO.
COMPLETED	11/11/67	04/15/43	DRILL STEM TEST
SAMPLED	08/30/73	08/30/73	08/09/80
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3434	3300	3412
WELLHEAD PRESSURE,PSIG	688	719	65
OPEN FLOW, MCFD	10800	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.1	40.1	63.4
ETHANE	3.7	2.4	3.9
PROPANE	1.9	1.2	1.8
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.3	26.2	27.6
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	TRACE
HELIUM	3.11	28.43	1.83
HEATING VALUE*	423	515	803
SPECIFIC GRAVITY	0.707	0.585	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8881 SAMPLE 16028	INDEX 8882 SAMPLE 16029	INDEX 8883 SAMPLE 16030
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	LAMBERT NO. 3	LAMBERT NO. 3	LAMBERT NO. 3
WELL NAME	EMENY-O'BRIEN NO. 2	EMENY-O'BRIEN NO. 1	EMENY-O'BRIEN NO. 2
LOCATION	SEC. 30, BLK. M-19, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	08/--/80	08/--/80	08/09/80
FORMATION	PERM-WICHITA ALBANY	PERM-WICHITA ALBANY	PERM-WICHITA ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3412	3412	3412
WELLHEAD PRESSURE,PSIG	65	65	65
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.3	63.2	63.4
ETHANE	3.9	3.9	3.8
PROPANE	1.8	1.8	1.9
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.5	27.6	27.4
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	1.81	1.85	1.83
HEATING VALUE*	810	809	808
SPECIFIC GRAVITY	0.722	0.724	0.720

	INDEX 8884 SAMPLE 4067	INDEX 8885 SAMPLE 7838	INDEX 8886 SAMPLE 8388
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	NOT GIVEN	POTTER
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	WATER WELL	BARNES ESTATE R NO. 1	BIVINS NO. 2R
LOCATION	NOT GIVEN	SEC. 7, WARRICK SUR.	SEC. 21, BLK. 0-18, D&P SUR.
OWNER	L. H. PUCKETT	H. N. BURNETT	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	02/03/61	01/31/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	291	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	81.3	77.4
ETHANE	0.0	7.2	8.2
PROPANE	---	2.8	3.8
N-BUTANE	---	0.6	0.8
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	2.6	7.2	8.3
OXYGEN	0.6	TRACE	0.1
ARGON	---	TRACE	0.1
HYDROGEN	---	TRACE	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	97.2	0.1	0.1
HELIUM	0.15	0.10	0.30
HEATING VALUE*	0	1069	1087
SPECIFIC GRAVITY	1.512	0.668	0.701

	INDEX 8887 SAMPLE 209	INDEX 8888 SAMPLE 214	INDEX 8889 SAMPLE 1031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. 8	RANCH CREEK NO. 1	WARRICK NO. 1
LOCATION	SEC.109, BLK. 0-18, D&P SUR.	SEC. 2, BLK. B-11, ELRR SUR.	SEC. 16, BLK. Y-2
OWNER	AMARILLO OIL CO.	RANCH CREEK OIL & GAS CO.	AMARILLO OIL CO.
COMPLETED	09/--/19	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	04/15/20	04/16/20	04/20/25
FORMATION	-LIME	-BLUE GRANITE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1600	2363	2930
WELLHEAD PRESSURE,PSIG	435	650	430
OPEN FLOW, MCFD	107000	3000	70000
COMPONENT, MOLE PCT			
METHANE	76.4	72.3	68.4
ETHANE	15.0	15.6	20.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	11.0	9.9
OXYGEN	0.6	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.4
HELIUM	0.49	0.60	0.50
HEATING VALUE*	1043	1012	1062
SPECIFIC GRAVITY	0.661	0.676	0.701

	INDEX 8890 SAMPLE 1259	INDEX 8891 SAMPLE 1896	INDEX 8892 SAMPLE 2335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-4	BIVINS A-1	TUCK-TRIGG NO. 1
LOCATION	SEC. 20, BLK. 0-18, D&P SUR.	SEC. 39, BLK. M-20, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.
OWNER	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/--/25	11/15/29	04/29/20
SAMPLED	04/08/26	11/15/29	05/25/31
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2680	2560
WELLHEAD PRESSURE,PSIG	430	415	NOT GIVEN
OPEN FLOW, MCFD	4500	56957	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	71.3	67.0
ETHANE	20.4	17.6	15.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.7	9.7	17.2
OXYGEN	1.8	0.6	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.0
HELIUM	0.25	0.45	0.64
HEATING VALUE*	1054	1038	948
SPECIFIC GRAVITY	0.831	0.686	0.698

* CALCULATED GROSS BTU PER CU.FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8893 SAMPLE 2883	INDEX 8894 SAMPLE 3287	INDEX 8895 SAMPLE 3297
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	COUGHLAN NO. A-1	MASTERSON NO. J-2	MASTERSON NO. N-1
LOCATION	SEC. 1, BLK. O-18 , D&P SUR.	SEC. 69, BLK. O-18, D&P SUR.	SEC. 17, BLK. 3, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/26/36	NOT GIVEN	NOT GIVEN
SAMPLED	08/22/41	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2326	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.4	67.2	70.1
ETHANE	21.7	17.7	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.9	13.8	10.1
OXYGEN	0.0	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.77	0.90	0.54
HEATING VALUE*	1021	998	1049
SPECIFIC GRAVITY	0.722	0.698	0.690

	INDEX 8896 SAMPLE 3333	INDEX 8897 SAMPLE 3347	INDEX 8898 SAMPLE 3355
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. G-2	MASTERSON NO. E-2	BIVINS NO. D-3
LOCATION	NOT GIVEN	SEC. 70, BLK. O-18, D&P SUR.	SEC. 15, BLK. M-20, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.8	73.5	71.8
ETHANE	18.8	19.5	17.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.2	6.3	9.2
OXYGEN	0.4	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.74	0.25	0.54
HEATING VALUE*	1024	1094	1046
SPECIFIC GRAVITY	0.698	0.678	0.684

	INDEX 8899 SAMPLE 3361	INDEX 8900 SAMPLE 3366	INDEX 8901 SAMPLE 3741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-20	BIVINS NO. A-16	BIVINS NO. A-30
LOCATION	SEC. 35, BLK. M-20, G&M SUR.	SEC. 33, BLK. M-20, G&M SUR.	SEC. 192, BLK. 2, AB&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	NOT GIVEN	NOT GIVEN	04/26/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3668
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	31
COMPONENT, MOLE PCT			
METHANE	72.5	71.7	41.1
ETHANE	16.6	17.9	7.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.6	9.2	37.1
OXYGEN	0.4	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	11.7
HELIUM	0.56	0.54	1.95
HEATING VALUE*	1032	1047	558
SPECIFIC GRAVITY	0.679	0.684	0.853

	INDEX 8902 SAMPLE 5059	INDEX 8903 SAMPLE 5196	INDEX 8904 SAMPLE 5410
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-77	BIVINS NO. A-83	BIVINS A-92
LOCATION	SEC. 71, BLK. 2, G&M SUR.	SEC. 45, BLK. O-18, D&P SUR.	SEC. 34, BLK.A-11, EL&RR SUR
OWNER	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/02/51	03/20/52	03/10/53
SAMPLED	07/31/51	05/01/52	03/31/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2725	2383	2230
WELLHEAD PRESSURE,PSIG	366	352	310
OPEN FLOW, MCFD	37400	11975	3000
COMPONENT, MOLE PCT			
METHANE	71.2	72.5	72.9
ETHANE	5.1	4.2	4.9
PROPANE	2.7	2.9	2.8
N-BUTANE	0.6	0.9	0.8
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	17.9	16.6	16.3
OXYGEN	0.3	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	1.05	1.04	0.97
HEATING VALUE*	936	959	960
SPECIFIC GRAVITY	0.704	0.699	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8905 SAMPLE 5411		INDEX 8906 SAMPLE 5412		INDEX 8907 SAMPLE 5425	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-89		BIVINS A-88		BIVINS A-91	
LOCATION	SEC. 21, BLK. 2, G&M SUR.		SEC. 21, BLK. 0-18, D&P SUR.		SEC. 58, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	11/12/52		10/14/52		03/20/53	
SAMPLED	03/11/53		03/11/53		03/25/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2440		2427		2272	
WELLHEAD PRESSURE,PSIG	349		342		360	
OPEN FLOW, MCFD	10900		62000		10200	
COMPONENT, MOLE PCT						
METHANE	72.1		72.6		72.7	
ETHANE	4.7		5.2		4.6	
PROPANE	2.7		3.0		2.7	
N-BUTANE	0.8		0.8		0.8	
ISOBUTANE	0.4		0.4		0.3	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	17.4		16.3		17.2	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.2		0.1	
HELIUM	1.03		0.99		1.06	
HEATING VALUE*	943		969		948	
SPECIFIC GRAVITY	0.702		0.705		0.700	

	INDEX 8908 SAMPLE 5468		INDEX 8909 SAMPLE 5469		INDEX 8910 SAMPLE 5568	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-95		BIVINS A-96		BIVINS NO. A-98	
LOCATION	SEC. 37, BLK. 0-18, D&P SUR.		SEC. 16, BLK. 0-18, D&P SUR.		SEC. 59, BLK. 2, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	04/24/53		04/25/53		04/18/53	
SAMPLED	05/15/53		05/15/53		12/01/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2438		2462		2431	
WELLHEAD PRESSURE,PSIG	302		320		367	
OPEN FLOW, MCFD	12000		19200		7400	
COMPONENT, MOLE PCT						
METHANE	72.7		72.5		72.0	
ETHANE	5.4		5.6		5.1	
PROPANE	2.8		3.1		2.7	
N-BUTANE	0.9		0.9		0.8	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	16.0		15.7		17.1	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.98		0.96		1.09	
HEATING VALUE*	972		978		954	
SPECIFIC GRAVITY	0.704		0.704		0.704	

	INDEX 8911 SAMPLE 5569		INDEX 8912 SAMPLE 5570		INDEX 8913 SAMPLE 5571	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS NO. A-99		BIVINS NO. A-100		BIVINS NO. A-101	
LOCATION	SEC. 44, BLK. 0-18, D&P SUR.		SEC. 36, BLK. 0-18, D&P SUR.		SEC. 34, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	10/02/53		09/10/53		09/30/53	
SAMPLED	12/01/53		12/01/53		12/01/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2295		2550		2605	
WELLHEAD PRESSURE,PSIG	426		313		333	
OPEN FLOW, MCFD	4400		10600		27800	
COMPONENT, MOLE PCT						
METHANE	72.2		72.7		72.6	
ETHANE	5.1		5.4		5.4	
PROPANE	2.8		2.9		2.9	
N-BUTANE	0.9		0.9		0.9	
ISOBUTANE	0.3		0.4		0.3	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.1		0.1		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	16.8		15.9		15.9	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.1		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	1.05		0.97		0.98	
HEATING VALUE*	958		974		974	
SPECIFIC GRAVITY	0.704		0.704		0.703	

	INDEX 8914 SAMPLE 5572		INDEX 8915 SAMPLE 5573		INDEX 8916 SAMPLE 5574	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS NO. A-102		BIVINS NO. A-103		BIVINS NO. A-104	
LOCATION	SEC. 31, BLK. 0-18, D&P SUR.		SEC. 81, BLK. 2, G&M SUR.		SEC. 57, BLK. 2, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	09/10/53		10/02/53		09/28/53	
SAMPLED	12/01/53		12/01/53		12/01/53	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2370		2409		2350	
WELLHEAD PRESSURE,PSIG	335		325		349	
OPEN FLOW, MCFD	36000		7300		7800	
COMPONENT, MOLE PCT						
METHANE	72.6		72.6		72.2	
ETHANE	5.5		5.4		5.2	
PROPANE	2.8		2.9		2.8	
N-BUTANE	0.9		0.9		0.8	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	0.3		0.2		0.3	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	15.7		15.9		16.7	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.1		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	1.09		0.99		1.13	
HEATING VALUE*	979		974		960	
SPECIFIC GRAVITY	0.705		0.704		0.704	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8917 SAMPLE 5575	INDEX 8918 SAMPLE 5576	INDEX 8919 SAMPLE 5577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-105	BIVINS NO. A-106	BIVINS NO. 109
LOCATION	SEC. 38, BLK. O-18, D&P SUR.	SEC. 30,BLK.B-11,EL&RR SUR.	SEC. 70, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/23/53	10/26/53	12/06/53
SAMPLED	12/01/53	12/01/53	12/11/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2430	2355	2475
WELLHEAD PRESSURE,PSIG	317	348	371
OPEN FLOW, MCFD	23000	20800	12600
COMPONENT, MOLE PCT			
METHANE	72.6	71.8	71.3
ETHANE	5.6	5.0	5.1
PROPANE	3.0	2.8	2.7
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.6	17.2	17.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.96	1.14	1.17
HEATING VALUE*	984	950	943
SPECIFIC GRAVITY	0.707	0.704	0.704

	INDEX 8920 SAMPLE 5579	INDEX 8921 SAMPLE 5580	INDEX 8922 SAMPLE 5581
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	COUGHLIN NO. A-2	BIVINS NO. 108	BIVINS NO. 110
LOCATION	SEC. 77, BLK. O-18, D&P SUR.	SEC. 17, BLK. O-18, D&P SUR.	SEC. 8, BLK. O-18, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/12/53	NOT GIVEN	12/10/53
SAMPLED	12/15/53	12/15/53	12/15/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2385	2605	2500
WELLHEAD PRESSURE,PSIG	300	300	328
OPEN FLOW, MCFD	6800	3000	7800
COMPONENT, MOLE PCT			
METHANE	74.3	71.8	72.8
ETHANE	6.0	5.5	5.9
PROPANE	3.4	2.9	3.3
N-BUTANE	1.0	0.8	1.0
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	13.2	16.4	15.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.76	1.11	0.94
HEATING VALUE*	1029	960	1000
SPECIFIC GRAVITY	0.708	0.706	0.711

	INDEX 8923 SAMPLE 5747	INDEX 8924 SAMPLE 5748	INDEX 8925 SAMPLE 5760
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. B-32	BIVINS NO. A-124	BIVINS A-5
LOCATION	SEC. 64, BLK. 47, H&TC SUR.	SEC. 23, BLK. 5, G&M SUR.	SEC. 25, BLK. O-18,D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	10/10/26
SAMPLED	01/03/55	01/03/55	02/16/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2500	2500	2374
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	74.4	73.4
ETHANE	5.8	5.2	5.2
PROPANE	2.8	2.6	2.9
N-BUTANE	0.7	0.7	0.9
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.6	14.9	15.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.1
HELIUM	0.60	0.90	0.96
HEATING VALUE*	1000	962	982
SPECIFIC GRAVITY	0.687	0.692	0.702

	INDEX 8926 SAMPLE 5764	INDEX 8927 SAMPLE 5770	INDEX 8928 SAMPLE 5824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS E-1	BIVINS A-13	MASTERSON NO. A-25
LOCATION	SEC. 27, BLK. O-18,D&P SUR.	SEC. 7, BLK. O-18, D&P SUR.	SEC. 12, BLK. B-11,EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/07/28	09/15/30	NOT GIVEN
SAMPLED	01/26/55	01/26/55	05/03/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2175	NOT GIVEN	2802
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	310
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	28300
COMPONENT, MOLE PCT			
METHANE	73.6	73.1	73.7
ETHANE	5.4	5.6	5.8
PROPANE	2.6	3.3	3.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.3	15.1	14.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.96	0.98	0.89
HEATING VALUE*	969	985	994
SPECIFIC GRAVITY	0.694	0.704	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8929 SAMPLE 5921	INDEX 8930 SAMPLE 5922	INDEX 8931 SAMPLE 5923
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-129	BIVINS A-128	MASTERSON A-26
LOCATION	SEC. 32, BLK. 0-18, D&P SUR.	SEC. 6, BLK. 0-18, D&P SUR.	SEC. 83, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/11/55	NOT GIVEN	NOT GIVEN
SAMPLED	08/23/55	08/24/55	08/24/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2882	2622	2545
WELLHEAD PRESSURE,PSIG	316	312	309
OPEN FLOW, MCFD	63000	136000	34000
COMPONENT, MOLE PCT			
METHANE	72.5	73.0	73.4
ETHANE	5.4	5.8	5.5
PROPANE	2.9	3.0	3.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.0	15.0	15.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.97	0.91	0.87
HEATING VALUE*	972	987	991
SPECIFIC GRAVITY	0.706	0.704	0.706

	INDEX 8932 SAMPLE 5930	INDEX 8933 SAMPLE 5931	INDEX 8934 SAMPLE 5932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON J-4	MASTERSON J-2	CRAWFORD D-1
LOCATION	SEC. 84, BLK. 8-11, EL&RR SUR	SEC. 68, BLK. 0-18, D&P SUR.	SEC. 68, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/16/53	09/16/27	12/05/48
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2486	2388	2915
WELLHEAD PRESSURE,PSIG	299	295	311
OPEN FLOW, MCFD	6144	2728	2286
COMPONENT, MOLE PCT			
METHANE	73.2	73.5	73.6
ETHANE	5.7	6.0	6.2
PROPANE	3.4	3.2	3.2
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	14.3	13.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.88	0.86	0.82
HEATING VALUE*	1002	1008	1009
SPECIFIC GRAVITY	0.709	0.709	0.705

	INDEX 8935 SAMPLE 5933	INDEX 8936 SAMPLE 5934	INDEX 8937 SAMPLE 5936
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-44	MASTERSON J-5	BRADLEY A-1
LOCATION	SEC. 81, BLK. B-3, G&M SUR.	SEC. 11, BLK. B-3, G&M SUR.	SEC. 8, BLK. B-11, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/53	10/02/53	08/11/42
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2318	2665	2345
WELLHEAD PRESSURE,PSIG	312	255	306
OPEN FLOW, MCFD	1390	424	16446
COMPONENT, MOLE PCT			
METHANE	73.5	74.2	72.6
ETHANE	6.2	6.9	6.0
PROPANE	3.3	3.4	3.8
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.0	12.4	14.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.84	0.70	0.93
HEATING VALUE*	1016	1042	1008
SPECIFIC GRAVITY	0.710	0.713	0.712

	INDEX 8938 SAMPLE 5937	INDEX 8939 SAMPLE 6015	INDEX 8940 SAMPLE 6023
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-38	MASTERSON I-1	COUGHLAN A-1
LOCATION	SEC. 67, BLK. 0-18, D&P SUR.	SEC. 20, BLK. 3, G&M SUR.	SEC. 1, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/09/53	12/13/22	12/26/36
SAMPLED	NOT GIVEN	01/31/56	02/10/56
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	-LIME & DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2443	1920	2326
WELLHEAD PRESSURE,PSIG	332	342	308
OPEN FLOW, MCFD	463	16000	7848
COMPONENT, MOLE PCT			
METHANE	73.7	76.5	73.9
ETHANE	6.5	7.6	6.0
PROPANE	4.5	3.7	5.4
N-BUTANE	1.2	0.9	1.0
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	11.3	9.6	11.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.79	2.44	0.80
HEATING VALUE*	1082	1070	1023
SPECIFIC GRAVITY	0.711	0.694	0.709

* DRY BTU AT 14.73 PSIA AND 60 DEG. F.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8941 SAMPLE 6228	INDEX 8942 SAMPLE 6229	INDEX 8943 SAMPLE 6231
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MATERSON B NO. 66	BIVINS A NO. 130	BIVINS A NO. 139
LOCATION	SEC. 104, BLK. O-18, D&PSUR.	SEC. 33, BLK. O-18, D&P SUR.	SEC. 14, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/08/56	07/17/55	04/30/56
SAMPLED	01/23/57	01/23/57	01/23/57
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1850	2453	2196
WELLHEAD PRESSURE,PSIG	304	345	297
OPEN FLOW, MCFD	21	22700	110000
COMPONENT, MOLE PCT			
METHANE	76.4	72.6	73.5
ETHANE	7.0	5.3	5.8
PROPANE	3.4	2.6	2.9
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	10.5	16.5	15.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.63	1.03	0.95
HEATING VALUE*	1056	957	986
SPECIFIC GRAVITY	0.696	0.703	0.700

	INDEX 8944 SAMPLE 6232	INDEX 8945 SAMPLE 6287	INDEX 8946 SAMPLE 6288
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A NO. 143	MASTERSON A-19	MASTERSON G-4
LOCATION	SEC. 55, BLK. 2, G&M SUR.	SEC. 3, BLK. O-18, D&P SUR.	SEC. 79, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/27/56	12/14/50	07/26/51
SAMPLED	01/23/57	03/02/57	03/02/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2590	2322	2310
WELLHEAD PRESSURE,PSIG	315	295	285
OPEN FLOW, MCFD	5200	18300	20000
COMPONENT, MOLE PCT			
METHANE	73.1	73.3	73.7
ETHANE	5.5	6.0	5.6
PROPANE	2.7	3.1	3.1
N-BUTANE	0.6	0.9	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.9	14.5	14.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	1.03	0.94	0.89
HEATING VALUE*	968	996	1001
SPECIFIC GRAVITY	0.699	0.703	0.703

	INDEX 8947 SAMPLE 6289	INDEX 8948 SAMPLE 6290	INDEX 8949 SAMPLE 6291
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-23	MASTERSON J-3	MASTERSON J-6
LOCATION	SEC. 84, BLK. 2, G&M SUR.	SEC. 10, BLK. B-11, EL&RRSUR	SEC. 80, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/25/53	06/09/51	10/18/56
SAMPLED	03/02/57	03/02/57	03/02/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2187	2225	2859
WELLHEAD PRESSURE,PSIG	297	295	284
OPEN FLOW, MCFD	18260	17000	1680
COMPONENT, MOLE PCT			
METHANE	73.1	73.6	71.4
ETHANE	5.9	6.0	5.4
PROPANE	3.1	3.2	2.5
N-BUTANE	0.9	1.0	0.6
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.8	14.2	17.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.0	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.96	0.93	1.18
HEATING VALUE*	1000	1008	933
SPECIFIC GRAVITY	0.709	0.706	0.701

	INDEX 8950 SAMPLE 6292	INDEX 8951 SAMPLE 6308	INDEX 8952 SAMPLE 6309
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-28	MASTERSON B-61	MASTERSON C-1
LOCATION	SEC. 13, BLK. B-11, EL&RRSUR	SEC. 70, BLK. O-18, D&P SUR.	SEC. 65, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/09/56	11/11/55	12/08/18
SAMPLED	03/02/57	05/09/57	05/09/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR.WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2713	2227	1780
WELLHEAD PRESSURE,PSIG	272	292	295
OPEN FLOW, MCFD	11800	5128	12067
COMPONENT, MOLE PCT			
METHANE	71.7	74.2	74.0
ETHANE	5.8	6.2	6.3
PROPANE	2.9	3.3	3.4
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	16.1	13.1	13.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	1.07	0.83	0.82
HEATING VALUE*	973	1026	1028
SPECIFIC GRAVITY	0.711	0.704	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8953 SAMPLE 6310		INDEX 8954 SAMPLE 6311		INDEX 8955 SAMPLE 6312	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-50		CRAWFORD D-2		BIVINS A-70	
LOCATION	SEC. 28, BLK. O-18, D&P SUR.		SEC. 20, BLK. O-18, D&P SUR.		SEC. 9, BLK. O-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	05/23/49		01/31/51		01/22/51	
SAMPLED	05/09/57		05/09/57		05/09/57	
FORMATION	-RED GR.		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2633		2270		2350	
WELLHEAD PRESSURE,PSIG	303		288		299	
OPEN FLOW, MCFD	7855		7634		10903	
COMPONENT, MOLE PCT						
METHANE	72.8		73.3		73.0	
ETHANE	5.6		5.9		5.9	
PROPANE	2.8		3.1		3.0	
N-BUTANE	0.9		0.9		0.8	
ISOBUTANE	0.5		0.6		0.6	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	15.5		14.3		14.9	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		TRACE		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	1.08		0.92		0.97	
HEATING VALUE*	979		1005		997	
SPECIFIC GRAVITY	0.704		0.704		0.708	

	INDEX 8956 SAMPLE 6313		INDEX 8957 SAMPLE 6314		INDEX 8958 SAMPLE 6316	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	CRAWFORD D-2		BIVINS A-149		BIVINS A-69	
LOCATION	SEC. 8, BLK. O-18, D&P SUR.		SEC. 20, BLK. O-18, D&P SUR.		SEC. 5, BLK. O-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	11/06/49		10/29/56		11/17/50	
SAMPLED	05/09/57		05/09/57		05/09/57	
FORMATION	PERM-WICHITA-ALBANY&GR. WASH		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2330		2580		2390	
WELLHEAD PRESSURE,PSIG	300		292		301	
OPEN FLOW, MCFD	26724		3100		26871	
COMPONENT, MOLE PCT						
METHANE	72.7		72.6		73.0	
ETHANE	5.9		5.4		5.7	
PROPANE	3.0		2.9		3.0	
N-BUTANE	0.9		0.8		0.9	
ISOBUTANE	0.6		0.5		0.6	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	15.0		15.8		15.0	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.97		1.01		0.98	
HEATING VALUE*	988		973		993	
SPECIFIC GRAVITY	0.704		0.704		0.707	

	INDEX 8959 SAMPLE 6317		INDEX 8960 SAMPLE 6318		INDEX 8961 SAMPLE 6319	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-38		BIVINS A-32		BIVINS A-31	
LOCATION	SEC. 10, BLK. O-18, D&P SUR.		SEC. 22, BLK. O-18, D&P SUR.		SEC. 15, BLK. O-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	05/09/49		01/30/47		12/18/45	
SAMPLED	05/09/57		05/09/57		05/09/57	
FORMATION	PERM-GRANITE WASH		PERM-WICHITA-ALBANY&GR. WASH		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2260		2290		2145	
WELLHEAD PRESSURE,PSIG	296		371		297	
OPEN FLOW, MCFD	11343		519		3594	
COMPONENT, MOLE PCT						
METHANE	73.0		73.0		73.0	
ETHANE	5.9		5.8		5.9	
PROPANE	3.2		3.2		3.1	
N-BUTANE	0.9		1.0		0.9	
ISOBUTANE	0.7		0.5		0.6	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.0		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	14.6		14.8		14.7	
OXYGEN	0.0		TRACE		0.1	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.91		0.96		0.95	
HEATING VALUE*	1020		1008		998	
SPECIFIC GRAVITY	0.707		0.712		0.708	

	INDEX 8962 SAMPLE 7073		INDEX 8963 SAMPLE 7096		INDEX 8964 SAMPLE 7097	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-158		STATE NO. 1		BRITAIN WEYMOUTH NO. 5-6	
LOCATION	SEC. 54, W. T. PALMER SUR.		SO. OF 65-47 IN RIVER BED		SEC. 6, BLK. RRM, RRM SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	12/23/58		01/16/58		08/24/54	
SAMPLED	05/13/59		06/02/59		06/02/59	
FORMATION	PERM-WICHITA-ALBANY&GR. WASH		PERM-WICHITA-ALBANY&GR. WASH		PERM-WICHITA-ALBANY&GR. WASH	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2485		2266		1975	
WELLHEAD PRESSURE,PSIG	2446		497		280	
OPEN FLOW, MCFD	8220		17800		8984	
COMPONENT, MOLE PCT						
METHANE	77.7		74.3		76.7	
ETHANE	6.4		4.8		7.3	
PROPANE	3.3		1.7		3.6	
N-BUTANE	1.0		0.4		1.0	
ISOBUTANE	0.5		0.3		0.5	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	10.3		15.1		9.7	
OXYGEN	0.1		TRACE		TRACE	
ARGON	TRACE		1.6		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.50		0.40		0.50	
HEATING VALUE*	1369		1314		1074	
SPECIFIC GRAVITY	0.697		0.696		0.698	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** USE OF FOR ABSORPTION OF H2S DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8965 SAMPLE 7098	INDEX 8966 SAMPLE 7099	INDEX 8967 SAMPLE 7100
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-29	MASTERSON B-6	MASTERSON B-27
LOCATION	SEC. 13, BLK. 3, G&M SUR.	SEC. 19, BLK. 3, G&M SUR.	SEC. 27, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/23/56	12/23/42	08/23/51
SAMPLED	06/02/59	06/02/59	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2502	2140	2195
WELLHEAD PRESSURE,PSIG	364	282	276
OPEN FLOW, MCFD	900	32980	3358
COMPONENT, MOLE PCT			
METHANE	75.5	76.4	77.6
ETHANE	6.1	7.3	6.6
PROPANE	2.6	3.7	3.3
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.9	9.9	10.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.70	0.30	0.50
HEATING VALUE*	1003	1069	1060
SPECIFIC GRAVITY	0.694	0.696	0.692

	INDEX 8968 SAMPLE 7101	INDEX 8969 SAMPLE 7102	INDEX 8970 SAMPLE 7103
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-29	MASTERSON B-31	MASTERSON B-32
LOCATION	SEC. 28, BLK. 3, G&M SUR.	SEC. 65, BLK. 47, H&TC SUR.	SEC. 64, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/51	03/05/52	04/23/52
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1796	1820	2230
WELLHEAD PRESSURE,PSIG	242	273	201
OPEN FLOW, MCFD	921	15241	2293
COMPONENT, MOLE PCT			
METHANE	77.5	77.5	76.4
ETHANE	6.4	6.9	5.9
PROPANE	3.8	3.3	2.6
N-BUTANE	1.2	0.9	0.7
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.2	9.8	12.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.50	0.50	0.60
HEATING VALUE*	1094	1064	1006
SPECIFIC GRAVITY	0.705	0.694	0.689

	INDEX 8971 SAMPLE 7104	INDEX 8972 SAMPLE 7105	INDEX 8973 SAMPLE 7106
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-33	MASTERSON B-26	MASTERSON B-37
LOCATION	SEC. 18, BLK. 3, G&M SUR.	SEC. 63, BLK. 26, H&TC SUR.	SEC. 66, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/05/52	08/18/51	01/13/53
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2129	1810	2640
WELLHEAD PRESSURE,PSIG	271	274	237
OPEN FLOW, MCFD	31856	7370	936
COMPONENT, MOLE PCT			
METHANE	76.5	77.6	77.2
ETHANE	7.2	6.4	6.4
PROPANE	3.7	3.5	3.1
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.8	9.6	10.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.50	0.60
HEATING VALUE*	1078	1078	1039
SPECIFIC GRAVITY	0.700	0.700	0.689

	INDEX 8974 SAMPLE 7107	INDEX 8975 SAMPLE 7108	INDEX 8976 SAMPLE 7109
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-34	MASTERSON B-39	MASTERSON B-57
LOCATION	SEC. 15, BLK. 3, G&M SUR.	SEC. 107, BLK. 0-18, D&P SUR	SEC. 68, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/14/52	05/04/53	03/23/55
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2015	2402	2230
WELLHEAD PRESSURE,PSIG	271	275	272
OPEN FLOW, MCFD	1302	3413	5316
COMPONENT, MOLE PCT			
METHANE	76.9	75.5	71.7
ETHANE	7.2	6.8	7.4
PROPANE	3.6	3.6	3.7
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.6	0.6	0.7
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	9.8	11.2	13.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.3
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.60	0.20
HEATING VALUE*	1074	1060	1088
SPECIFIC GRAVITY	0.697	0.707	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8977 SAMPLE 7111	INDEX 8978 SAMPLE 7112	INDEX 8979 SAMPLE 7113
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-58	MASTERSON B-59	MASTERSON B-69
LOCATION	SEC. 67, BLK. 47, H&TC SUR.	SEC. 16, BLK. 3, G&M SUR.	SEC. 21, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/17/55	04/27/55	09/01/56
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2444	1920	2100
WELLHEAD PRESSURE,PSIG	208	251	285
OPEN FLOW, MCFD	219	2731	28374
COMPONENT, MOLE PCT			
METHANE	77.2	77.2	75.9
ETHANE	6.9	7.0	7.1
PROPANE	3.3	3.4	3.7
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.9	9.7	10.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.40	0.60
HEATING VALUE*	1074	1068	1068
SPECIFIC GRAVITY	0.698	0.694	0.703

	INDEX 8980 SAMPLE 7114	INDEX 8981 SAMPLE 7115	INDEX 8982 SAMPLE 7116
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-60	MASTERSON B-71	MASTERSON B-70
LOCATION	SEC. 106, BLK. 9-18, D&P SUR	SEC. 70, BLK. 47, H&TC SUR.	SEC. 44, BLK. B-11, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/24/55	07/28/56	09/14/56
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2067	2301	2110
WELLHEAD PRESSURE,PSIG	291	320	273
OPEN FLOW, MCFD	2534	133	2539
COMPONENT, MOLE PCT			
METHANE	76.6	75.6	76.4
ETHANE	6.8	6.1	7.7
PROPANE	3.5	2.9	3.8
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.4	12.5	9.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.50	0.70	0.40
HEATING VALUE*	1070	1016	1087
SPECIFIC GRAVITY	0.701	0.694	0.702

	INDEX 8983 SAMPLE 7117	INDEX 8984 SAMPLE 7118	INDEX 8985 SAMPLE 7119
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-79	MASTERSON B-72	MASTERSON F-1
LOCATION	SEC. 22, BLK. 3, G&P SUR.	SEC. 5, BLK. B-11, EL&RR SUR	SEC. 14, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/10/58	09/22/56	10/01/21
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2176	2370	1787
WELLHEAD PRESSURE,PSIG	279	212	272
OPEN FLOW, MCFD	77000	1945	8690
COMPONENT, MOLE PCT			
METHANE	76.7	74.2	76.3
ETHANE	7.1	6.3	7.2
PROPANE	3.6	2.7	3.6
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.9	13.5	10.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.1
HELIUM	0.51	0.80	0.50
HEATING VALUE*	1075	1004	1073
SPECIFIC GRAVITY	0.699	0.703	0.701

	INDEX 8986 SAMPLE 7120	INDEX 8987 SAMPLE 7121	INDEX 8988 SAMPLE 7122
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-80	MASTERSON I-1	MASTERSON I-1
LOCATION	SEC. 62, BLK. 47, H&TC SUR.	SEC. 20, BLK. 3, G&M SUR.	SEC. 82, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/31/58	12/13/22	11/--/20
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1996	1410	1605
WELLHEAD PRESSURE,PSIG	274	276	276
OPEN FLOW, MCFD	10700	14319	805
COMPONENT, MOLE PCT			
METHANE	77.7	76.5	77.5
ETHANE	6.5	7.2	7.3
PROPANE	3.8	3.5	3.7
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.3	10.0	9.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.50	2.50	0.40
HEATING VALUE*	1078	1067	1081
SPECIFIC GRAVITY	0.695	0.697	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8989 SAMPLE 7123	INDEX 8990 SAMPLE 7124	INDEX 8991 SAMPLE 7288
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON H-1	MASTERSON N-1	MASTERSON B-82
LOCATION	SEC. 9, BLK. B-11, EL&RR SUR	SEC. 17, BLK. 3, G&M SUR.	SEC. 66, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/01/21	05/24/30	NOT GIVEN
SAMPLED	05/--/58	05/--/58	11/24/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1767	1980	2045
WELLHEAD PRESSURE,PSIG	277	262	260
OPEN FLOW, MCFD	330	7626	5100
COMPONENT, MOLE PCT			
METHANE	76.7	76.9	74.1
ETHANE	8.0	7.2	6.1
PROPANE	3.8	3.6	3.3
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	8.9	9.6	13.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.50	0.80
HEATING VALUE*	1048	1084	1016
SPECIFIC GRAVITY	0.698	0.702	0.701

	INDEX 8992 SAMPLE 7562	INDEX 8993 SAMPLE 7612	INDEX 8994 SAMPLE 7730
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-84	MASTERSON B-83	MASTERSON B-86
LOCATION	SEC. 105, BLK. 0-18, D&P SUR	SEC. 93, BLK. 0-18, D&P SUR.	SEC. 62, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	06/03/60	09/08/60
SAMPLED	05/03/60	07/18/60	10/12/60
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1610	2175	1926
WELLHEAD PRESSURE,PSIG	248	2528	258
OPEN FLOW, MCFD	3000	69000	32
COMPONENT, MOLE PCT			
METHANE	75.8	73.4	74.8
ETHANE	6.8	6.9	7.8
PROPANE	3.5	4.1	4.1
N-BUTANE	0.7	1.4	1.1
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.1	12.1	10.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.60	0.70	0.50
HEATING VALUE*	1057	1062	1092
SPECIFIC GRAVITY	0.698	0.717	0.717

	INDEX 8995 SAMPLE 7731	INDEX 8996 SAMPLE 7770	INDEX 8997 SAMPLE 8051
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-88	BIVINS A-159	MASTERSON B
LOCATION	SEC. 1, BLK. B-11, EL&RR SUR	SEC. 13, BLK. 0-18, D&P SUR.	SEC. 67, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.
COMPLETED	10/10/60	10/27/60	04/13/61
SAMPLED	10/14/60	11/10/60	07/05/61
FORMATION	PERM-WICHITA-ALBANY&GR.WASH	PERM-GRANITE WASH	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2390	2240	1746
WELLHEAD PRESSURE,PSIG	252	252	271
OPEN FLOW, MCFD	5600	11100	15000
COMPONENT, MOLE PCT			
METHANE	70.8	64.9	77.5
ETHANE	7.8	5.4	8.9
PROPANE	4.3	2.9	4.1
N-BUTANE	1.3	0.9	0.9
ISOBUTANE	0.8	0.4	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	12.9	23.4	6.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	TRACE
HELIUM	0.70	0.60	0.20
HEATING VALUE*	1093	900	1135
SPECIFIC GRAVITY	0.745	0.742	0.702

	INDEX 8998 SAMPLE 8195	INDEX 8999 SAMPLE 8253	INDEX 9000 SAMPLE 8440
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	WARRICK NO. 1-R	STATE OF TEXAS NO. 1	MASTERSON B-90
LOCATION	SEC. 16, BLK. Y-2, TT&RR SUR	CANADIAN RIVER BED	SEC. 10, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	06/22/57	06/30/61
SAMPLED	09/16/61	09/06/61	03/09/62
FORMATION	PERM-TUBB	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2158	2106
WELLHEAD PRESSURE,PSIG	2	292	240
OPEN FLOW, MCFD	NOT GIVEN	5200	7100
COMPONENT, MOLE PCT			
METHANE	81.2	76.6	74.1
ETHANE	6.1	6.3	7.3
PROPANE	2.4	3.1	3.9
N-BUTANE	0.6	0.8	1.2
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.9	11.6	11.4
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.15	0.54	0.65
HEATING VALUE*	1038	1032	1075
SPECIFIC GRAVITY	0.664	0.691	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9001 SAMPLE 8441	INDEX 9002 SAMPLE 8443	INDEX 9003 SAMPLE 8444
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-91	MASTERSON B-89	BIVINS A-162
LOCATION	SEC. 108, BLK. 0-18, D&P SUR	SEC. 85, BLK. 0-18, D&P SUR.	SEC. 24, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/19/61	08/04/61	07/21/61
SAMPLED	03/09/62	03/07/62	03/07/62
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2030	2130	2450
WELLHEAD PRESSURE,PSIG	249	219	244
OPEN FLOW, MCFD	3100	5300	19100
COMPONENT, MOLE PCT			
METHANE	78.8	76.1	71.9
ETHANE	6.7	6.4	5.7
PROPANE	3.6	4.0	3.3
N-BUTANE	1.0	1.3	1.0
ISOBUTANE	0.5	0.7	0.5
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	12.3	10.0	15.5
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.69	0.50	0.99
HEATING VALUE*	1040	1101	1002
SPECIFIC GRAVITY	0.707	0.718	0.718

	INDEX 9004 SAMPLE 8452	INDEX 9005 SAMPLE 8892	INDEX 9006 SAMPLE 9218
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-163	BIVINS NO. A-46	MASTERSON NO. J-7
LOCATION	SEC. 103, BLK. 46, H&TC SUR.	SEC. 11, BLK. 5, G&M SUR.	SEC. 9, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/01/61	07/10/49	07/19/57
SAMPLED	03/14/62	03/13/63	01/17/64
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2260	1870	2767
WELLHEAD PRESSURE,PSIG	233	NOT GIVEN	181
OPEN FLOW, MCFD	8000	NOT GIVEN	6245
COMPONENT, MOLE PCT			
METHANE	76.9	77.0	71.8
ETHANE	6.2	6.0	6.6
PROPANE	3.5	3.4	3.5
N-BUTANE	1.2	1.3	1.2
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	10.3	10.3	14.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.51	0.51	0.86
HEATING VALUE*	1069	1077	1035
SPECIFIC GRAVITY	0.702	0.707	0.726

	INDEX 9007 SAMPLE 9284	INDEX 9008 SAMPLE 9285	INDEX 9009 SAMPLE 9286
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-166	BIVINS A-165	MCBRIDE A-2
LOCATION	SEC. 106, BLK. 46, H&TC SUR.	SEC. 99, BLK. 46, H&TC SUR.	SEC. 98, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/14/63	09/09/63	08/21/63
SAMPLED	04/09/64	04/10/64	04/03/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1911	2023	1990
WELLHEAD PRESSURE,PSIG	213	194	192
OPEN FLOW, MCFD	37000	235000	41000
COMPONENT, MOLE PCT			
METHANE	76.8	77.3	76.3
ETHANE	6.4	6.7	6.3
PROPANE	3.6	3.9	3.5
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	10.0	8.7	10.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.50	0.50	0.51
HEATING VALUE*	1075	1105	1062
SPECIFIC GRAVITY	0.704	0.708	0.711

	INDEX 9010 SAMPLE 9349	INDEX 9011 SAMPLE 9350	INDEX 9012 SAMPLE 9352
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS D NO. 1	BIVINS D NO. 2	BIVINS D NO. 4
LOCATION	SEC. 48, BLK. 0-18, D&P SUR.	SEC. 56, BLK. 2, G&M SUR.	SEC. 60, BLK. 2, G&M SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	03/18/64	05/18/64	04/06/64
SAMPLED	05/20/64	05/27/64	05/20/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2514	2624	2428
WELLHEAD PRESSURE,PSIG	289	244	240
OPEN FLOW, MCFD	13000	13500	24000
COMPONENT, MOLE PCT			
METHANE	71.6	72.4	72.1
ETHANE	5.1	5.1	5.1
PROPANE	2.4	2.6	2.5
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.3	16.5	16.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.4
HELIUM	1.24	1.12	1.19
HEATING VALUE*	949	958	974
SPECIFIC GRAVITY	0.707	0.711	0.704

* DRY BTU PER CU. FT. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ADSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9013 SAMPLE 9651	INDEX 9014 SAMPLE 9652	INDEX 9015 SAMPLE 9653
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS 5D	BIVINS 6D	BIVINS 7D
LOCATION	SEC. 30, BLK. O-18, D&P SUR.	SEC. 29, BLK. O-18, D&P SUR.	SEC. 60, BLK. B-2, G&M SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	08/26/64	08/26/64	08/27/64
SAMPLED	12/09/64	12/09/64	12/09/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2686	2999	2440
WELLHEAD PRESSURE,PSIG	282	276	284
OPEN FLOW, MCFD	17250	8800	8400
COMPONENT, MOLE PCT			
METHANE	71.9	70.8	71.4
ETHANE	5.3	5.0	5.3
PROPANE	2.6	2.6	2.7
N-BUTANE	0.8	0.7	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.6	17.9	17.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.5
HELIUM	1.12	1.16	1.16
HEATING VALUE*	950	922	955
SPECIFIC GRAVITY	0.705	0.707	0.709

	INDEX 9016 SAMPLE 9654	INDEX 9017 SAMPLE 9798	INDEX 9018 SAMPLE 9799
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS 8D	BIVINS A-167	MASTERSON B-93
LOCATION	SEC. 54, BLK. B-2, G&M SUR.	SEC. 15, BLK M-20, G&M SUR.	SEC. 58, BLK 47, H&TC SUR.
OWNER	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/26/64	12/10/64	10/02/63
SAMPLED	12/09/64	03/15/65	03/15/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2831	2133	2060
WELLHEAD PRESSURE,PSIG	287	183	195
OPEN FLOW, MCFD	11000	34500	72000
COMPONENT, MOLE PCT			
METHANE	71.7	76.7	76.2
ETHANE	5.1	6.1	6.4
PROPANE	2.5	3.6	3.8
N-BUTANE	0.8	1.2	1.3
ISOBUTANE	0.3	0.6	0.8
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	17.2	10.2	9.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.2
HELIUM	1.16	0.52	0.45
HEATING VALUE*	942	1080	1101
SPECIFIC GRAVITY	0.704	0.708	0.717

	INDEX 9019 SAMPLE 9801	INDEX 9020 SAMPLE 10026	INDEX 9021 SAMPLE 10031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MCBRIDE A-2	BIVINS A-166	WARRICK A-6
LOCATION	SEC. 98, BLK 46, H&TC SUR.	SEC. 106, BLK 46, H&TC SUR.	SEC. 16, BLK Y-2, AB&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/21/63	09/16/63	07/29/65
SAMPLED	03/16/65	02/20/65	08/05/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1990	1911	2331
WELLHEAD PRESSURE,PSIG	192	212	162
OPEN FLOW, MCFD	41000	37000	64000
COMPONENT, MOLE PCT			
METHANE	77.0	76.9	76.3
ETHANE	6.1	6.3	6.6
PROPANE	3.5	3.7	4.2
N-BUTANE	1.2	1.1	1.3
ISOBUTANE	0.7	0.6	0.9
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.2	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	9.8	10.1	9.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.50	0.51	0.44
HEATING VALUE*	1089	1077	1118
SPECIFIC GRAVITY	0.710	0.704	0.721

	INDEX 9022 SAMPLE 10658	INDEX 9023 SAMPLE 10661	INDEX 9024 SAMPLE 10662
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-98	BIVINS A-13	BIVINS A-143
LOCATION	SEC. 59, BLK. 2, G&M SUR.	SEC. 7, BLK. 018, D&P SUR.	SEC. 55, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/18/53	09/15/30	05/27/56
SAMPLED	07/21/66	07/21/66	07/21/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2431	2820	2590
WELLHEAD PRESSURE,PSIG	232	205	212
OPEN FLOW, MCFD	2894	1202	3855
COMPONENT, MOLE PCT			
METHANE	69.4	70.2	70.7
ETHANE	4.9	5.4	5.2
PROPANE	3.7	3.0	3.1
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.8	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	18.9	17.6	17.3
OXYGEN	0.4	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.6	0.3
HELIUM	1.16	1.08	1.06
HEATING VALUE*	944	965	966
SPECIFIC GRAVITY	0.720	0.720	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9025 SAMPLE 10665		INDEX 9026 SAMPLE 10666		INDEX 9027 SAMPLE 10667	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-14		MASTERSON J-2		MASTERSON C-1	
LOCATION	SEC. 26, BLK. 018, D&P SUR.		SEC. 69, BLK. 018, D&P SUR.		SEC. 65, BLK. 018, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	11/09/35		09/16/27		NOT GIVEN	
SAMPLED	07/21/66		07/21/66		07/21/66	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2347		2388		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	202		184		190	
OPEN FLOW, MCFD	13336		1810		7744	
COMPONENT, MOLE PCT						
METHANE	71.9		72.3		73.1	
ETHANE	5.8		6.9		6.8	
PROPANE	3.6		4.2		4.0	
N-BUTANE	1.0		1.2		1.1	
ISOBUTANE	0.6		0.7		0.6	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.3		0.4		0.4	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	15.6		13.0		12.8	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.95		0.75		0.75	
HEATING VALUE*	1010		1069		1063	
SPECIFIC GRAVITY	0.720		0.730		0.720	

	INDEX 9028 SAMPLE 11562		INDEX 9029 SAMPLE 11572		INDEX 9030 SAMPLE 11898	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS NO. 30R		MASTERSON NO. 28R		BIVINS A-153	
LOCATION	SEC. 31, BLK. 0-18, D&P SUR.		SEC. 3, BLK. 0-18, D&P SUR.		SEC. 33, BLK. B-11,ELARR SUR	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		06/08/57	
SAMPLED	07/07/68		07/14/68		05/23/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1400		1750		2320	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		12700	
COMPONENT, MOLE PCT						
METHANE	76.7		77.6		69.8	
ETHANE	9.3		9.3		5.6	
PROPANE	4.7		4.5		3.1	
N-BUTANE	1.1		1.1		1.2	
ISOBUTANE	0.6		0.5		0.3	
N-PENTANE	0.3		0.3		0.2	
ISOPENTANE	0.0		TRACE		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	6.6		6.1		17.7	
OXYGEN	0.1		0.0		0.1	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.1		0.2		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.3	
HELIUM	0.18		0.20		1.03	
HEATING VALUE*	1154		1151		969	
SPECIFIC GRAVITY	0.715		0.706		0.733	

	INDEX 9031 SAMPLE 11899		INDEX 9032 SAMPLE 11900		INDEX 9033 SAMPLE 12414	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	BIVINS A-36		BIVINS A-33		MASTERSON I-1	
LOCATION	SEC. 43, BLK. 0-18, D&P SUR.		SEC. 35, BLK. 0-18, D&P SUR.		SEC. 20, BLK. 3, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/25/49		07/22/47		12/13/22	
SAMPLED	05/23/69		05/23/69		09/16/70	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2530		2420		1920	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		163	
OPEN FLOW, MCFD	9200		17000		130	
COMPONENT, MOLE PCT						
METHANE	70.2		71.1		75.3	
ETHANE	5.7		6.0		8.6	
PROPANE	4.3		3.2		5.1	
N-BUTANE	1.2		0.9		1.1	
ISOBUTANE	0.6		0.5		0.7	
N-PENTANE	0.3		0.3		0.3	
ISOPENTANE	0.2		0.1		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	16.6		16.4		8.1	
OXYGEN	0.1		0.0		TRACE	
ARGON	0.1		0.1		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.5		0.0	
HELIUM	0.93		0.95		0.35	
HEATING VALUE*	995		989		1132	
SPECIFIC GRAVITY	0.730		0.720		0.716	

	INDEX 9034 SAMPLE 12816		INDEX 9035 SAMPLE 12845		INDEX 9036 SAMPLE 12881	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	MASTERSON B-94		BIVINS A-169		BIVINS A-170	
LOCATION	SEC. 49, BLK. 018, D&P SUR.		SEC. 23, BLK. 018, D&P SUR.		SEC. 22, BLK. 018, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	11/22/71		06/06/71		06/22/71	
SAMPLED	12/14/71		06/06/71		06/22/71	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	NOT GIVEN		2334		2343	
WELLHEAD PRESSURE,PSIG	195		NOT GIVEN		180	
OPEN FLOW, MCFD	11300		849		2610	
COMPONENT, MOLE PCT						
METHANE	69.6		68.5		72.3	
ETHANE	7.1		6.5		5.7	
PROPANE	4.6		4.5		3.7	
N-BUTANE	1.4		1.5		1.1	
ISOBUTANE	0.8		0.7		0.5	
N-PENTANE	0.4		0.6		0.3	
ISOPENTANE	0.3		0.3		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	14.7		15.4		14.8	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.2	
HELIUM	0.81		0.93		0.96	
HEATING VALUE*	1075		1041		1029	
SPECIFIC GRAVITY	0.759		0.751		0.721	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9037 SAMPLE 12954	INDEX 9038 SAMPLE 2312	INDEX 9039 SAMPLE 5935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-171	CRAWFORD NO. B-1	MASTERSON E-2R
LOCATION	SEC. 23, BLK. O-18, D&P SUR.	SEC. 78, BLK. O-18, D&P SUR.	SEC. 70, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/26/71	DRILL STEM TEST	NOT GIVEN
SAMPLED	08/19/71	04/14/31	NOT GIVEN
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2270	1845	1755
WELLHEAD PRESSURE,PSIG	147	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	13880	2000	
COMPONENT, MOLE PCT			
METHANE	73.9	75.6	78.2
ETHANE	5.3	18.1	8.6
PROPANE	3.5	---	3.8
N-BUTANE	0.9	---	0.9
ISOBUTANE	0.6	---	0.4
N-PENTANE	0.4	---	0.2
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	14.1	5.6	7.1
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.98	0.17	0.23
HEATING VALUE*	1016	1090	1116
SPECIFIC GRAVITY	0.707	0.669	0.695

	INDEX 9040 SAMPLE 5983	INDEX 9041 SAMPLE 5984	INDEX 9042 SAMPLE 6000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-138	BIVINS A-138	MASTERSON B-64R
LOCATION	SEC. 25, BLK. 5, G&M SUR.	SEC. 25, BLK. 5, G&M SUR.	SEC. 95, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/31/55	12/31/55	02/12/56
SAMPLED	NOT GIVEN	NOT GIVEN	01/19/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1988	1988	1800
WELLHEAD PRESSURE,PSIG	279	279	250
OPEN FLOW, MCFD	155	155	600
COMPONENT, MOLE PCT			
METHANE	75.1	75.1	78.0
ETHANE	8.7	9.1	6.5
PROPANE	5.1	5.2	3.4
N-BUTANE	1.3	1.3	0.9
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	7.9	7.7	9.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.30	0.26	0.39
HEATING VALUE*	1144	1153	1057
SPECIFIC GRAVITY	0.726	0.727	0.687

	INDEX 9043 SAMPLE 6002	INDEX 9044 SAMPLE 6003	INDEX 9045 SAMPLE 6006
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-64R	MASTERSON B-64R	MASTERSON B-64R
LOCATION	SEC. 95, BLK. O-18, D&P SUR.	SEC. 95, BLK. O-18, D&P SUR.	SEC. 95, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/12/56	02/12/56	02/12/56
SAMPLED	01/22/56	01/25/56	01/29/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1754	1718	1630
WELLHEAD PRESSURE,PSIG	195	75	190
OPEN FLOW, MCFD	416	29	120
COMPONENT, MOLE PCT			
METHANE	78.5	78.9	79.3
ETHANE	6.5	6.7	6.8
PROPANE	3.1	3.2	3.1
N-BUTANE	0.9	0.6	0.8
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	9.6	9.1	8.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.38	0.37	0.34
HEATING VALUE*	1050	1047	1057
SPECIFIC GRAVITY	0.682	0.674	0.678

	INDEX 9046 SAMPLE 6014	INDEX 9047 SAMPLE 6016	INDEX 9048 SAMPLE 6024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON I-1	MASTERSON D-4R	COUGHLAN A-1
LOCATION	SEC. 20, BLK. 3, G&M SUR.	SEC. 108, BLK. O-18, D&P SUR	SEC. 1, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/13/22	11/29/19	12/26/36
SAMPLED	01/31/56	01/31/56	02/10/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1540	1640	1780
WELLHEAD PRESSURE,PSIG	342	331	308
OPEN FLOW, MCFD	16000	30000	7848
COMPONENT, MOLE PCT			
METHANE	76.9	77.5	78.5
ETHANE	7.6	8.0	8.4
PROPANE	3.5	3.7	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	9.5	8.3	6.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.41	0.32	0.16
HEATING VALUE*	1069	1097	1123
SPECIFIC GRAVITY	0.692	0.697	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9049 SAMPLE 6026		INDEX 9050 SAMPLE 6039		INDEX 9051 SAMPLE 6041	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON D-9R		MASTERSON H-1		BIVINS A-25	
LOCATION	SEC. 108, BLK. 0-18, D&P SUR		SEC. 2, BLK. 11, EL&RR SUR.		SEC. 2, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	11/29/19		07/01/21		05/21/39	
SAMPLED	02/10/56		02/24/56		02/24/56	
FORMATION	PERM-RED CAVE		PERM-RED CAVE&WICHITA-ALBANY		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1640		1767		1843	
WELLHEAD PRESSURE,PSIG	324		312		303	
OPEN FLOW, MCFD	29000		408		6970	
COMPONENT, MOLE PCT						
METHANE	76.9		75.4		78.4	
ETHANE	7.8		8.1		8.7	
PROPANE	3.7		4.2		3.9	
N-BUTANE	0.9		1.3		0.9	
ISOBUTANE	0.5		0.6		0.4	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.2		0.4		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	8.9		8.8		6.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.3		0.1		0.4	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.0	
HELIUM	0.37		0.37		0.18	
HEATING VALUE*	1047		1126		1123	
SPECIFIC GRAVITY	0.697		0.721		0.693	

	INDEX 9052 SAMPLE 6042		INDEX 9053 SAMPLE 7125		INDEX 9054 SAMPLE 7126	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS A-2R		MASTERSON B-75R		MASTERSON B-76R	
LOCATION	SEC. 13, BLK. 0-18, D&P SUR.		SEC. 93, BLK. 0-18, D&P SUR.		SEC. 66, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/16/56		01/02/58		01/07/58	
SAMPLED	02/24/56		05/--/58		05/--/58	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1465		1706		1628	
WELLHEAD PRESSURE,PSIG	351		353		303	
OPEN FLOW, MCFD	8342		13600		14000	
COMPONENT, MOLE PCT						
METHANE	78.7		80.5		79.4	
ETHANE	8.7		7.6		7.8	
PROPANE	3.7		3.4		3.6	
N-BUTANE	0.9		0.8		0.9	
ISOBUTANE	0.4		0.4		0.5	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	6.4		6.6		7.0	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.4		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		TRACE	
HELIUM	0.16		0.20		0.30	
HEATING VALUE*	1116		1098		1103	
SPECIFIC GRAVITY	0.689		0.678		0.686	

	INDEX 9055 SAMPLE 7127		INDEX 9056 SAMPLE 7175		INDEX 9057 SAMPLE 7657	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON B-78R		NOT GIVEN		BIVINS A NO. 10R	
LOCATION	SEC. 105, BLK. 78, D&P SUR.		SEC 60		SEC. 43, BLK. M-20, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		BRITAIN-WEYMOUTH		AMARILLO OIL CO.	
COMPLETED	12/23/57		NOT GIVEN		08/09/60	
SAMPLED	05/--/58		08/22/59		08/29/60	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1420		NOT GIVEN		1645	
WELLHEAD PRESSURE,PSIG	296		NOT GIVEN		266	
OPEN FLOW, MCFD	8500		NOT GIVEN		1260	
COMPONENT, MOLE PCT						
METHANE	78.8		76.9		80.0	
ETHANE	7.3		6.9		7.3	
PROPANE	3.5		3.2		3.3	
N-BUTANE	0.9		0.7		1.0	
ISOBUTANE	0.4		0.2		0.2	
N-PENTANE	0.1		TRACE		0.2	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.0		0.2	
NITROGEN	8.1		11.1		7.2	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.0		0.1	
HELIUM	0.30		0.42		0.20	
HEATING VALUE*	1082		1029		1095	
SPECIFIC GRAVITY	0.684		0.683		0.684	

	INDEX 9058 SAMPLE 7707		INDEX 9059 SAMPLE 7708		INDEX 9060 SAMPLE 7741	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON B-86		BIVINS A NO. 11		MASTERSON B-87R	
LOCATION	SEC. 82, BLK. 3, G&M SUR.		SEC. 42, G&M SUR.		SEC. 16, BLK. 3, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		AMARILLO OIL CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	NOT GIVEN		10/04/60		09/29/60	
SAMPLED	10/07/60		10/07/60		10/21/60	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1404		1524		1468	
WELLHEAD PRESSURE,PSIG	257		312		354	
OPEN FLOW, MCFD	8700		3200		2900	
COMPONENT, MOLE PCT						
METHANE	76.8		79.1		78.0	
ETHANE	7.2		7.8		8.3	
PROPANE	3.6		3.1		3.7	
N-BUTANE	0.9		0.8		0.8	
ISOBUTANE	0.6		0.4		0.4	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	7.9		7.9		8.0	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		TRACE	
HELIUM	0.30		0.12		0.30	
HEATING VALUE*	1076		1047		1089	
SPECIFIC GRAVITY	0.698		0.686		0.688	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9061 SAMPLE 7898	INDEX 9062 SAMPLE 7981	INDEX 9063 SAMPLE 8254
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	STATE NO. 2R	EXELL-SHELL NO. 1	STATE OF TEXAS NO. 2-R
LOCATION	TRACT 7, CANADIAN RIVER SUR.	SEC. 30, BLK. O-18, D&P SUR.	CANADIAN RIVER BED
OWNER	AMARILLO OIL CO.	BIVINS INTERESTS	AMARILLO OIL CO.
COMPLETED	02/23/61	NOT GIVEN	02/24/61
SAMPLED	02/23/61	05/23/61	09/06/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1414	2160	1414
WELLHEAD PRESSURE,PSIG	356	395	356
OPEN FLOW, MCFD	4600	NOT GIVEN	4600
COMPONENT, MOLE PCT			
METHANE	77.5	77.2	77.8
ETHANE	8.6	8.3	8.4
PROPANE	3.6	3.0	4.0
N-BUTANE	0.8	0.6	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.2	9.6	7.6
OXYGEN	0.1,	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.20	0.20	0.23
HEATING VALUE*	1090	1060	1108
SPECIFIC GRAVITY	0.695	0.687	0.695

	INDEX 9064 SAMPLE 8424	INDEX 9065 SAMPLE 8428	INDEX 9066 SAMPLE 8429
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	ALLISON NO. 1R	BIVINS NO. 6R	WARRICK NO. 1R
LOCATION	SEC. 1, W. T. PALMER SUR.	SEC. 40, M-20, G&M SUR.	SEC. 16, BLK. Y-2, TT&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/11/61	08/12/61	10/23/61
SAMPLED	03/05/62	03/05/62	03/02/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1463	1513	1506
WELLHEAD PRESSURE,PSIG	271	269	2732
OPEN FLOW, MCFD	3950	3400	6500
COMPONENT, MOLE PCT			
METHANE	81.2	80.7	80.7
ETHANE	6.7	6.8	6.8
PROPANE	2.8	3.0	2.9
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	7.6	7.6	7.5
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.15	0.16	0.15
HEATING VALUE*	1067	1073	1083
SPECIFIC GRAVITY	0.669	0.674	0.679

	INDEX 9067 SAMPLE 8479	INDEX 9068 SAMPLE 8481	INDEX 9069 SAMPLE 8848
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-1-R	MASTERSON I-1R	BIVINS NO. 10R
LOCATION	SEC. 67, BLK. O-18, D&P SUR.	SEC. 69, BLK. 47, H&TC SUR.	SEC. 95, BLK. 46, H&TC SUR.
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/13/61	09/22/61	08/16/62
SAMPLED	03/21/62	NOT GIVEN	02/05/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1746	1772	1531
WELLHEAD PRESSURE,PSIG	250	287	241
OPEN FLOW, MCFD	9367	1254	1150
COMPONENT, MOLE PCT			
METHANE	77.4	75.8	80.0
ETHANE	8.6	8.3	7.2
PROPANE	4.2	4.4	3.2
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.2	8.8	7.7
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.26	0.30	0.10
HEATING VALUE*	1124	1118	1081
SPECIFIC GRAVITY	0.703	0.716	0.680

	INDEX 9070 SAMPLE 8850	INDEX 9071 SAMPLE 8851	INDEX 9072 SAMPLE 8853
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-92R	BIVINS NO. 14R	MASTERSON NO. 7R
LOCATION	SEC. 26, BLK. 3, G&M SUR.	SEC. 103, BLK. 46, H&TC SUR.	SEC. 65, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/25/62	09/17/62	09/14/62
SAMPLED	02/07/63	02/05/63	02/07/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1384	1637	1700
WELLHEAD PRESSURE,PSIG	277	270	311
OPEN FLOW, MCFD	5600	540	9600
COMPONENT, MOLE PCT			
METHANE	78.6	79.0	78.9
ETHANE	7.7	6.9	8.3
PROPANE	3.8	3.2	3.8
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	7.8	9.1	6.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.30	0.30	0.20
HEATING VALUE*	1099	1058	1113
SPECIFIC GRAVITY	0.691	0.679	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9073 SAMPLE 8855	INDEX 9074 SAMPLE 8858	INDEX 9075 SAMPLE 8859
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 13R	WARRICK NO. 3R	BIVINS NO. 11R
LOCATION	SEC. 33, BLK. M-20, G&M SUR.	SEC. 96, BLK. 46, H&TC SUR.	SEC. 41, BLK. M-20, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/03/62	08/31/62	08/23/62
SAMPLED	02/15/63	02/14/63	02/14/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1650	1502	1480
WELLHEAD PRESSURE,PSIG	195	263	261
OPEN FLOW, MCFD	1700	6300	7100
COMPONENT, MOLE PCT			
METHANE	79.7	81.2	81.5
ETHANE	6.7	6.7	6.8
PROPANE	2.9	2.9	2.8
N-BUTANE	1.0	1.0	0.8
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	8.4	7.4	7.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.30	0.20	0.10
HEATING VALUE*	1067	1077	1073
SPECIFIC GRAVITY	0.682	0.675	0.670

	INDEX 9076 SAMPLE 8860	INDEX 9077 SAMPLE 8862	INDEX 9078 SAMPLE 9251
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 15R	BIVINS NO. 12R	BIVINS NO. 2R
LOCATION	SEC. 108, BLK. 46, H&TC SUR.	SEC. 32, BLK. M-20, G&M SUR.	SEC. 21, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/13/62	08/31/62	10/02/60
SAMPLED	02/14/63	02/15/63	03/06/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1714	1542	1817
WELLHEAD PRESSURE,PSIG	333	231	333
OPEN FLOW, MCFD	2900	4150	2392
COMPONENT, MOLE PCT			
METHANE	77.8	80.7	76.1
ETHANE	8.5	6.9	9.2
PROPANE	3.9	2.2	4.2
N-BUTANE	1.1	0.9	1.2
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.4	8.0	8.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.20	0.40
HEATING VALUE*	1119	1066	1122
SPECIFIC GRAVITY	0.701	0.673	0.709

	INDEX 9079 SAMPLE 9310	INDEX 9080 SAMPLE 9622	INDEX 9081 SAMPLE 9623
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	COUGHLAN NO. 1R	CRAWFORD NO. 3-R	MASTERSON NO. 11-R
LOCATION	SEC. 77, BLK. O-18, D&P SUR.	SEC. 68, BLK. O-18, D&P SUR.	SEC. 67, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/10/63	09/28/64	09/28/64
SAMPLED	04/14/64	11/04/64	11/04/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1882	1704	1747
WELLHEAD PRESSURE,PSIG	317	277	228
OPEN FLOW, MCFD	8700	7200	6100
COMPONENT, MOLE PCT			
METHANE	78.9	77.6	76.5
ETHANE	9.0	9.0	9.0
PROPANE	3.9	3.9	4.4
N-BUTANE	1.0	0.9	1.1
ISOBUTANE	0.2	0.5	0.6
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.2	7.0	7.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.16	0.31	0.24
HEATING VALUE*	1129	1122	1139
SPECIFIC GRAVITY	0.693	0.700	0.714

	INDEX 9082 SAMPLE 9756	INDEX 9083 SAMPLE 9757	INDEX 9084 SAMPLE 9758
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD 2R	MASTERSON 9R	MASTERSON 12R
LOCATION	SEC. 34, BLK PMC, EL&RR SUR.	SEC. 64, BLK O-18, D&P SUR.	SEC. 35, BLK 8-10, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/30/64	09/02/64	09/03/64
SAMPLED	02/18/65	02/18/65	02/19/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1887	1824	1518
WELLHEAD PRESSURE,PSIG	327	308	195
OPEN FLOW, MCFD	8200	7900	4900
COMPONENT, MOLE PCT			
METHANE	78.6	79.1	78.4
ETHANE	8.9	8.0	6.8
PROPANE	4.1	3.9	3.5
N-BUTANE	0.9	1.0	1.0
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.6	6.8	8.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.20	0.22	0.38
HEATING VALUE*	1129	1115	1081
SPECIFIC GRAVITY	0.697	0.691	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9085 SAMPLE 9760	INDEX 9086 SAMPLE 9802	INDEX 9087 SAMPLE 10024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 10R	MCBRIDE 1 R	MASTERSON 15R
LOCATION	SEC. 104, BLK 0-18, D&P SUR.	SEC. 98, BLK 46, H&TC SUR.	SEC. 103, BLK 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/64	08/20/64	07/13/65
SAMPLED	02/19/65	03/16/65	08/05/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1448	1370	1603
WELLHEAD PRESSURE,PSIG	222	208	249
OPEN FLOW, MCFD	7700	3100	7900
COMPONENT, MOLE PCT			
METHANE	77.6	80.1	77.9
ETHANE	7.3	7.2	8.1
PROPANE	4.1	3.3	4.3
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	8.6	7.4	7.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.36	0.16	0.27
HEATING VALUE*	1093	1090	1119
SPECIFIC GRAVITY	0.696	0.681	0.700

	INDEX 9088 SAMPLE 10025	INDEX 9089 SAMPLE 10027	INDEX 9090 SAMPLE 10659
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 13R	MASTERSON 16R	BIVINS 2R
LOCATION	SEC. 63, BLK 0-18, D&P SUR.	SEC. 24, BLK 3, G&M SUR.	SEC. 21, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/16/65	07/13/65	10/02/60
SAMPLED	08/04/65	08/04/65	07/21/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1844	1639	1817
WELLHEAD PRESSURE,PSIG	292	229	318
OPEN FLOW, MCFD	17500	2200	2252
COMPONENT, MOLE PCT			
METHANE	78.0	77.8	76.0
ETHANE	8.4	7.2	9.2
PROPANE	3.9	3.8	4.3
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	6.9	8.9	8.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.19	0.38	0.31
HEATING VALUE*	1139	1082	1122
SPECIFIC GRAVITY	0.709	0.694	0.710

	INDEX 9091 SAMPLE 10660	INDEX 9092 SAMPLE 10663	INDEX 9093 SAMPLE 10664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-150R	BIVINS A-2R	BIVINS A-4R
LOCATION	SEC. 18, BLK. 018, D&P SUR.	SEC. 13, BLK. 018, D&P SUR.	SEC. 24, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/08/56	07/16/24	NOT GIVEN
SAMPLED	07/22/66	07/21/66	07/21/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2284	1865	NOT GIVEN
WELLHEAD PRESSURE,PSIG	180	317	305
OPEN FLOW, MCFD	161	4676	562
COMPONENT, MOLE PCT			
METHANE	76.4	78.1	77.3
ETHANE	7.1	8.9	9.5
PROPANE	3.3	4.1	4.5
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.0	6.6	6.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.31	0.17	0.19
HEATING VALUE*	1053	1130	1150
SPECIFIC GRAVITY	0.700	0.700	0.710

	INDEX 9094 SAMPLE 10668	INDEX 9095 SAMPLE 10699	INDEX 9096 SAMPLE 10723
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD 3R	BIVINS 23R	MASTERSON 19R
LOCATION	SEC. 68, BLK. 018, D&P SUR.	SEC. 12, BLK. 0-18, D&P SUR.	SEC. 33, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/28/64	08/01/66	09/13/66
SAMPLED	07/21/66	08/19/66	09/14/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1704	1880	1521
WELLHEAD PRESSURE,PSIG	248	324	181
OPEN FLOW, MCFD	1945	9000	1110
COMPONENT, MOLE PCT			
METHANE	76.6	77.3	76.9
ETHANE	9.3	8.4	7.0
PROPANE	4.6	3.9	4.3
N-BUTANE	1.1	0.8	1.3
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.1	8.0	8.8
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.22	0.15	0.34
HEATING VALUE*	1150	1098	1103
SPECIFIC GRAVITY	0.720	0.700	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9097 SAMPLE 10724	INDEX 9098 SAMPLE 10736	INDEX 9099 SAMPLE 10737
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 20R	MASTERSON 22R	BIVINS 20R
LOCATION	SEC. 97, BLK. 46, H&TC SUR.	SEC. 10, BLK. 3, G&M SUR.	SEC. 97, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/31/66	09/20/66	09/23/66
SAMPLED	09/14/66	09/23/66	09/26/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1625	1680	1454
WELLHEAD PRESSURE,PSIG	199	231	192
OPEN FLOW, MCFD	780	7800	3750
COMPONENT, MOLE PCT			
METHANE	75.0	76.5	79.5
ETHANE	7.1	9.0	7.4
PROPANE	4.5	4.6	3.5
N-BUTANE	1.4	1.2	0.9
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	10.2	7.4	7.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.49	0.26	0.16
HEATING VALUE*	1099	1132	1092
SPECIFIC GRAVITY	0.720	0.710	0.680

	INDEX 9100 SAMPLE 10757	INDEX 9101 SAMPLE 11042	INDEX 9102 SAMPLE 11044
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 21R	BIVINS 26R	CRAWFORD 4R
LOCATION	SEC. 107, BLK. 0-18, D&P SUR	SEC. 81, BLK. 2, G&M SUR.	SEC. 78, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/16/66	07/24/67	07/21/67
SAMPLED	10/25/66	07/28/67	07/26/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1631	1825	1873
WELLHEAD PRESSURE,PSIG	197	391	324
OPEN FLOW, MCFD	6500	4300	5900
COMPONENT, MOLE PCT			
METHANE	74.8	74.8	78.3
ETHANE	7.5	8.8	8.6
PROPANE	4.2	4.3	3.7
N-BUTANE	1.1	1.0	0.9
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.5	9.4	6.9
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.4	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.43	0.13	0.17
HEATING VALUE*	1095	1048	1064
SPECIFIC GRAVITY	0.720	0.715	0.694

	INDEX 9103 SAMPLE 11045	INDEX 9104 SAMPLE 11079	INDEX 9105 SAMPLE 11080
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 25R	MASTERSON 27R	MASTERSON 24R
LOCATION	SEC. 27, BLK. 0-18, D&P SUR.	SEC. 27, BLK. 3, G&N SUR.	SEC. 69, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/21/67	08/12/67	08/07/67
SAMPLED	97/26/67	08/15/67	08/14/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1780	1659	1763
WELLHEAD PRESSURE,PSIG	352	219	204
OPEN FLOW, MCFD	12000	920	3100
COMPONENT, MOLE PCT			
METHANE	77.4	76.1	75.5
ETHANE	9.1	10.3	9.0
PROPANE	4.7	4.0	4.4
N-BUTANE	1.0	1.1	1.1
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	7.0	6.9	7.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.21	0.20	0.26
HEATING VALUE*	1168	1139	1130
SPECIFIC GRAVITY	0.698	0.710	0.714

	INDEX 9106 SAMPLE 11081	INDEX 9107 SAMPLE 11082	INDEX 9108 SAMPLE 11096
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 23R	MASTERSON 25R	BIVINS 27R
LOCATION	SEC. 71, BLK. 0-18, D&P SUR.	SEC. 106, BLK. 0-18, D&P SUR.	SEC. 55, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/07/67	08/12/67	08/29/67
SAMPLED	08/14/67	08/15/67	09/07/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1842	1631	2114
WELLHEAD PRESSURE,PSIG	285	180	372
OPEN FLOW, MCFD	4700	2500	630
COMPONENT, MOLE PCT			
METHANE	77.8	75.2	72.8
ETHANE	8.9	7.4	8.9
PROPANE	4.9	3.9	5.1
N-BUTANE	1.1	1.0	1.4
ISOBUTANE	0.7	0.6	0.9
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	7.3	10.5	8.8
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.17	0.22
HEATING VALUE*	1116	1077	1170
SPECIFIC GRAVITY	0.698	0.708	0.749

* GAS RATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9109 SAMPLE 11548		INDEX 9110 SAMPLE 11549		INDEX 9111 SAMPLE 11571	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 29R		BIVINS 30R		BIVINS 31R	
LOCATION	SEC. 57, BLK. 2, G&M SUR.		SEC. 31, BLK. 0-18, D&P SUR.		SEC. 10, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	06/18/68		NOT GIVEN		NOT GIVEN	
SAMPLED	06/18/68		06/23/68		07/12/68	
FORMATION	PERM-RED CAVE		NOT GIVEN		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1742		700		1800	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	128		800		2350	
COMPONENT, MOLE PCT						
METHANE	77.2	----------	72.2	----------	77.4	----------
ETHANE	8.7		5.1		9.3	
PROPANE	4.9	----------	3.1	----------	4.4	----------
N-BUTANE	1.1		1.0		1.1	
ISOBUTANE	0.8	----------	0.4	----------	0.5	----------
N-PENTANE	0.5		0.1		0.2	
ISOPENTANE	0.0	----------	0.3	----------	0.1	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.1	----------	0.2	----------
NITROGEN	6.3		16.4		6.2	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		0.1		TRACE	
HYDROGEN	TRACE	----------	TRACE	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0	----------	0.1	----------	TRACE	----------
HELIUM	0.18		1.02		0.20	
HEATING VALUE*	1164	----------	976	----------	1146	----------
SPECIFIC GRAVITY	0.717		0.709		0.705	

	INDEX 9112 SAMPLE 11768		INDEX 9113 SAMPLE 11769		INDEX 9114 SAMPLE 11770	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 33R		BIVINS 34R		BIVINS 35R	
LOCATION	SEC. 2, BLK.0-18, D&P SUR.		SEC. 15, BLK.0-18, D&P SUR.		SEC. 16, BLK.0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/13/69		02/18/69		02/19/69	
SAMPLED	02/26/69		02/26/69		02/26/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1820		1755		1905	
WELLHEAD PRESSURE,PSIG	319		333		333	
OPEN FLOW, MCFD	5600		9200		8000	
COMPONENT, MOLE PCT						
METHANE	77.7	----------	77.8	----------	76.3	----------
ETHANE	9.0		9.0		9.2	
PROPANE	4.1	----------	4.1	----------	4.3	----------
N-BUTANE	1.1		1.1		1.1	
ISOBUTANE	0.4	----------	0.3	----------	0.5	----------
N-PENTANE	0.3		0.3		0.3	
ISOPENTANE	0.1	----------	0.1	----------	0.1	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.2	----------	0.3	----------
NITROGEN	6.4		6.5		7.3	
OXYGEN	0.1	----------	0.0	----------	0.1	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2	----------	0.2	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.1	----------
HELIUM	0.21		0.21		0.23	
HEATING VALUE*	1137	----------	1135	----------	1140	----------
SPECIFIC GRAVITY	0.703		0.702		0.715	

	INDEX 9115 SAMPLE 11773		INDEX 9116 SAMPLE 11774		INDEX 9117 SAMPLE 11775	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 30R		BIVINS 29R		BIVINS 31R	
LOCATION	SEC. 31, BLK. 0-18, D&P SUR.		SEC. 57, BLK. 2, G&M SUR.		SEC. 10, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	02/28/69		02/28/69		02/28/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1859		1764		1823	
WELLHEAD PRESSURE,PSIG	350		356		338	
OPEN FLOW, MCFD	7400		2800		7600	
COMPONENT, MOLE PCT						
METHANE	78.6	----------	77.9	----------	78.0	----------
ETHANE	9.1		8.7		8.9	
PROPANE	3.9	----------	4.3	----------	3.9	----------
N-BUTANE	0.8		1.1		0.9	
ISOBUTANE	0.3	----------	0.5	----------	0.4	----------
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.1	----------	0.1	----------	0.1	----------
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1	----------	0.2	----------	0.1	----------
NITROGEN	6.4		6.6		6.8	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1	----------	0.1	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.1	----------
HELIUM	0.17		0.16		0.19	
HEATING VALUE*	1120	----------	1134	----------	1117	----------
SPECIFIC GRAVITY	0.691		0.702		0.694	

	INDEX 9118 SAMPLE 11776		INDEX 9119 SAMPLE 11777		INDEX 9120 SAMPLE 11778	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 32R		BIVINS 33R		BIVINS 34R	
LOCATION	SEC. 11, BLK. 0-18, D&P SUR.		SEC. 72, BLK. 0-18, D&P SUR.		SEC. 15, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/14/69		02/13/69		02/18/69	
SAMPLED	02/27/69		02/27/69		02/27/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1851		2069		1755	
WELLHEAD PRESSURE,PSIG	327		519		342	
OPEN FLOW, MCFD	9090		5600		9200	
COMPONENT, MOLE PCT						
METHANE	77.8	----------	72.8	----------	78.1	----------
ETHANE	8.9		9.2		8.9	
PROPANE	4.1	----------	5.9	----------	4.0	----------
N-BUTANE	1.0		2.2		1.0	
ISOBUTANE	0.4	----------	1.3	----------	0.5	----------
N-PENTANE	0.2		1.0		0.2	
ISOPENTANE	TRACE	----------	0.4	----------	0.1	----------
CYCLOPENTANE	TRACE		0.3		TRACE	
HEXANES PLUS	0.1	----------	0.7	----------	0.1	----------
NITROGEN	6.6		5.8		6.5	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.3	----------	0.2	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.2	----------	0.1	----------
HELIUM	0.19		0.00		0.18	
HEATING VALUE*	1116	----------	1281	----------	1124	----------
SPECIFIC GRAVITY	0.691		0.787		0.695	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9121 SAMPLE 11779		INDEX 9122 SAMPLE 11780		INDEX 9123 SAMPLE 11781	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 35R		MASTERSON 28R		CRAWFORD 5R	
LOCATION	SEC. 16, BLK. 0-18, D&P SUR.		SEC. 3, BLK. 0-18, D&P SUR.		SEC. 4, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE G CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/19/69		--/--/69		02/26/69	
SAMPLED	02/20/69		02/28/69		02/28/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1905		1779		1836	
WELLHEAD PRESSURE,PSIG	333		325		341	
OPEN FLOW, MCFD	8000		8000		6800	
COMPONENT, MOLE PCT						
METHANE	76.7		78.3		76.5	
ETHANE	9.0		8.8		9.1	
PROPANE	4.1		4.0		4.5	
N-BUTANE	1.1		0.8		1.1	
ISOBUTANE	0.9		0.5		0.7	
N-PENTANE	0.2		0.2		0.4	
ISOPENTANE	0.1		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.3	
NITROGEN	7.7		6.8		6.7	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.2		0.2		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.2	
HELIUM	0.22		0.19		0.19	
HEATING VALUE*	1116		1113		1152	
SPECIFIC GRAVITY	0.701		0.690		0.718	

	INDEX 9124 SAMPLE 11782		INDEX 9125 SAMPLE 11805		INDEX 9126 SAMPLE 11806	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	GAGE 1R		MASTERSON 35R		MASTERSON NO. 34R	
LOCATION	SEC. 7, BLK. 8-11, ELSRR SUR		SEC. 101, BLK. 0-18, D&P SUR		SEC. 94, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/26/69		02/27/69		02/21/69	
SAMPLED	02/28/69		04/02/69		04/02/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1738		1523		1636	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		230		266	
OPEN FLOW, MCFD	2820		4100		7100	
COMPONENT, MOLE PCT						
METHANE	76.9		76.9		77.9	
ETHANE	9.2		7.9		8.1	
PROPANE	4.6		4.2		3.7	
N-BUTANE	1.1		1.1		1.1	
ISOBUTANE	0.7		0.5		0.4	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.1		0.0		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	6.6		7.8		7.5	
OXYGEN	0.1		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.2		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.2	
HELIUM	0.18		0.61		0.24	
HEATING VALUE*	1146		1111		1113	
SPECIFIC GRAVITY	0.709		0.703		0.700	

	INDEX 9127 SAMPLE 11807		INDEX 9128 SAMPLE 11808		INDEX 9129 SAMPLE 11878	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	GAGE 1R		MASTERSON 32R		CRAWFORD 5R	
LOCATION	SEC. 7, BLK. 8-11, ELSRR SUR		SEC. 74, BLK. 0-18, D&P SUR.		SEC. 4, BLK. 018, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/26/69		NOT GIVEN		02/26/69	
SAMPLED	04/07/69		04/07/69		05/28/69	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1738		1934		1836	
WELLHEAD PRESSURE,PSIG	291		314		341	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		6800	
COMPONENT, MOLE PCT						
METHANE	77.5		78.2		77.8	
ETHANE	9.1		8.9		8.9	
PROPANE	4.6		4.1		4.4	
N-BUTANE	1.1		1.0		0.9	
ISOBUTANE	0.7		0.4		0.4	
N-PENTANE	0.3		0.2		0.3	
ISOPENTANE	0.0		0.3		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	6.3		6.3		6.7	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.2		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.0	
HELIUM	0.19		0.16		0.19	
HEATING VALUE*	1142		1136		1128	
SPECIFIC GRAVITY	0.704		0.702		0.698	

	INDEX 9130 SAMPLE 11879		INDEX 9131 SAMPLE 11951		INDEX 9132 SAMPLE 12279	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 33R		MASTERSON 33R		BIVINS 36R	
LOCATION	SEC. 2, BLK. 0-18, D&P SUR.		SEC. 72, BLK. 0-18, D&P SUR.		SEC. 25, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	02/13/69		03/13/69		05/24/70	
SAMPLED	05/14/69		07/24/69		06/05/70	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1820		1895		1848	
WELLHEAD PRESSURE,PSIG	319		292		219	
OPEN FLOW, MCFD	5400		4100		57	
COMPONENT, MOLE PCT						
METHANE	76.8		77.1		77.6	
ETHANE	9.0		8.9		8.7	
PROPANE	4.5		4.7		4.1	
N-BUTANE	1.1		0.9		0.7	
ISOBUTANE	0.7		0.6		0.5	
N-PENTANE	0.2		0.3		0.1	
ISOPENTANE	0.2		TRACE		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	6.5		6.4		6.7	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.2		0.2		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.0		0.5	
HELIUM	0.18		0.16		0.11	
HEATING VALUE*	1147		1135		1108	
SPECIFIC GRAVITY	0.715		0.705		0.692	

* CALCULATED GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9133 SAMPLE 12297	INDEX 9134 SAMPLE 12299	INDEX 9135 SAMPLE 12300
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD 6R	BIVINS 37R	MASTERSON 36R
LOCATION	SEC. 80, BLK. O-18, D&P SUR.	SEC. 26, BLK. O-18, D&P SUR.	SEC. 10, BLK. B-11, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/12/70	05/28/70	06/18/70
SAMPLED	06/12/70	06/19/70	06/18/70
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1745	1716	1650
WELLHEAD PRESSURE,PSIG	200	361	NOT GIVEN
OPEN FLOW, MCFD	2500	480	3000
COMPONENT, MOLE PCT			
METHANE	76.8	77.2	76.2
ETHANE	9.0	9.4	9.0
PROPANE	4.9	5.0	4.8
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.9	6.2	7.3
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.17	0.18	0.20
HEATING VALUE*	1140	1149	1140
SPECIFIC GRAVITY	0.709	0.706	0.713

	INDEX 9136 SAMPLE 12301	INDEX 9137 SAMPLE 12302	INDEX 9138 SAMPLE 12755
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 38R	BIVINS 39R	MASTERSON NO. 41 R
LOCATION	SEC. 22, BLK. O-18, D&P SUR.	SEC. 14, BLK. O-18, D&P SUR.	SEC. 79, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/04/70	06/08/70	04/09/71
SAMPLED	06/19/70	06/08/70	04/09/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1738	1721	1750
WELLHEAD PRESSURE,PSIG	345	NOT GIVEN	300
OPEN FLOW, MCFD	1900	12900	2000
COMPONENT, MOLE PCT			
METHANE	76.8	77.8	74.5
ETHANE	9.0	8.7	10.7
PROPANE	4.6	4.4	5.6
N-BUTANE	0.9	0.8	1.3
ISOBUTANE	0.6	0.6	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	7.2	6.8	6.1
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.21	0.18	0.18
HEATING VALUE*	1127	1124	1199
SPECIFIC GRAVITY	0.704	0.698	0.736

	INDEX 9139 SAMPLE 12815	INDEX 9140 SAMPLE 12817	INDEX 9141 SAMPLE 12825
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 42R	MASTERSON 49R	BIVINS 40 R
LOCATION	SEC. 70, BLK. 018, D&P SUR.	SEC. 36, BLK. 3, G&M SUR.	SEC. 30, BLK. B-11, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/12/71	05/08/71	05/19/71
SAMPLED	04/12/71	05/14/71	05/19/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1724	1804	1650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	131	NOT GIVEN
OPEN FLOW, MCFD	1040	1618	41
COMPONENT, MOLE PCT			
METHANE	74.8	69.1	75.5
ETHANE	10.1	7.5	9.8
PROPANE	5.2	5.1	5.1
N-BUTANE	1.3	1.4	1.1
ISOBUTANE	0.9	0.9	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.9	9.3	7.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	5.4	TRACE
HELIUM	0.19	0.36	0.14
HEATING VALUE*	1179	1078	1170
SPECIFIC GRAVITY	0.734	0.782	0.727

	INDEX 9142 SAMPLE 12826	INDEX 9143 SAMPLE 12836	INDEX 9144 SAMPLE 12844
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 41 R	MASTERSON 49R	BIVINS 42R
LOCATION	SEC. 44, BLK. 018, D&P SUR.	SEC. 36, BLK. 3, G&M SUR.	SEC. 38, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/23/71	05/--/71	05/27/71
SAMPLED	05/23/71	05/25/71	06/01/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1660	1066	1801
WELLHEAD PRESSURE,PSIG	NOT GIVEN	131	NOT GIVEN
OPEN FLOW, MCFD	435	2600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.4	74.7	72.2
ETHANE	9.5	8.0	8.8
PROPANE	5.1	5.2	5.0
N-BUTANE	1.2	1.4	1.5
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.5	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	7.4	8.5	10.8
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.16	0.39	0.14
HEATING VALUE*	1162	1149	1133
SPECIFIC GRAVITY	0.727	0.733	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9145 SAMPLE 12846	INDEX 9146 SAMPLE 12882	INDEX 9147 SAMPLE 12893
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 43R	BIVINS 44R	BIVINS NO. 46R
LOCATION	SEC. 13, BLK. O-18, D&P SUR.	SEC. 28, BLK. 014, D&P SUR.	SEC. 9, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/09/71	06/12/71	06/30/71
SAMPLED	06/09/71	06/12/71	06/30/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1865	1783	1760
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1900	1750	3800
COMPONENT, MOLE PCT			
METHANE	74.5	77.0	78.1
ETHANE	10.8	9.0	8.9
PROPANE	5.4	4.5	4.3
N-BUTANE	1.2	1.7	0.9
ISOBUTANE	0.8	0.0	0.4
N-PENTANE	0.4	0.0	0.2
ISOPENTANE	0.0	0.5	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.6	6.8	6.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.17	0.25	0.22
HEATING VALUE*	1142	1142	1128
SPECIFIC GRAVITY	0.731	0.710	0.698

	INDEX 9148 SAMPLE 12895	INDEX 9149 SAMPLE 12956	INDEX 9150 SAMPLE 13261
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-169R	BIVINS 45R	BIVINS 49R
LOCATION	SEC. 23, BLK. 018, D&P SUR.	SEC. 17, BLK. O-18, D&P SUR.	SEC. 5, BLK. O-18,D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/05/71	06/29/71	04/15/72
SAMPLED	07/07/71	08/23/71	04/15/72
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1858	1978	1843
WELLHEAD PRESSURE,PSIG	398	390	NOT GIVEN
OPEN FLOW, MCFD	2400	200	21000
COMPONENT, MOLE PCT			
METHANE	78.9	64.0	76.8
ETHANE	9.0	16.3	9.8
PROPANE	4.5	11.2	4.5
N-BUTANE	0.8	2.2	0.9
ISOBUTANE	0.9	1.5	0.5
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.1	4.1	6.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.17	0.07	0.22
HEATING VALUE*	1157	1378	1136
SPECIFIC GRAVITY	0.700	0.830	0.701

	INDEX 9151 SAMPLE 13262	INDEX 9152 SAMPLE 13265	INDEX 9153 SAMPLE 13663
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 53R	BIVINS 52R	MASTERSON 63 R
LOCATION	SEC. 58, BLK.2, G&M SUR.	SEC. 36, BLK. O-18, D&P SUR.	SEC. 81, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/26/72	06/04/72	NOT GIVEN
SAMPLED	05/26/72	06/04/72	06/11/73
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1702	1830	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	295
OPEN FLOW, MCFD	240	550	4140
COMPONENT, MOLE PCT			
METHANE	76.2	76.6	77.5
ETHANE	9.1	9.1	9.7
PROPANE	5.0	5.0	4.5
N-BUTANE	1.2	1.2	0.8
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.3	0.2	TRACE
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	6.8	6.5	6.4
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.16	0.16	0.21
HEATING VALUE*	1151	1155	1129
SPECIFIC GRAVITY	0.716	0.713	0.696

	INDEX 9154 SAMPLE 13664	INDEX 9155 SAMPLE 13676	INDEX 9156 SAMPLE 14282
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 61 R	MASTERSON 61 R	BIVINS 80R
LOCATION	SEC. 81, BLK. 3, G&M SUR.	SEC. 61, BLK. 3, G&M SUR.	SEC. 34, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	C.I.G. EXPLORATION, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	02/15/75
SAMPLED	06/11/73	06/13/73	02/20/75
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1816
WELLHEAD PRESSURE,PSIG	195	192	256
OPEN FLOW, MCFD	NOT GIVEN	124	724
COMPONENT, MOLE PCT			
METHANE	66.7	74.0	79.3
ETHANE	9.2	10.2	7.2
PROPANE	8.9	6.6	3.7
N-BUTANE	1.9	1.4	0.3
ISOBUTANE	0.6	0.8	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.3	0.5	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	TRACE
NITROGEN	10.2	5.6	6.4
OXYGEN	2.2	0.0	0.5
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	TRACE
HELIUM	0.15	0.22	0.16
HEATING VALUE*	1044	1195	1048
SPECIFIC GRAVITY	0.758	0.743	0.672

* CALCULATED GROSS BTU PER CU.FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9157 SAMPLE 7552	INDEX 9158 SAMPLE 7570	INDEX 9159 SAMPLE 7583
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PEDROSA	PEDROSA	PEDROSA
WELL NAME	PEDROSA NO. 1	PEDROSA NO. 1	PEDROSA NO. 1
LOCATION	SEC. 3, BLK. 4, ACH&B SUR.	SEC. 3, BLK. 4, ACH&B SUR.	SEC. 3, BLK. 4, ACH&B SUR.
OWNER	LEE T. BIVINS	LEE T. BIVINS	LEE T. BIVINS
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/12/60	06/06/60	06/20/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3310	NOT GIVEN	2692
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	107	2000
COMPONENT, MOLE PCT			
METHANE	64.2	67.7	73.6
ETHANE	3.8	4.0	6.0
PROPANE	3.0	0.5	2.6
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	19.7	21.5	15.0
OXYGEN	TRACE	TRACE	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.5	3.2	0.1
HELIUM	1.40	1.40	0.50
HEATING VALUE*	849	830	972
SPECIFIC GRAVITY	0.768	0.721	0.697

	INDEX 9160 SAMPLE 8074	INDEX 9161 SAMPLE 2834	INDEX 9162 SAMPLE 3606
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PEDROSA	WILDCAT	WILDCAT
WELL NAME	PEDROSA NO. 2	CITY OF AMARILLO NO. 1	STANOLIND NO. 1 GRIFFIN
LOCATION	NOT GIVEN	SEC. 167, BLK. 2, AB&M SUR.	SEC. 9, BLK. 2, AB&M SUR.
OWNER	PIONEER NATURAL GAS	CANADIAN RIVER GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	09/29/60	06/10/40	NOT GIVEN
SAMPLED	07/20/61	03/11/40	09/28/42
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2671	3750	4205
WELLHEAD PRESSURE,PSIG	564	NOT GIVEN	125
OPEN FLOW, MCFD	675	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	24.2	1.2
ETHANE	6.4	11.3	0.0
PROPANE	2.8	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	14.2	52.7	98.2
OXYGEN	0.4	0.0	0.4
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	9.8	0.0
HELIUM	0.50	2.24	0.24
HEATING VALUE*	987	448	12
SPECIFIC GRAVITY	0.695	0.915	0.961

	INDEX 9163 SAMPLE 7150	INDEX 9164 SAMPLE 7560	INDEX 9165 SAMPLE 7561
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CAROLINE BUSH EMENY NO. 1	BIVINS NO. 1-207	BIVINS RANCH NO. 1-207
LOCATION	SEC. 9, BLK. M-19, G&M SUR.	SEC. 207, BLK. 2, AB&M SUR.	SEC. 207, BLK. 2, AB&M SUR.
OWNER	HUMBLE OIL & REFINING CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	05/18/60	NOT GIVEN
SAMPLED	07/24/59	05/18/60	05/24/60
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3420	3420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	670	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	57	300
COMPONENT, MOLE PCT			
METHANE	1.0	63.7	58.9
ETHANE	0.1	3.6	3.1
PROPANE	0.2	2.6	2.4
N-BUTANE	0.0	0.5	0.4
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	98.2	22.7	20.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	5.1	12.5
HELIUM	0.20	1.42	1.30
HEATING VALUE*	18	607	741
SPECIFIC GRAVITY	0.961	0.750	0.809

	INDEX 9166 SAMPLE 7563	INDEX 9167 SAMPLE 7566	INDEX 9168 SAMPLE 7926
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BIVINS RANCH NO. 1-207	BIVINS RANCH NO. 1-207	BIVINS RANCH NO. 1-207
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	SEC. 207, BLK. 2, AB&M SUR.	SEC. 207, BLK. 2, AB&M SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	03/27/61
SAMPLED	05/27/60	05/31/60	04/13/61
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3420	2510
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	520
OPEN FLOW, MCFD	NOT GIVEN	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.6	64.5	74.1
ETHANE	3.1	3.5	4.9
PROPANE	5.5	0.7	2.1
N-BUTANE	0.5	0.3	0.5
ISOBUTANE	0.0	0.4	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	20.9	23.4	16.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.5	5.3	0.3
HELIUM	1.50	1.40	0.70
HEATING VALUE*	872	772	937
SPECIFIC GRAVITY	0.762	0.738	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9169 SAMPLE 12001		INDEX 9170 SAMPLE 15990		INDEX 9171 SAMPLE 16000	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	MASTERSON A-33		EMENY NO.1		EMENY NO. 1	
LOCATION	SEC. 78, BLK. M7, H&TC SUR.		SEC. 29, BLK M-19, G&M SUR.		SEC. 29, BLK. M-19, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		BAKER & TAYLOR DR. CO.		BAKER & TAYLOR DRILLING CO.	
COMPLETED	DRILL STEM TEST		NOT GIVEN		07/09/80	
SAMPLED	08/21/69		06/28/60		07/17/80	
FORMATION	PENN-LIMESTONE		PENN-GRANITE WASH		PENN-GRANITE WASH	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	6418		5700		5700	
WELLHEAD PRESSURE,PSIG	225		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	20		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	54.9	----------	36.9	----------	43.6	----------
ETHANE	10.3		2.9		3.6	
PROPANE	17.1	----------	4.4	----------	4.4	----------
N-BUTANE	4.1		5.0		2.6	
ISOBUTANE	1.3	----------	2.4	----------	1.3	----------
N-PENTANE	0.4		2.1		0.9	
ISOPENTANE	0.7	----------	2.6	----------	1.0	----------
CYCLOPENTANE	TRACE		0.5		0.2	
HEXANES PLUS	0.1	----------	1.4	----------	0.6	----------
NITROGEN	10.6		40.7		40.1	
OXYGEN	0.1	----------	TRACE	----------	TRACE	----------
ARGON	TRACE		0.3		0.4	
HYDROGEN	0.1	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0	----------	0.1	----------	0.7	----------
HELIUM	0.17		0.65		0.61	
HEATING VALUE*	1419	----------	1081	----------	871	----------
SPECIFIC GRAVITY	0.925		1.028		0.904	

	INDEX 9172 SAMPLE 16080		INDEX 9173 SAMPLE 10691		INDEX 9174 SAMPLE 12495	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		RAINS		RAINS	
FIELD	WILDCAT		DUNBAR		YANTIS W	
WELL NAME	EMENY NO. 1		EARL REYNOLDS GAS UNIT NO. 1		SENTRY G. U. NO. 1	
LOCATION	SEC. 29, BLK. M-19, G&M SUR.		BONIFACIO DE OSINEA SUR.		O. P. SELLS SUR.	
OWNER	BAKER & TAYLOR DRILLING CO.		TEXACO INC.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	07/09/80		12/11/64		08/05/62	
SAMPLED	08/04/80		08/09/66		10/25/70	
FORMATION	PENN-GRANITE WASH		JURA-SMACKOVER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	440		260		260	
DEPTH, FEET	5700		13072		12522	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3510		3834	
OPEN FLOW, MCFD	NOT GIVEN		41000		24000	
COMPONENT, MOLE PCT						
METHANE	37.3	----------	46.6	----------	59.4	----------
ETHANE	2.7		11.6		6.2	
PROPANE	3.1	----------	5.6	----------	4.0	----------
N-BUTANE	2.4		1.9		1.3	
ISOBUTANE	1.3	----------	2.0	----------	1.4	----------
N-PENTANE	0.6		0.4		0.4	
ISOPENTANE	0.8	----------	0.8	----------	0.3	----------
CYCLOPENTANE	0.5		0.1		TRACE	
HEXANES PLUS	0.7	----------	0.3	----------	0.3	----------
NITROGEN	49.4		22.2		14.4	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.4		TRACE		TRACE	
HYDROGEN	0.2	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE**	0.0		3.1		4.7	
CARBON DIOXIDE	0.0	----------	5.3	----------	7.4	----------
HELIUM	0.58		0.10		0.05	
HEATING VALUE*	947	----------	1047	----------	983	----------
SPECIFIC GRAVITY	0.912		0.920		0.847	

	INDEX 9175 SAMPLE 34		INDEX 9176 SAMPLE 1734		INDEX 9177 SAMPLE 2047	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RANDALL		REAGAN		REAGAN	
FIELD	PALO DURO CREEK		BIG LAKE		BIG LAKE	
WELL NAME	PALO DURO OIL CO. NO. 1		UNIVERSITY NO. B-1		UNIVERSITY NO. 12	
LOCATION	SEC. 125, BLK. I&GN SUR.		SEC. 36, BLK. 9, UNIV. LAND		SEC. 36, BLK. 9, UNIV. LAND	
OWNER	PALO DURO OIL CO.		TEXON OIL & LAND CO.		W. E. BEYMAN	
COMPLETED	07/21/19		12/01/28		12/01/25	
SAMPLED	09/04/19		04/04/29		06/17/30	
FORMATION	PERM-		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	435		430		430	
DEPTH, FEET	400		8523		2937	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		22000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	0.9	----------	42.7	----------	34.4	----------
ETHANE	1.2		53.2		55.1	
PROPANE	---	----------	---	----------	---	----------
N-BUTANE	---		---		---	
ISOBUTANE	---	----------	---	----------	---	----------
N-PENTANE	---		---		---	
ISOPENTANE	---	----------	---	----------	---	----------
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---	----------	---	----------	---	----------
NITROGEN	97.3		3.8		6.2	
OXYGEN	0.3	----------	0.2	----------	0.2	----------
ARGON	---		---		---	
HYDROGEN	---	----------	---	----------	---	----------
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3	----------	0.2	----------	4.2	----------
HELIUM	0.09		0.06		0.09	
HEATING VALUE*	31	----------	1346	----------	1336	----------
SPECIFIC GRAVITY	0.967		0.837		0.895	

	INDEX 9178 SAMPLE 2048		INDEX 9179 SAMPLE 12686		INDEX 9180 SAMPLE 5993	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REAGAN		REAGAN		REAGAN	
FIELD	BIG LAKE		BIG LAKE		CENTRALIA DRAW	
WELL NAME	UNIVERSITY NO. 65		UNIVERSITY 3955 NO. 1-2		W. H. DIXON NO. 1	
LOCATION	SEC. 36, BLK. 9, UNIV. LAND		SEC. 2, BLK. 2		SEC. 1, A. ROACH SUR. A-4875	
OWNER	W. E. BEYMAN		MARATHON OIL CO.		TEXAS CO.	
COMPLETED	01/01/27		01/28/55		05/17/55	
SAMPLED	06/14/30		02/16/71		12/29/55	
FORMATION	NOT GIVEN		PENN-STRAWN		PERM-DEAN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	2975		8350		7846	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		246		55	
OPEN FLOW, MCFD	NOT GIVEN		5606		30	
COMPONENT, MOLE PCT						
METHANE	33.1	----------	65.7	----------	67.8	----------
ETHANE	53.1		16.5		12.5	
PROPANE	---	----------	9.2	----------	11.6	----------
N-BUTANE	---		3.0		3.8	
ISOBUTANE	---	----------	1.5	----------	0.8	----------
N-PENTANE	---		0.9		0.7	
ISOPENTANE	---	----------	0.4	----------	0.6	----------
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---	----------	0.4	----------	0.5	----------
NITROGEN	3.2		2.1		1.3	
OXYGEN	0.3	----------	0.0	----------	0.0	----------
ARGON	---		0.0		0.0	
HYDROGEN	---	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	10.3	----------	0.3	----------	0.3	----------
HELIUM	0.06		0.04		0.03	
HEATING VALUE*	1287	----------	1491	----------	1451	----------
SPECIFIC GRAVITY	0.933		0.886		0.849	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9181 SAMPLE 2049	INDEX 9182 SAMPLE 9585	INDEX 9183 SAMPLE 7145
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REAGAN	REAGAN	REAGAN
FIELD	SKELLY-GRAYSON	TEXON	WILDCAT
WELL NAME	GRAYSON NO. 1	UNIVERSITY AA NO. 1	L. PROCTER B NO. 6
LOCATION	SEC. 33, BLK. 8, UNIV. LAND	SEC. 2,BLK.S,UNIV. LANDS SUR	SEC. 23, T3T, T&P RR SUR.
OWNER	SKELLY OIL CO.	GREAT WESTERN DRILLING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/11/28	07/23/64	NOT GIVEN
SAMPLED	06/18/30	10/06/64	07/--/59
FORMATION	PERM-SAN ANDRES	SILU-FUSSELMAN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3131	9972	10600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2619	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	8150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	9.7	76.7	85.1
ETHANE	67.2	12.3	4.9
PROPANE	---	4.9	0.8
N-BUTANE	---	1.6	0.0
ISOBUTANE	---	0.7	0.2
N-PENTANE	---	0.5	TRACE
ISOPENTANE	---	0.4	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.4	0.0
NITROGEN	9.4	1.9	7.8
OXYGEN	0.4	0.0	0.8
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	13.2	0.4	0.1
HELIUM	0.14	0.06	TRACE
HEATING VALUE*	1302	1265	982
SPECIFIC GRAVITY	1.056	0.740	0.630

	INDEX 9184 SAMPLE 15560	INDEX 9185 SAMPLE 10626	INDEX 9186 SAMPLE 13588
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	ADAM	AMBLER	ATHEN
WELL NAME	ADAM ESTATE NO. 1	LANGFORD NO. 1	SPENCER NO. 1
LOCATION	SEC. 11, BLK. 3, H&GN SUR.	SEC. 9, BLK. 4, H&GN SUR.	SEC. 33, BLK. 55, T&P SUR.
OWNER	ATAPCO	HARLAN PRODUCTION CO.	COASTAL STATES GAS CO.
COMPLETED	09/18/78	12/18/66	12/06/72
SAMPLED	01/29/79	06/23/66	04/20/73
FORMATION	PENN-MORROW	PERM-DELAWARE	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17208	4335	12911
WELLHEAD PRESSURE,PSIG	10412	2225	4600
OPEN FLOW, MCFD	12100	3800	22000
COMPONENT, MOLE PCT			
METHANE	92.2	96.9	88.7
ETHANE	0.4	1.6	0.3
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	4.1	0.9	1.0
OXYGEN	0.8	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.2	9.9
HELIUM	0.01	0.02	0.02
HEATING VALUE*	954	1021	896
SPECIFIC GRAVITY	0.605	0.572	0.657

	INDEX 9187 SAMPLE 15104	INDEX 9188 SAMPLE 15105	INDEX 9189 SAMPLE 14687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	CASEY DRAW	CASEY DRAW	CHAPMAN
WELL NAME	JOHNSON NO. 1	JOHNSON NO. 2	A.T. RANDOLPH G.U. NO. 1
LOCATION	SEC. 22, BLK. C-11, PSL SUR.	SEC. 22, BLK. C-11, PSL SUR.	SEC. 34, BLK. 57, T-2 T&P SR
OWNER	MONSANTO CO.	MONSANTO CO.	GULF ENERGY & MINERALS CO.
COMPLETED	03/09/76	08/23/76	09/22/74
SAMPLED	09/--/77	09/--/77	06/04/76
FORMATION	PERM-DELAWARE	PERM-DELAWARE	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3836	3886	15499
WELLHEAD PRESSURE,PSIG	1550	1515	5353
OPEN FLOW, MCFD	2400	2200	19600
COMPONENT, MOLE PCT			
METHANE	95.9	96.0	96.6
ETHANE	0.7	0.7	0.3
PROPANE	0.1	0.1	TRACE
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	2.2	2.0	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.9	1.0	2.0
HELIUM	0.03	0.03	0.03
HEATING VALUE*	995	995	985
SPECIFIC GRAVITY	0.581	0.580	0.579

	INDEX 9190 SAMPLE 14688	INDEX 9191 SAMPLE 12375	INDEX 9192 SAMPLE 12422
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	CHAPMAN	GREASEWOOD	GREASEWOOD
WELL NAME	A.T. RANDOLPH G.U. NO. 1	CORNELL KNIGHT NO. 1	CORNELL KNIGHT NO. 1
LOCATION	SEC. 34, BLK. 57, T-2 T&P SR	SEC. 9, BLK. C-19, PSL SUR.	SEC. 9, BLK. C19, PSL SUR.
OWNER	GULF ENERGY & MINERALS CO.	TEXACO INC.	TEXACO INC.
COMPLETED	09/17/74	09/23/68	09/22/68
SAMPLED	06/04/76	08/13/70	09/23/70
FORMATION	PENN-ATOKA	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12884	16293	16293
WELLHEAD PRESSURE,PSIG	6664	5800	5777
OPEN FLOW, MCFD	25025	37000	37000
COMPONENT, MOLE PCT			
METHANE	98.0	93.3	93.6
ETHANE	0.6	0.4	0.4
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.6	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	5.6	5.0
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1006	952	956
SPECIFIC GRAVITY	0.569	0.613	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9193 SAMPLE 12551	INDEX 9194 SAMPLE 10612	INDEX 9195 SAMPLE 14473
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	GREASEWOOD	HAMON	L.N.D.
WELL NAME	CORNELL KNIGHT NO. 1	WAPLES PLATTER	PECOS UNIT NO. 1
LOCATION	SEC. 9, BLK. C19, P&L SUR.	SEC. 22, BLK. 50, T1S	SEC. 29,BLK.4,H&GNRR SUR.
OWNER	TEXACO INC.	JAKE L. HAMON	TEXAS WEST OIL & GAS CORP.
COMPLETED	09/22/68	--/--/65	NOT GIVEN
SAMPLED	11/19/70	06/14/66	10/03/75
FORMATION	SILU-DEVO	ORDO-ELLENBURGER	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16293	20450	15218
WELLHEAD PRESSURE,PSIG	5777	6700	8950
OPEN FLOW, MCFD	37000	50000	44000
COMPONENT, MOLE PCT			
METHANE	93.8	90.0	95.2
ETHANE	0.4	0.3	0.4
PROPANE	TRACE	0.0	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.6	0.7	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	5.5	9.0	3.9
HELIUM	0.02	0.02	0.01
HEATING VALUE*	954	917	974
SPECIFIC GRAVITY	0.612	0.647	0.597

	INDEX 9196 SAMPLE 15719	INDEX 9197 SAMPLE 15336	INDEX 9198 SAMPLE 13391
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	LOCKRIDGE S	MARSHALS	MI VIDA
WELL NAME	SAM J. DWYER NO. 1	REEVES STATE NO. 1-22	CAMP UNIT NO. 1
LOCATION	BLK. 5T, HERNANDEZ SUR.	SEC. 22, BLK. 45, PSL SUR.	SEC. 3, BLK. 4, H&GN SUR.
OWNER	SEPTOR OIL CO.	CHEVRON U.S.A.,INC.	SUPERIOR OIL CO.
COMPLETED	08/06/79	08/27/77	10/24/71
SAMPLED	08/06/79	07/31/78	09/22/72
FORMATION	DEVO-	PERM-DELAWARE	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16760	2688	18444
WELLHEAD PRESSURE,PSIG	6400	1349	2990
OPEN FLOW, MCFD	6000	2900	4585
COMPONENT, MOLE PCT			
METHANE	93.9	98.6	47.0
ETHANE	2.8	0.1	0.1
PROPANE	0.7	TRACE	TRACE
N-BUTANE	0.2	TRACE	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.6	0.7	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.5
CARBON DIOXIDE	1.5	0.4	52.0
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1039	1006	481
SPECIFIC GRAVITY	0.598	0.564	1.067

	INDEX 9199 SAMPLE 13392	INDEX 9200 SAMPLE 15353	INDEX 9201 SAMPLE 14897
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	MI VIDA	NOT GIVEN	RIPPLINGER
WELL NAME	CAMP UNIT NO. 1	J. B. YOUNG NO. 1	WORSHAM UNIT NO. 1
LOCATION	SEC. 3, BLK. 4, H&GN SUR.	SEC. 2,BLK.50,T-7,P&PRR SUR.	SEC. 4, BLK. C-7, PSL SUR.
OWNER	SUPERIOR OIL CO.	W. W. BUCHANAN	UNION OIL CO. OF CALIFORNIA
COMPLETED	10/24/71	10/16/77	08/09/75
SAMPLED	09/22/72	08/28/78	02/04/77
FORMATION	SILU-FUSSELMAN	PERM-DELAWARE	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16332	5103	18147
WELLHEAD PRESSURE,PSIG	5515	2206	6340
OPEN FLOW, MCFD	512405	3240	2565
COMPONENT, MOLE PCT			
METHANE	92.5	90.4	96.4
ETHANE	0.4	4.0	0.9
PROPANE	TRACE	0.5	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	4.0	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.4	0.1	2.1
HELIUM	0.01	0.06	0.01
HEATING VALUE*	946	1035	995
SPECIFIC GRAVITY	0.622	0.612	0.582

	INDEX 9202 SAMPLE 11886	INDEX 9203 SAMPLE 12811	INDEX 9204 SAMPLE 15538
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	ROJO CABALLOS W	ROJO CABALLOS W	SAN MARTINE
WELL NAME	MILLWEE-STATE NO. 1	TXL REEVES STATE UNIT	CALDWELL STATE NO. 1
LOCATION	SEC. 18, BLK. 49, T&P SUR.	SEC. 20, BLK. 49, T&PRR SUR.	SEC. 9, BLK. 71, PSL SUR.
OWNER	EXPET OIL CORP.	TEXAS INC.	DYCO PETROLEUM CORP.
COMPLETED	03/19/68	06/19/66	08/15/77
SAMPLED	05/15/69	NOT GIVEN	12/13/78
FORMATION	PERM-WOLFCAMP	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15887	20520	16680
WELLHEAD PRESSURE,PSIG	6595	6937	7400
OPEN FLOW, MCFD	2400	375400	2400
COMPONENT, MOLE PCT			
METHANE	94.8	94.9	90.5
ETHANE	3.0	0.4	5.2
PROPANE	0.6	0.1	0.6
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	TRACE	0.2	TRACE
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.7	0.7	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1065	1002	1006
SPECIFIC GRAVITY	0.588	0.599	0.629

* CALCULATED GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9205 SAMPLE 13073	INDEX 9206 SAMPLE 10813	INDEX 9207 SAMPLE 5809
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	SAND LAKE	TORO	TOYAH
WELL NAME	T. A. KIRK GAS UNIT NO. 1	REEVES TXL FEE UNIT NO. 1	TOYAH UNIT NO. 1
LOCATION	SEC. 25, BLK. C-18, PSL SUR.	SEC. 46, 850, T7, T&P SUR.	SEC. 20, BLK. C-17, PSL SUR.
OWNER	GULF OIL CO.-U.S.	TEXACO INC.	GULF OIL CORP.&PHILLIPS PET.
COMPLETED	02/01/71	07/26/66	09/--/54
SAMPLED	10/07/71	12/13/66	04/22/55
FORMATION	PENN-ATOKA	ORDO-ELLENBURGER	SILU-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14590	19895	12570
WELLHEAD PRESSURE,PSIG	8553	6661	4600
OPEN FLOW, MCFD	19400	170000	56000
COMPONENT, MOLE PCT			
METHANE	97.6	96.6	91.5
ETHANE	0.5	0.2	0.4
PROPANE	0.1	0.1	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.8	0.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.3	7.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1000	985	934
SPECIFIC GRAVITY	0.574	0.583	0.631

	INDEX 9208 SAMPLE 12720	INDEX 9209 SAMPLE 12721	INDEX 9210 SAMPLE 10629
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	TOYAH	TOYAH	WAHA W
WELL NAME	TOYAH NO. 3	TOYAH NO. 2	RAPE NO. 2
LOCATION	SEC. 24, BLK. C17	SEC. 23, BLK. C-17	SEC. 2, BLK.C-4, P.S.L. SUR.
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/1-/65
SAMPLED	03/19/71	03/19/71	06/23/66
FORMATION	PENN-	DEVO-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11354	12460	16071
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	5735
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	38000
COMPONENT, MOLE PCT			
METHANE	97.2	91.2	94.5
ETHANE	1.0	0.4	1.3
PROPANE	0.2	TRACE	0.8
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	0.6	0.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	7.6	2.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1008	931	1013
SPECIFIC GRAVITY	0.574	0.632	0.602

	INDEX 9211 SAMPLE 11072	INDEX 9212 SAMPLE 11073	INDEX 9213 SAMPLE 12748
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	WAHA W	WAHA W	WAHA W
WELL NAME	W. T. BARBER NO. 9-U	W. T. BARBER NO. 9	WAYNE MOORE NO. 12
LOCATION	SEC. 21, BLK7, H&GN RRCO.SUR	SEC. 21, BLK7, H&GN RRCO.SUR	SEC. 3, BLK. C-3, PSL SUR.
OWNER	GULF OIL CORP.	GULF OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/11/67	01/17/67	12/09/66
SAMPLED	08/17/67	08/17/67	04/02/71
FORMATION	PERM-DELAWARE	PERM-DELAWARE	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5826	6213	16499
WELLHEAD PRESSURE,PSIG	2310	2520	2642
OPEN FLOW, MCFD	183	16500	4126
COMPONENT, MOLE PCT			
METHANE	88.5	89.3	93.5
ETHANE	5.3	5.0	1.6
PROPANE	2.2	1.8	0.4
N-BUTANE	0.6	0.6	0.1
ISOBUTANE	0.4	0.4	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	2.3	1.7	0.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	3.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1104	1119	1002
SPECIFIC GRAVITY	0.637	0.640	0.610

	INDEX 9214 SAMPLE 14040	INDEX 9215 SAMPLE 14041	INDEX 9216 SAMPLE 15835
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	WORSHAM	WORSHAM	WORSHAM E
WELL NAME	WORSHAM "19" NO. 1	WORSHAM "19" NO. 1	S. E. LIGON-STATE NO. 6
LOCATION	SEC. 19, BLK 6, H&GN SUR	SEC. 19, BLK. 6, H&GN SUR	SEC. 16, BLK. 7, H&GN RR SUR
OWNER	AMERICAN QUASAR PETROLEUM CO	AMERICAN QUASAR PETROLEUM CO	GULF OIL CORP.
COMPLETED	11/30/73	11/30/73	07/25/79
SAMPLED	07/08/74	07/08/74	11/14/79
FORMATION	DEVO-	DEVO-	PERM-CHERRY CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17110	16611	6154
WELLHEAD PRESSURE,PSIG	5126	5740	2405
OPEN FLOW, MCFD	9600	12800	13000
COMPONENT, MOLE PCT			
METHANE	96.3	95.6	91.9
ETHANE	0.6	0.7	4.4
PROPANE	0.1	0.1	1.2
N-BUTANE	0.0	0.0	0.4
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.6	0.6	1.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	3.0	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	989	984	1086
SPECIFIC GRAVITY	0.584	0.591	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9217 SAMPLE 10949		INDEX 9218 SAMPLE 12268		INDEX 9219 SAMPLE 10182	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REEVES		REEVES		REFUGIO	
FIELD	WORSHAM-BAYER		WORSHAM-BAYER		BAYSIDE	
WELL NAME	STATE SCHOOL BOARD ZZ NO. 4		WRAY NO. 1		A. L. COLE NO. 1	
LOCATION	SEC. 15, BLK. C-4, PSL SUR.		SEC. 4 BLK. 7, H&GN SUR.		JUAN POREDANO GRANT A-49	
OWNER	GULF OIL CORP.		IMPERIAL-AMERICAN MANAGEMENT		SUN OIL CO.	
COMPLETED	06/01/66		04/21/69		NOT GIVEN	
SAMPLED	05/02/67		04/22/70		09/30/65	
FORMATION	ORDO-ELLENBURGER		DEVO-		OLIG-FRIO 8000	
GEOLOGIC PROVINCE CODE	430		430		220	
DEPTH, FEET	16748		14456		8005	
WELLHEAD PRESSURE,PSIG	5696		3013		750	
OPEN FLOW, MCFD	330000		2115		10600	
COMPONENT, MOLE PCT						
METHANE	92.4		89.9		94.5	
ETHANE	1.0		5.6		2.6	
PROPANE	0.2		1.6		0.9	
N-BUTANE	0.0		0.4		0.3	
ISOBUTANE	0.0		0.3		0.3	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.0		TRACE		0.1	
HEXANES PLUS	0.0		0.3		0.3	
NITROGEN	0.6		1.2		0.6	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	5.8		0.5		0.1	
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	959		1096		1079	
SPECIFIC GRAVITY	0.620		0.627		0.604	

	INDEX 9220 SAMPLE 4683		INDEX 9221 SAMPLE 4684		INDEX 9222 SAMPLE 13545	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REFUGIO		REFUGIO		REFUGIO	
FIELD	BLANCO CREEK		BLANCO CREEK		FAGAN	
WELL NAME	W. S. PERRYMAN NO. 1-T		W. S. PERRYMAN NO. 1C		FAGAN "L" NO. 2	
LOCATION	NOT GIVEN		NOT GIVEN		MICHAUL RILEY SUR. A-57	
OWNER	SOUTHERN MINERALS CORP.		SOUTHERN MINERALS CORP.		TEXAS OIL & GAS CORP.	
COMPLETED	09/17/48		09/17/48		03/29/72	
SAMPLED	02/14/49		02/14/49		02/20/73	
FORMATION	OLIG-FRIO & VICKSBURG		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7114		6630		2072	
WELLHEAD PRESSURE,PSIG	3023		2393		225	
OPEN FLOW, MCFD	9250		27000		8300	
COMPONENT, MOLE PCT						
METHANE	91.3		71.2		98.7	
ETHANE	4.1		9.2		0.1	
PROPANE	1.8		11.7		TRACE	
N-BUTANE	0.5		1.1		0.0	
ISOBUTANE	0.5		3.8		0.0	
N-PENTANE	0.3		0.9		0.0	
ISOPENTANE	0.0		TRACE		0.0	
CYCLOPENTANE	0.1		0.3		0.0	
HEXANES PLUS	0.6		1.4		0.0	
NITROGEN	0.3		0.1		1.1	
OXYGEN	0.1		0.1		0.1	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.4		0.4		0.1	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1124		1467		1002	
SPECIFIC GRAVITY	0.636		0.854		0.562	

	INDEX 9223 SAMPLE 14319		INDEX 9224 SAMPLE 2566		INDEX 9225 SAMPLE 4042	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REFUGIO		REFUGIO		REFUGIO	
FIELD	FAGAN		GOLIAD		GRETA	
WELL NAME	FAGAN ESTATE M NO. 4		J. O'CONNER NO. 2		J. M. OBRIEN G NO. 1	
LOCATION	MARY BRYNE SUR. A-8		NO. 40, C.E.P.I.&M.SUR.		WINFIELD SUR.	
OWNER	TEXAS OIL & GAS CORP.		GULF PRODUCTION CO.		ATLANTIC REFINING CO.	
COMPLETED	08/30/73		09/18/32		11/15/41	
SAMPLED	03/25/75		10/14/32		05/30/45	
FORMATION	NOT GIVEN		OLIG-FRIO L		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8030		5704		3432	
WELLHEAD PRESSURE,PSIG	2230		2240		1300	
OPEN FLOW, MCFD	18000		20000		200	
COMPONENT, MOLE PCT						
METHANE	88.7		83.4		95.2	
ETHANE	4.8		15.6		4.6	
PROPANE	3.0		---		---	
N-BUTANE	1.0		---		---	
ISOBUTANE	0.6		---		---	
N-PENTANE	0.3		---		---	
ISOPENTANE	0.5		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.2		---		---	
NITROGEN	0.5		0.5		0.0	
OXYGEN	0.0		0.4		0.0	
ARGON	0.0		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.3		0.1		0.2	
HELIUM	0.01		0.00		TRACE	
HEATING VALUE*	1164		1124		1047	
SPECIFIC GRAVITY	0.660		0.637		0.579	

	INDEX 9226 SAMPLE 4043		INDEX 9227 SAMPLE 12466		INDEX 9228 SAMPLE 11589	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REFUGIO		REFUGIO		REFUGIO	
FIELD	GRETA		GRETA W		HUFF	
WELL NAME	O'CONNER NO. 5		W. J. FOX NO. 1		O'CONNER NO. 44L	
LOCATION	N. S. CROWE SUR.		WILLIAM HEWS SUR. A-33		FLORENTINE RIOS SUR. A-59	
OWNER	ATLANTIC REFINING CO.		DUER WAGNER + CO.		T-C OIL CO.	
COMPLETED	10/06/43		07/27/67		06/09/67	
SAMPLED	NOT GIVEN		10/21/70		07/26/68	
FORMATION	OLIG-FRIO		OLIG-FRIO		MIOC-HUFF	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5450		5701		2619	
WELLHEAD PRESSURE,PSIG	2250		1610		910	
OPEN FLOW, MCFD	18000		4560		30200	
COMPONENT, MOLE PCT						
METHANE	93.0		90.9		97.8	
ETHANE	5.7		4.4		0.2	
PROPANE	---		2.5		TRACE	
N-BUTANE	---		0.5		0.0	
ISOBUTANE	---		0.7		0.0	
N-PENTANE	---		0.1		0.0	
ISOPENTANE	---		0.2		0.0	
CYCLOPENTANE	---		0.1		0.0	
HEXANES PLUS	---		0.2		0.0	
NITROGEN	2.0		0.4		1.7	
OXYGEN	0.1		0.2		0.3	
ARGON	---		0.2		TRACE	
HYDROGEN	---		0.1		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1063		1127		994	
SPECIFIC GRAVITY	0.590		0.632		0.566	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9229 SAMPLE 10648	INDEX 9230 SAMPLE 13535	INDEX 9231 SAMPLE 4466
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	LAKE PASTURE	MARY ELLEN O'CONNER	NOT GIVEN
WELL NAME	MAUDE WILLIAMS A NO. D-5C	M. E. O'CONNER NO.4	C. T. HOLEMAN B-1
LOCATION	H. C. SWEET A-393	BB&C RR CO. SUR. A-382	NOT GIVEN
OWNER	QUINTANA PETROLEUM CORP.	AMOCO PRODUCTION CO.	SOUTHERN MINERALS CORP.
COMPLETED	08/29/65	04/10/71	12/14/47
SAMPLED	07/07/66	02/15/73	04/29/48
FORMATION	OLIG-FS-509	OLIG-FRIO	MIOC-OAKVILLE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5117	3138	2354
WELLHEAD PRESSURE,PSIG	1700	635	1000
OPEN FLOW, MCFD	100000	3011	14500
COMPONENT, MOLE PCT			
METHANE	93.3	99.1	99.3
ETHANE	3.6	0.1	0.3
PROPANE	0.3	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.5	0.0	---
CYCLOPENTANE	0.3	0.0	---
HEXANES PLUS	0.4	0.0	---
NITROGEN	0.8	0.7	0.0
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1084	1006	1011
SPECIFIC GRAVITY	0.610	0.557	0.559

	INDEX 9232 SAMPLE 4587	INDEX 9233 SAMPLE 4839	INDEX 9234 SAMPLE 15410
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	REFUGIO	REFUGIO E	TOM O'CONNER
WELL NAME	JAMIF HYNES NO. 4-A	J.J. O'BRIEN NO. A-1	FANNIE V. W. HEARD NO. 70
LOCATION	O'BRIEN SUR.	REFUGIO TOWN TR. SUR. ABS.56	THOMAS H. WEBB SUR., A-298
OWNER	LA GLORIA CORP. & SKELLY OIL	UNION PRODUCING CO.	QUINTANA PETROLEUM CORP.
COMPLETED	03/20/48	09/10/49	01/16/77
SAMPLED	10/08/48	12/26/49	10/09/78
FORMATION	OLIG-SINTON	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5295	5826	4044
WELLHEAD PRESSURE,PSIG	2400	1058	1505
OPEN FLOW, MCFD	15000	13000	27800
COMPONENT, MOLE PCT			
METHANE	90.4	90.8	98.3
ETHANE	9.0	4.7	0.6
PROPANE	---	1.9	0.1
N-BUTANE	---	0.6	TRACE
ISOBUTANE	---	0.4	TRACE
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.5	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.0	0.6	0.5
OXYGEN	0.2	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1077	1118	1018
SPECIFIC GRAVITY	0.604	0.630	0.566

	INDEX 9235 SAMPLE 12043	INDEX 9236 SAMPLE 4648	INDEX 9237 SAMPLE 4444
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	VIDAURI	VIDAURI W	WILDCAT
WELL NAME	J. F. WELDER NO. 1	J. F. WELDER HEIRS NO. 6	J. F. WELDER HEIRS NO. 1
LOCATION	NOT GIVEN	JOSEPH FARLEY SUR.	NOT GIVEN
OWNER	MERIDIAN EXPLORATION INC.	P. R. RUTHERFORD ET AL.	P. R. RUTHERFORD, ET AL.
COMPLETED	11/16/47	09/06/48	11/16/47
SAMPLED	09/16/69	01/10/49	01/16/48
FORMATION	OLIG-FRIO	OLIG-FRIO U	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4760	4550	4869
WELLHEAD PRESSURE,PSIG	1932	2060	2010
OPEN FLOW, MCFD	15000	37500	5875
COMPONENT, MOLE PCT			
METHANE	95.9	92.6	91.3
ETHANE	2.3	6.9	6.8
PROPANE	0.5	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.5	0.1	1.3
OXYGEN	0.0	0.3	0.3
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1047	1062	1047
SPECIFIC GRAVITY	0.584	0.592	0.598

	INDEX 9238 SAMPLE 14402	INDEX 9239 SAMPLE 15373	INDEX 9240 SAMPLE 15395
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	CARRIE KILLEBREW	CARRIE KILLEBREW	CARRIE KILLEBREW
WELL NAME	KILLEBREW A NO. 1	MORRISON NO. 1	MORRISON NO. 2
LOCATION	SEC. 220, BLK. 42, H&TC SUR.	SEC. 212, BLK 42, H&TC SUR.	SEC. 213, BLK. 42, H&TC SUR.
OWNER	EASON OIL CO.	PIONEER PRODUCTION CORP.	EASON OIL CO.
COMPLETED	08/09/74	04/--/78	NOT GIVEN
SAMPLED	06/19/75	09/12/78	09/--/78
FORMATION	PENN-MORROW	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8536	8618	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2550	1480	NOT GIVEN
OPEN FLOW, MCFD	58500	59000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.3	81.5	74.2
ETHANE	10.4	10.7	9.8
PROPANE	5.9	4.3	5.0
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	2.2	0.7	5.5
OXYGEN	0.2	0.0	0.5
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.8	4.1
HELIUM	0.05	0.05	0.03
HEATING VALUE*	1155	1205	1096
SPECIFIC GRAVITY	0.693	0.696	0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9241 SAMPLE 13542		INDEX 9242 SAMPLE 7334		INDEX 9243 SAMPLE 7739	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	CREE FLOWERS		CREE-FLOWERS		CREE-FLOWERS	
WELL NAME	FLOWERS "A" NO. 1		FLOWERS BROS. 3		MILLS NO. A-1	
LOCATION	SEC. 79, BLK.C, G&M SUR.		SEC. 70, BLK. C, G&M SUR.		CLAY COUNTY SCHOOL LAND	
OWNER	HELMERICH & PAYNE, INC.		HUMBLE OIL & REFINING CO.		JAMES F. SMITH, ET AL.	
COMPLETED	07/05/72		10/20/59		NOT GIVEN	
SAMPLED	02/19/73		01/11/60		10/25/60	
FORMATION	PENN-DOUGLAS		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6287		3869		3620	
WELLHEAD PRESSURE,PSIG	1645		896		888	
OPEN FLOW, MCFD	5200		6800		4000	
COMPONENT, MOLE PCT						
METHANE	79.9		80.2		86.5	
ETHANE	8.7		7.8		6.6	
PROPANE	5.1		4.3		2.5	
N-BUTANE	1.3		1.2		0.7	
ISOBUTANE	0.5		0.5		0.4	
N-PENTANE	0.3		0.2		0.2	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	3.6		5.0		2.2	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.5	
HELIUM	0.16		0.10		0.10	
HEATING VALUE*	1189		1148		1124	
SPECIFIC GRAVITY	0.705		0.694		0.656	

	INDEX 9244 SAMPLE 7740		INDEX 9245 SAMPLE 12347		INDEX 9246 SAMPLE 8347	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	CREE-FLOWERS		CREE-FLOWERS		GEE-FLOWERS W	
WELL NAME	MILLS NO. 1		FLOWERS BROS. NO. 4		R. A. FLOWERS NO. 1	
LOCATION	CLAY COUNTY SCHOOL LAND		SEC. 74, BLK. C, G&M SUR.		SEC. 5, BS&F SUR.	
OWNER	JAMES F. SMITH, ET AL.		HUMBLE OIL & REFINING CO.		TEXACO INC.	
COMPLETED	NOT GIVEN		05/31/70		06/15/61	
SAMPLED	10/25/60		08/10/70		12/22/61	
FORMATION	PERM-WICHITA-ALBANY		PERM-GRANITE WASH		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	3608		8611		4168	
WELLHEAD PRESSURE,PSIG	879		1947		1050	
OPEN FLOW, MCFD	6400		2600		1200	
COMPONENT, MOLE PCT						
METHANE	86.0		78.7		83.7	
ETHANE	6.9		11.6		6.8	
PROPANE	2.6		5.5		3.5	
N-BUTANE	0.8		1.2		1.0	
ISOBUTANE	0.5		0.4		0.6	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.2		0.4		0.4	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		TRACE	
NITROGEN	2.4		1.4		3.2	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.4		0.4	
HELIUM	0.10		0.05		0.14	
HEATING VALUE*	1133		1232		1136	
SPECIFIC GRAVITY	0.657		0.715		0.674	

	INDEX 9247 SAMPLE 16068		INDEX 9248 SAMPLE 5515		INDEX 9249 SAMPLE 6113	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	LEDRICK RANCH		LIPS		LIPS	
WELL NAME	LEDRICK NO. 2-55		CHAS. LIPS NO. 11		LIPS B	
LOCATION	SEC. 55, BLK. C, G&M SUR.		SEC. 4, BLK.44, TE WHITE SUR		SEC. 31, BLK. A, H&GN SUR.	
OWNER	TENNECO OIL CO.		SINCLAIR OIL & GAS CO.		STANOLIND OIL & GAS CO.	
COMPLETED	06/24/80		05/26/53		05/16/56	
SAMPLED	09/18/80		07/09/53		07/26/56	
FORMATION	PENN-MORROW		PENN-ATOKA		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9285		8510		8494	
WELLHEAD PRESSURE,PSIG	1200		2032		2000	
OPEN FLOW, MCFD	2500		2500		15000	
COMPONENT, MOLE PCT						
METHANE	76.9		89.7		89.4	
ETHANE	13.6		6.6		4.2	
PROPANE	5.4		2.1		2.1	
N-BUTANE	1.3		0.5		0.8	
ISOBUTANE	0.3		0.1		0.6	
N-PENTANE	0.2		0.3		0.5	
ISOPENTANE	0.2		0.0		0.1	
CYCLOPENTANE	TRACE		TRACE		0.3	
HEXANES PLUS	0.1		0.2		0.7	
NITROGEN	1.1		0.5		0.8	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.0		0.4	
HELIUM	0.02		0.06		0.14	
HEATING VALUE*	1239		1125		1156	
SPECIFIC GRAVITY	0.720		0.630		0.659	

	INDEX 9250 SAMPLE 13172		INDEX 9251 SAMPLE 10538		INDEX 9252 SAMPLE 14634	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	LOCKE		MENDOTA		MENDOTA NW	
WELL NAME	TEPE NO. 1		FLOWERS LISTON NO. 1		R.A. FLOWERS NO. 3	
LOCATION	SEC. 17, BLK.44 KIVLEHEN SUR		SEC. 62, BLK. B-1,H&GN SUR.		SEC. 4, BS&F SUR.	
OWNER	J. M. HUBER CORP.		HUMBLE OIL & REFINING CO.		AMARILLO OIL CO.	
COMPLETED	01/04/72		11/15/65		03/01/76	
SAMPLED	03/24/72		04/13/66		04/13/76	
FORMATION	PERM-WICHITA-ALBANY		PENN-MORROW		PERM-GRANITE WASH	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4986		11306		9596	
WELLHEAD PRESSURE,PSIG	1120		425		2397	
OPEN FLOW, MCFD	9400		23600		30000	
COMPONENT, MOLE PCT						
METHANE	87.5		89.0		83.0	
ETHANE	6.6		7.2		9.6	
PROPANE	2.8		1.6		3.9	
N-BUTANE	0.7		0.2		0.9	
ISOBUTANE	0.5		0.1		0.5	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.3		0.1		0.1	
NITROGEN	1.2		0.4		1.1	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.1		TRACE		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		1.0		0.5	
HELIUM	0.04		0.04		0.04	
HEATING VALUE*	1158		1120		1143	
SPECIFIC GRAVITY	0.655		0.651		0.652	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9253 SAMPLE 16140	INDEX 9254 SAMPLE 11969	INDEX 9255 SAMPLE 14401
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	MENDOTA NW	MORRISON RANCH	MORRISON RANCH
WELL NAME	FLOWERS TRUST "B" NO. 3	MARY T. MORRISON D NO. 1	CONRAD NO. 1
LOCATION	SEC. C, BS&F SUR.	SEC. 180, BLK. 42, H&TC SUR.	SEC. 192, BL. 42, H&TC SUR.
OWNER	EXXON CO., U.S.A.	UNION OIL CO. OF CALIF.	DYCO PETROLEUM CORP.
COMPLETED	NOT GIVEN	09/23/68	NOT GIVEN
SAMPLED	12/08/80	07/17/69	06/19/75
FORMATION	PENN-GRANITE WASH	PENN-MORROW U	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10102	10594	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1835	2913	NOT GIVEN
OPEN FLOW, MCFD	21500	2800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.5	79.9	74.1
ETHANE	8.3	9.9	5.3
PROPANE	7.4	4.9	2.0
N-BUTANE	1.9	0.8	0.4
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.5	2.5	12.9
OXYGEN	TRACE	0.4	1.8
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	2.1
HELIUM	0.12	0.05	0.03
HEATING VALUE*	1231	1172	954
SPECIFIC GRAVITY	0.732	0.698	0.710

	INDEX 9256 SAMPLE 7505	INDEX 9257 SAMPLE 4834	INDEX 9258 SAMPLE 7475
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	NOT GIVEN	PANHANDLE W	PARSELL
WELL NAME	MARION OSBORNE NO. 2	LIPPS NO. 2	NO. 1-147
LOCATION	SEC. 26, BLK. B-1, H&GN SUR.	SEC. 157, BLK.13,T&NO RR SUR	SEC. 147, BLK. 42, H&TC SUR.
OWNER	GULF OIL CORP.	SINCLAIR OIL & GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	09/20/49	04/07/58
SAMPLED	04/20/60	01/27/50	03/27/60
FORMATION	PENN-UPPER G	-QUARTZ WASH	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9570	8098	9996
WELLHEAD PRESSURE,PSIG	3157	2041	3864
OPEN FLOW, MCFD	NOT GIVEN	41000	1200
COMPONENT, MOLE PCT			
METHANE	86.6	93.7	87.0
ETHANE	6.8	2.6	8.0
PROPANE	3.3	0.9	2.5
N-BUTANE	0.8	0.3	0.4
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.0	1.0	0.5
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.3	0.9	0.7
HELIUM	0.03	0.07	0.05
HEATING VALUE*	1161	1047	1135
SPECIFIC GRAVITY	0.669	0.602	0.648

	INDEX 9259 SAMPLE 7650	INDEX 9260 SAMPLE 11579	INDEX 9261 SAMPLE 14176
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	PARSELL	PARSELL	PARSELL S
WELL NAME	NO. 1-153	W. B. PARSELL NO. E-2	J.BRUSCE WATERFIELD NO. D 1
LOCATION	SEC. 153, BLK. 42, H&TC SUR.	SEC. 157, BLK. 42, H&TC SUR.	SEC. 112, BLK. C, G&M SUR.
OWNER	CITIES SERVICE OIL CO.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	10/24/59	06/05/68	05/20/74
SAMPLED	04/21/60	07/23/68	10/09/74
FORMATION	PENN-MORROW	PENN-MORROW L	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9853	10935	11773
WELLHEAD PRESSURE,PSIG	3777	4383	4342
OPEN FLOW, MCFD	2060	60500	16000
COMPONENT, MOLE PCT			
METHANE	85.4	96.9	96.3
ETHANE	8.8	0.5	0.5
PROPANE	3.4	0.1	0.1
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.0	0.4	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	2.0	2.5
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1157	993	987
SPECIFIC GRAVITY	0.664	0.580	0.583

	INDEX 9262 SAMPLE 7152	INDEX 9263 SAMPLE 5341	INDEX 9264 SAMPLE 5638
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	PRITCHETT	QUINDUNO	QUINDUNO
WELL NAME	W. H. MARTIN NO. 1	J. HAGGARD NO. 5	AGATHA NO. 1
LOCATION	SEC. 83, BLK. C, G&M SUR.	SEC. 6, BLK. 2, I&GN SUR.	SEC. 8, BLK. 2, I&GN SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	GULF OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	07/22/59	12/04/52	02/01/54
SAMPLED	07/29/59	12/04/52	06/15/54
FORMATION	PENN-CHEROKEE	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9250	4101	4004
WELLHEAD PRESSURE,PSIG	1980	1010	881
OPEN FLOW, MCFD	6000	NOT GIVEN	27870
COMPONENT, MOLE PCT			
METHANE	78.0	59.7	80.5
ETHANE	11.7	14.1	7.6
PROPANE	3.0	13.3	3.5
N-BUTANE	1.2	4.7	0.9
ISOBUTANE	0.9	2.4	0.5
N-PENTANE	TRACE	1.2	0.2
ISOPENTANE	1.1	0.7	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.6	0.1
NITROGEN	2.5	2.9	6.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	1.0	0.1	0.1
HELIUM	0.05	0.06	0.14
HEATING VALUE*	1223	1558	1112
SPECIFIC GRAVITY	0.729	0.930	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9265 SAMPLE 5639		INDEX 9266 SAMPLE 6605		INDEX 9267 SAMPLE 7019	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	QUINOUNO		QUINOUNO		QUINOUNO	
WELL NAME	GAY NO. 1		FAYE HEAN NO. 1		PENNINGTON B NO. 1	
LOCATION	SEC. 201, BLK. M-2, BS&F SUR		SEC. 164, BLK. M-2, BS&F SUR		SEC. 17, BLK. 2, I&GN SUR.	
OWNER	PHILLIPS PETROLEUM CO.		CONSOLIDATED GAS & MINING		PHILLIPS PETROLEUM CO.	
COMPLETED	02/17/58		04/26/58		02/16/59	
SAMPLED	06/15/58		05/03/58		04/03/59	
FORMATION	PERM-		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	3490		4052		4128	
WELLHEAD PRESSURE, PSIG	883		850		NOT GIVEN	
OPEN FLOW, MCFD	75000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	79.9		80.4		79.9	
ETHANE	7.7		6.9		7.7	
PROPANE	3.6		2.9		4.0	
N-BUTANE	0.9		0.8		1.0	
ISOBUTANE	0.5		0.6		0.5	
N-PENTANE	0.3		0.1		0.3	
ISOPENTANE	0.1		0.3		0.0	
CYCLOPENTANE	TRACE		0.1		0.5	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	6.4		7.5		5.7	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.2		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.0	
HELIUM	0.14		0.20		0.14	
HEATING VALUE*	1116		1092		1139	
SPECIFIC GRAVITY	0.687		0.685		0.695	

	INDEX 9268 SAMPLE 7357		INDEX 9269 SAMPLE 15529		INDEX 9270 SAMPLE 15867	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	QUINOUNO		RED DEER CREEK		RED DEER NE	
WELL NAME	W. R. COWAN TRACT C NO. 6		WOLLMENT NO. 1		EARP NO. 1	
LOCATION	SEC. 165, BLK. M-2, BS&F SUR		SEC. 32, BLK. 81 H&GN SUR.		SEC. 59,BLK.1,H&GN SUR.	
OWNER	SINCLAIR OIL & GAS CO.		DAVIS OIL CO.		GETTY OIL CO.	
COMPLETED	11/03/59		NOT GIVEN		08/02/79	
SAMPLED	01/21/60		12/--/78		12/18/79	
FORMATION	PERM-WICHITA-ALBANY		NOT GIVEN		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4067		NOT GIVEN		11039	
WELLHEAD PRESSURE, PSIG	870		NOT GIVEN		3687	
OPEN FLOW, MCFD	3900		NOT GIVEN		12640	
COMPONENT, MOLE PCT						
METHANE	89.8		89.1		89.7	
ETHANE	6.7		6.8		6.3	
PROPANE	2.5		1.6		1.5	
N-BUTANE	0.6		0.2		0.2	
ISOBUTANE	0.5		0.1		0.1	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.4		0.1		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		TRACE	
NITROGEN	4.3		0.4		0.6	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		1.3		1.3	
HELIUM	0.10		0.04		0.04	
HEATING VALUE*	1113		1090		1075	
SPECIFIC GRAVITY	0.664		0.628		0.621	

	INDEX 9271 SAMPLE 14757		INDEX 9272 SAMPLE 14797		INDEX 9273 SAMPLE 14388	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	RULER		RULER		SHREIKEY	
WELL NAME	JONES "A" NO. 1		MCMURDIE BROTHERS B-1		ETTA GILL NO. 1	
LOCATION	SEC. 1, BLK. A-2, EL&RR SUR.		SEC. 9, BLK. A-2, EL&RR SUR.		SEC. 16, BLK. M-2, H&GN SUR.	
OWNER	AMARILLO OIL CO.		EXXON CO., U.S.A.		SIDWELL OIL & GAS, INC.	
COMPLETED	09/06/75		07/28/76		01/19/75	
SAMPLED	09/16/76		09/21/76		06/17/75	
FORMATION	PENN-MORROW U		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9632		9663		11401	
WELLHEAD PRESSURE, PSIG	2200		2390		3200	
OPEN FLOW, MCFD	11000		3150		10000	
COMPONENT, MOLE PCT						
METHANE	90.0		89.8		82.0	
ETHANE	6.4		6.7		6.5	
PROPANE	1.5		1.4		5.7	
N-BUTANE	0.2		0.3		1.2	
ISOBUTANE	0.1		0.0		0.7	
N-PENTANE	0.0		0.2		0.4	
ISOPENTANE	0.1		0.1		0.9	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.5	
NITROGEN	0.5		0.6		1.0	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		1.0		0.9	
HELIUM	0.06		0.07		0.03	
HEATING VALUE*	1045		1094		1228	
SPECIFIC GRAVITY	0.620		0.628		0.714	

	INDEX 9274 SAMPLE 14470		INDEX 9275 SAMPLE 14537		INDEX 9276 SAMPLE 14686	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ROBERTS		ROBERTS		ROBERTS	
FIELD	SHREIKEY		SHREIKEY		SHREIKY	
WELL NAME	ROB MCCOY B, NO. 2		BYRUM-COFFEE NO. 1		R. BYRUM NO. 1-36	
LOCATION	SEC. 194, BLK. M-2, H&GN SUR.		SEC. 12, BLK. M-2, H&GN SUR.		SEC. 36, BLK. M-2, H&GN SUR.	
OWNER	J. M. HUBER CORP.		HOOVER & BRACKEN, INC.		GULF ENERGY & MINERALS CO.	
COMPLETED	09/16/74		05/25/74		03/22/76	
SAMPLED	09/24/75		11/23/75		06/04/76	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	11076		10844		10800	
WELLHEAD PRESSURE, PSIG	1217		3600		1025	
OPEN FLOW, MCFD	13400		150000		11200	
COMPONENT, MOLE PCT						
METHANE	94.6		93.2		92.2	
ETHANE	2.7		3.7		3.7	
PROPANE	0.6		0.6		0.8	
N-BUTANE	0.2		0.2		0.2	
ISOBUTANE	0.1		0.1		0.1	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.9		0.7		1.4	
OXYGEN	0.3		0.0		0.2	
ARGON	0.3		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.1		1.1	
HELIUM	0.03		0.04		0.04	
HEATING VALUE*	1035		1051		1041	
SPECIFIC GRAVITY	0.594		0.603		0.607	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9277 SAMPLE 14571	INDEX 9278 SAMPLE 14593	INDEX 9279 SAMPLE 15574
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	ST. CLAIR	ST. CLAIR	ST. CLAIR
WELL NAME	JONES NO. 1	CHRISTIE-TIPPS A NO. 1	CHRISTIE-TIPPS NO. 1
LOCATION	SEC. 85, BLK. C, G&M SUR.	SEC. 70, BLK. B-1, H&GN SUR.	SEC. 25, BLK. 1, H&GN SUR.
OWNER	PENNZOIL CO.	ANADARKO PRODUCTION CO.	PARADOX PETROLEUM CO.
COMPLETED	04/17/75	06/16/75	NOT GIVEN
SAMPLED	01/29/76	03/05/76	03/07/79
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10200	9529	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2026	2114	1100
OPEN FLOW, MCFD	16000	11856	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	71.3	82.7
ETHANE	12.2	12.7	9.4
PROPANE	5.4	6.1	4.0
N-BUTANE	1.2	1.6	1.1
ISOBUTANE	0.6	0.7	0.5
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.5	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.4	5.4	0.7
OXYGEN	0.0	1.2	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1250	1208	1209
SPECIFIC GRAVITY	0.726	0.760	0.693

	INDEX 9280 SAMPLE 3068	INDEX 9281 SAMPLE 5800	INDEX 9282 SAMPLE 6334
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CUNNINGHAM AAA	SHELL-FLOWERS NO. 1	PARSELL ESTATE NO. 1
LOCATION	SEC. 74, BLK. 17-2	SEC. 75, BLK. C, G&M SUR.	SEC. 155, BLK. 42, H&TC SUR.
OWNER	J. T. WHITLOCK	CREC DRILLING CO.	SUN OIL CO.
COMPLETED	04/13/39	11/20/54	06/05/57
SAMPLED	02/02/42	04/06/55	06/05/57
FORMATION	-DOLOMITE	PERM-WICHITA-ALBANY	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4400	3742	11000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	886	4310
OPEN FLOW, MCFD	NOT GIVEN	4500	8000
COMPONENT, MOLE PCT			
METHANE	2.7	79.5	96.0
ETHANE	0.0	5.6	1.5
PROPANE	---	2.3	0.2
N-BUTANE	---	0.7	0.1
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.3	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	96.9	9.1	0.2
OXYGEN	0.2	1.5	0.0
ARGON	---	0.1	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	1.7
HELIUM	0.00	0.06	0.04
HEATING VALUE*	27	1025	1016
SPECIFIC GRAVITY	0.958	0.681	0.586

	INDEX 9283 SAMPLE 6408	INDEX 9284 SAMPLE 6411	INDEX 9285 SAMPLE 13185
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HILL NO. 1-A	HILL NO. 1-A	D. D. PAYNE A NO. 1
LOCATION	SEC. 146, BLK. 146, H&TC SUR	SEC. 146, BLK. 42, H&TC SUR.	BLK. A-50, CLAY CO. SCH. LD.
OWNER	PARKER PETROLEUM CO., INC.	PARKER PETROLEUM CO.	HELMERICH & PAYNE, INC.
COMPLETED	09/30/57	09/30/57	12/21/71
SAMPLED	10/04/57	10/04/57	04/04/72
FORMATION	PENN-MORROW U	PENN-MORROW L	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9832	9832	5868
WELLHEAD PRESSURE,PSIG	3378	3378	1622
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	89.9	92.6	82.1
ETHANE	6.5	3.4	8.9
PROPANE	1.7	1.3	4.9
N-BUTANE	0.2	0.3	1.8
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	TRACE	0.1	0.4
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.2	0.0	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	TRACE
HELIUM	0.10	0.03	0.10
HEATING VALUE*	1101	1083	1224
SPECIFIC GRAVITY	0.627	0.624	0.699

	INDEX 9286 SAMPLE 13567	INDEX 9287 SAMPLE 15106	INDEX 9288 SAMPLE 15107
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	WILDCAT	WILLOW CREEK	WILLOW CREEK
WELL NAME	R.A. FLOWERS NO. 1	BRAINARD NO. 2	BRAINARD NO. 1
LOCATION	SEC. 6, BLK. C, BS&F SUR.	SEC. 4, BLK. A, H&GN SUR.	SEC. 3, BLK. E, H&GN SUR.
OWNER	AMARILLO OIL CO.	PARAMOUNT PRODUCING, INC.	PARAMOUNT PRODUCING, INC.
COMPLETED	12/23/72	NOT GIVEN	NOT GIVEN
SAMPLED	03/21/73	09/23/77	09/23/77
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11994	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4771	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	90.0	89.6
ETHANE	0.8	4.1	4.4
PROPANE	0.1	1.7	2.1
N-BUTANE	TRACE	0.5	0.7
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.3	2.6	1.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.3	0.3
HELIUM	0.03	0.18	0.15
HEATING VALUE*	989	1071	1098
SPECIFIC GRAVITY	0.585	0.624	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9289 SAMPLE 4916		INDEX 9290 SAMPLE 13671		INDEX 9291 SAMPLE 12174	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RUNNELS		RUNNELS		RUNNELS	
FIELD	ELM CREEK		LOVE		ROWENA	
WELL NAME	J. P. KNIGHT NO. 1		WILLEKE NO. 2		ROWENA-GARDENER NO. 1	
LOCATION	BRRRC SUR. NO. 346		WILLIAM WILSON SUR. NO. 1		SEC. 113, PETER ZOBEL SUR.	
OWNER	KILLIAM & HURD		JAMES K. ANDERSON		HUMBLE OIL + REFINING ET AL.	
COMPLETED	06/03/50		07/24/72		12/22/67	
SAMPLED	08/07/50		08/04/73		01/22/70	
FORMATION	PENN-STRAWN		PENN-FRY		CRET-GARDENER	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3950		3146		4041	
WELLHEAD PRESSURE,PSIG	945		1060		1465	
OPEN FLOW, MCFD	20000		2600		6400	
COMPONENT, MOLE PCT						
METHANE	5.8	----------	78.5	----------	71.3	----------
ETHANE	37.3	----------	6.6	----------	8.9	----------
PROPANE	34.1	----------	3.4	----------	6.2	----------
N-BUTANE	11.4	----------	0.9	----------	1.4	----------
ISOBUTANE	4.9	----------	0.5	----------	0.6	----------
N-PENTANE	2.5	----------	0.2	----------	0.2	----------
ISOPENTANE	1.6	----------	0.3	----------	0.6	----------
CYCLOPENTANE	0.1	----------	TRACE	----------	0.1	----------
HEXANES PLUS	1.0	----------	0.1	----------	0.1	----------
NITROGEN	0.0	----------	9.0	----------	10.1	----------
OXYGEN	0.2	----------	0.0	----------	TRACE	----------
ARGON	0.0	----------	TRACE	----------	TRACE	----------
HYDROGEN	---	----------	TRACE	----------	0.1	----------
HYDROGEN SULFIDE**	---	----------	0.0	----------	0.0	----------
CARBON DIOXIDE	0.9	----------	0.1	----------	0.1	----------
HELIUM	TRACE	----------	0.37	----------	0.27	----------
HEATING VALUE*	2388	----------	1075	----------	1153	----------
SPECIFIC GRAVITY	1.443		0.691		0.752	

	INDEX 9292 SAMPLE 13796		INDEX 9293 SAMPLE 5120		INDEX 9294 SAMPLE 12257	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RUNNELS		RUNNELS		RUNNELS	
FIELD	ROWENA		SYKES		WILDCAT	
WELL NAME	CHARLES MATSCHEK NO. 1		B. R. THETFORD WELL NO. 1		REBECCA MILLER NO. 12	
LOCATION	FRANCIS HELMER SUR. 417		WHARTON CO. SUR. NO. 509		GC&SF SUR.	
OWNER	J. FRANK STRINGER		MID-CONTINENT PETROLEUM CORP		TEXAS PACIFIC OIL CO., INC.	
COMPLETED	06/19/72		08/02/51		10/22/69	
SAMPLED	11/01/73		11/19/51		05/12/70	
FORMATION	EOCE-JENNINGS		PENN-SYKES MORRIS		PENN-MORRIS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4066		3682		3845	
WELLHEAD PRESSURE,PSIG	1576		1516		1114	
OPEN FLOW, MCFD	4200		7200		2700	
COMPONENT, MOLE PCT						
METHANE	75.1	----------	69.9	----------	69.9	----------
ETHANE	7.3	----------	8.1	----------	8.4	----------
PROPANE	4.8	----------	4.7	----------	5.4	----------
N-BUTANE	1.6	----------	1.3	----------	1.2	----------
ISOBUTANE	0.7	----------	0.4	----------	0.7	----------
N-PENTANE	0.2	----------	0.4	----------	0.3	----------
ISOPENTANE	0.4	----------	0.1	----------	0.1	----------
CYCLOPENTANE	TRACE	----------	TRACE	----------	TRACE	----------
HEXANES PLUS	0.1	----------	0.3	----------	0.2	----------
NITROGEN	9.0	----------	14.0	----------	13.3	----------
OXYGEN	0.0	----------	0.1	----------	TRACE	----------
ARGON	TRACE	----------	TRACE	----------	TRACE	----------
HYDROGEN	TRACE	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE**	0.0	----------	---	----------	0.0	----------
CARBON DIOXIDE	0.3	----------	0.4	----------	0.0	----------
HELIUM	0.30	----------	0.34	----------	0.35	----------
HEATING VALUE*	1124	----------	1069	----------	1090	----------
SPECIFIC GRAVITY	0.725		0.745		0.744	

	INDEX 9295 SAMPLE 5112		INDEX 9296 SAMPLE 12658		INDEX 9297 SAMPLE 15092	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RUNNELS		RUNNELS		RUSK	
FIELD	WINTERS		WINTERS SW		BIG BARNETT	
WELL NAME	T. V. JENNINGS NO. 2		D. S. VANCIL NO. 1		DR. JOSEPH L. GOLDMAN NO. 1	
LOCATION	SEC. 332, H&TC SUR.		NOT GIVEN		E. TAYLOR SUR. A-771	
OWNER	ANTON OIL CORP.		HUMBLE OIL & REFINING CO.		ALAMO PETROLEUM CO.	
COMPLETED	06/04/51		10/30/61		05/10/75	
SAMPLED	10/17/51		02/05/71		09/09/77	
FORMATION	PENN-CADDO		PENN-STRAWN		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	425		425		260	
DEPTH, FEET	4444		4415		6993	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1435		3057	
OPEN FLOW, MCFD	NOT GIVEN		3350		3800	
COMPONENT, MOLE PCT						
METHANE	66.3	----------	72.2	----------	93.7	----------
ETHANE	8.5	----------	9.6	----------	2.4	----------
PROPANE	4.5	----------	5.1	----------	0.5	----------
N-BUTANE	1.2	----------	1.4	----------	0.2	----------
ISOBUTANE	0.5	----------	0.6	----------	0.1	----------
N-PENTANE	0.3	----------	0.4	----------	0.1	----------
ISOPENTANE	0.0	----------	0.4	----------	TRACE	----------
CYCLOPENTANE	0.1	----------	0.1	----------	TRACE	----------
HEXANES PLUS	0.3	----------	0.2	----------	0.1	----------
NITROGEN	10.7	----------	9.8	----------	1.7	----------
OXYGEN	TRACE	----------	0.0	----------	0.0	----------
ARGON	TRACE	----------	TRACE	----------	TRACE	----------
HYDROGEN	TRACE	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	---	----------	0.0	----------	0.0	----------
CARBON DIOXIDE	7.2	----------	TRACE	----------	1.0	----------
HELIUM	0.34	----------	0.25	----------	0.02	----------
HEATING VALUE*	1030	----------	1151	----------	1025	----------
SPECIFIC GRAVITY	0.795		0.745		0.596	

	INDEX 9298 SAMPLE 5621		INDEX 9299 SAMPLE 12477		INDEX 9300 SAMPLE 2473	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RUSK		RUSK		RUSK	
FIELD	CARTAGE		DANVILLE		EAST TEXAS	
WELL NAME	TURLINGTON NO. 1		C. W. LEE NO. 1-U		RAS LACY NO. 1	
LOCATION	NOT GIVEN		HENRY WELLS SUR.		J. W. SPARKS SUR.	
OWNER	CARTER-JONES DRILLING CO.		TEXACO INC.		STANOLIND OIL & GAS CO.	
COMPLETED	04/13/54		08/19/59		02/11/32	
SAMPLED	05/25/54		10/23/70		02/29/32	
FORMATION	CRET-PETTIT L		CRET-PETTIT		CRET-WOODBINE	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	6830		7372		3604	
WELLHEAD PRESSURE,PSIG	3023		975		1570	
OPEN FLOW, MCFD	95000		1305		40000	
COMPONENT, MOLE PCT						
METHANE	87.5	----------	93.6	----------	75.5	----------
ETHANE	5.1	----------	2.9	----------	11.8	----------
PROPANE	2.2	----------	0.8	----------	---	----------
N-BUTANE	0.8	----------	0.2	----------	---	----------
ISOBUTANE	0.7	----------	0.3	----------	---	----------
N-PENTANE	0.4	----------	0.1	----------	---	----------
ISOPENTANE	0.2	----------	TRACE	----------	---	----------
CYCLOPENTANE	0.1	----------	TRACE	----------	---	----------
HEXANES PLUS	0.5	----------	0.3	----------	---	----------
NITROGEN	1.5	----------	0.4	----------	11.4	----------
OXYGEN	TRACE	----------	0.0	----------	0.7	----------
ARGON	0.0	----------	TRACE	----------	---	----------
HYDROGEN	0.1	----------	0.1	----------	---	----------
HYDROGEN SULFIDE**	0.0	----------	0.0	----------	---	----------
CARBON DIOXIDE	1.2	----------	1.2	----------	0.6	----------
HELIUM	0.03	----------	0.01	----------	TRACE	----------
HEATING VALUE*	1141	----------	1058	----------	976	----------
SPECIFIC GRAVITY	0.666		0.606		0.670	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9301 SAMPLE 10740	INDEX 9302 SAMPLE 12469	INDEX 9303 SAMPLE 12470
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	GARRISON NE	HENDERSON	HENDERSON
WELL NAME	HAIRGROVE GAS UNIT NO. 1	FREEMAN MILLER NO. 1	T. V. BENNETT NO. 1
LOCATION	H. GRAHAM SUR. A-222	5 MI. N. OF HENDERSON	4 MI. N. OF HENDERSON
OWNER	PAN AMERICAN PETROLEUM CORP.	AMERICAN PETROFINA CO.	AMERICAN PETROFINA CO.
COMPLETED	05/24/65	NOT GIVEN	NOT GIVEN
SAMPLED	10/06/66	10/22/70	10/22/70
FORMATION	CRET-RODESSA	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6012	7450	7250
WELLHEAD PRESSURE,PSIG	2626	550	600
OPEN FLOW, MCFD	5200	350	55
COMPONENT, MOLE PCT			
METHANE	93.4	88.4	87.7
ETHANE	2.6	3.7	5.5
PROPANE	0.8	1.6	2.2
N-BUTANE	0.1	0.6	0.6
ISOBUTANE	0.3	0.8	0.5
N-PENTANE	0.1	0.6	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.6	0.3
NITROGEN	0.6	2.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.9	1.0
HELIUM	TRACE	0.03	0.02
HEATING VALUE*	1041	1111	1109
SPECIFIC GRAVITY	0.606	0.656	0.650

	INDEX 9304 SAMPLE 12437	INDEX 9305 SAMPLE 14816	INDEX 9306 SAMPLE 14315
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	HENDERSON S	JARRELL CREEK	MINDEN
WELL NAME	M. A. HUBBARD	ALFORD MARKEY NO. 1	C. C. BURKS NO. 1
LOCATION	2 MI. EAST OF HENDERSON	PERRY REESE SUR. A-657	DANIEL WOODLAND SUR. A-845
OWNER	SESCO PRODUCTION CO.	FAIR OIL, LTD.	JONES O'BRIEN INC.
COMPLETED	07/07/65	12/31/74	01/23/73
SAMPLED	10/13/70	NOT GIVEN	03/28/75
FORMATION	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7506	7458	7108
WELLHEAD PRESSURE,PSIG	2907	2878	2711
OPEN FLOW, MCFD	14750	5600	4400
COMPONENT, MOLE PCT			
METHANE	90.2	89.7	88.3
ETHANE	2.8	3.0	5.1
PROPANE	1.3	1.7	2.2
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.9	0.7	0.7
N-PENTANE	0.5	0.5	0.3
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.5	0.7	0.2
NITROGEN	1.8	1.8	1.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.7	1.0
HELIUM	0.04	0.03	0.02
HEATING VALUE*	1099	1127	1122
SPECIFIC GRAVITY	0.646	0.655	0.652

	INDEX 9307 SAMPLE 15351	INDEX 9308 SAMPLE 12440	INDEX 9309 SAMPLE 12540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	OAKHILL	PENN-GRIFFIN	PONE
WELL NAME	G. W. BIRD NO. 1	PRIOR NO. 1	PONE GAS UNIT NO. 3
LOCATION	JAMES MCLAIN SUR. A-19	HENDERSON	JOHN PILBURN SUR.
OWNER	MCCORMICK OIL & GAS CORP.	W. R. HUGHEY OPERATING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/16/75	11/27/63	06/13/61
SAMPLED	08/25/78	10/10/70	11/11/70
FORMATION	JURA-COTTON VALLEY	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9075	7360	7430
WELLHEAD PRESSURE,PSIG	3200	1800	1787
OPEN FLOW, MCFD	4792	897	6200
COMPONENT, MOLE PCT			
METHANE	95.3	89.2	89.5
ETHANE	1.6	3.1	3.4
PROPANE	0.3	0.6	1.6
N-BUTANE	0.1	0.2	0.7
ISOBUTANE	0.1	0.3	0.6
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	0.4	4.2	2.5
OXYGEN	TRACE	0.5	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.3	0.8
HELIUM	0.01	0.03	0.03
HEATING VALUE*	1014	1015	1090
SPECIFIC GRAVITY	0.593	0.627	0.643

	INDEX 9310 SAMPLE 15077	INDEX 9311 SAMPLE 15349	INDEX 9312 SAMPLE 12439
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	RUFUS	RUFUS	SHILOH
WELL NAME	KANGERGA NO. 1	PRIOR UNIT NO. 1	MARLIN HARDIN NO. 1-C
LOCATION	JOHN M. WHITE SUR. A-813	4 MILES E. OF HENDERSON	MARLIN HARDIN LEASE
OWNER	HINTON PRODUCTION CO.	HINTON PRODUCTION CO.	W. R. HUGHEY OPERATING CO.
COMPLETED	10/01/75	08/05/77	10/11/70
SAMPLED	08/12/77	08/16/78	10/11/70
FORMATION	CRET-PETTIT	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7256	7036	6400
WELLHEAD PRESSURE,PSIG	2581	2300	900
OPEN FLOW, MCFD	14000	9100	5540
COMPONENT, MOLE PCT			
METHANE	85.0	87.0	87.9
ETHANE	5.2	5.5	5.0
PROPANE	2.5	2.2	1.9
N-BUTANE	1.3	0.8	0.6
ISOBUTANE	1.1	0.5	0.7
N-PENTANE	0.9	0.3	0.4
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.9	0.3	0.5
NITROGEN	1.5	1.9	1.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.2	0.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1147	1122	1120
SPECIFIC GRAVITY	0.702	0.662	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9313 SAMPLE 13734	INDEX 9314 SAMPLE 14178	INDEX 9315 SAMPLE 11971
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	SAN JACINTO
FIELD	TRAWICK NE	TRAWICK NE	MERCY S
WELL NAME	TRAWICK NE GAS UNIT NO. 1-1	GAS UNIT 2 NO. 1	CENTRAL COAL&COKE CORP. NO.1
LOCATION	MARIA F. HEUJAS SUR. A-14	JOSE OURST SUR. A-8	J. ROBINSON SUR. A-45
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	COASTAL STATES GAS PROP. CO.
COMPLETED	10/26/72	01/23/73	05/05/68
SAMPLED	10/02/73	10/--/74	07/15/69
FORMATION	CRET-PETTIT	CRET-PETTIT	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	7179	7494	9464
WELLHEAD PRESSURE,PSIG	3335	2175	2212
OPEN FLOW, MCFD	7800	1738	6650
COMPONENT, MOLE PCT			
METHANE	92.3	91.4	81.6
ETHANE	2.4	3.2	6.4
PROPANE	0.8	1.2	6.0
N-BUTANE	0.2	0.4	1.0
ISOBUTANE	0.3	0.4	1.0
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.8	2.0	1.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	1.2
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1029	1058	1204
SPECIFIC GRAVITY	0.608	0.619	0.714

	INDEX 9316 SAMPLE 16106	INDEX 9317 SAMPLE 4344	INDEX 9318 SAMPLE 13721
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	BRANNON	EOROY	HARVEY DEEP
WELL NAME	J.R.C. BRANNON NO. 1	MCGLOIN NO. 1	J.H. HARVEY NO. 4
LOCATION	P. ARROYO SUR. A-52	NOT GIVEN	GEORGE SARGENT SUR., A-231
OWNER	WAINOCO OIL & GAS CO.	SOUTHERN MINERALS CORP.	JAKE L. HAMON
COMPLETED	01/31/79	06/04/47	03/16/72
SAMPLED	10/21/80	08/14/47	09/19/73
FORMATION	OLIG-FRIO	OLIG-	OLIG-FRIO-GRIMSHAW
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10521	5956	10510
WELLHEAD PRESSURE,PSIG	6755	2300	2500
OPEN FLOW, MCFD	3537	330000	8100
COMPONENT, MOLE PCT			
METHANE	88.8	84.9	84.8
ETHANE	6.2	14.8	6.8
PROPANE	2.5	---	3.2
N-BUTANE	0.5	---	1.0
ISOBUTANE	0.6	---	0.9
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.1	---	0.3
CYCLOPENTANE	TRACE	---	0.2
HEXANES PLUS	0.1	---	0.7
NITROGEN	0.2	0.0	0.1
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	1.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1126	1125	1222
SPECIFIC GRAVITY	0.641	0.630	0.702

	INDEX 9319 SAMPLE 13720	INDEX 9320 SAMPLE 6027	INDEX 9321 SAMPLE 13110
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	HARVEY E	MIDWAY S	MIDWAY S
WELL NAME	J.H. HARVEY NO. 6	STARK NO. 1	GLADYS HOSKINSON ETAL,NO.1
LOCATION	GEORGE SARGENT SUR., A-231	SEC. 92, G. H. PAUL SUB-DIV.	SEC. 80, GEORGE H. PAUL
OWNER	JAKE L. HAMON	REPUBLIC NATURAL GAS CO.	GULF COAST PRODUCING CO.
COMPLETED	12/24/71	11/09/55	08/01/70
SAMPLED	09/19/73	02/17/56	12/09/71
FORMATION	OLIG-FRIO M-2	OLIG-STARK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8970	9431	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1500	3400	NOT GIVEN
OPEN FLOW, MCFD	4800	7100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	89.3	88.8
ETHANE	6.6	5.1	5.0
PROPANE	3.4	2.4	2.7
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	1.0	0.9	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.4	0.2	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	0.6
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1189	1157	1134
SPECIFIC GRAVITY	0.676	0.650	0.650

	INDEX 9322 SAMPLE 15455	INDEX 9323 SAMPLE 4682	INDEX 9324 SAMPLE 5171
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	MIDWAY S	MORGAN	NOT GIVEN
WELL NAME	SWELL A NO. 1	T. C. HILL NO. 2	E. H. WELDER NO. E-A
LOCATION	SAN PAT SCH LAND NO.3,A-235	NOT GIVEN	SEC. 31, WELDER RANCH SUBD.
OWNER	SERVICE CO.	SOUTHERN MINERALS CORP.	PLYMOUTH OIL CO.
COMPLETED	01/24/77	11/14/48	NOT GIVEN
SAMPLED	10/18/78	04/15/49	02/27/52
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-OAKVILLE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13112	6484	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1175	2400	NOT GIVEN
OPEN FLOW, MCFD	4068	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	93.5	97.9
ETHANE	6.8	1.4	0.1
PROPANE	2.0	1.2	0.1
N-BUTANE	0.5	0.5	0.1
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.3	0.7	1.5
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1127	1079	999
SPECIFIC GRAVITY	0.644	0.605	0.566

* GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** [illegible] THE PRESENCE OF H2S DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9325 SAMPLE 11897	INDEX 9326 SAMPLE 4095	INDEX 9327 SAMPLE 12731
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	ODEM	ONEIL	PLYMOUTH
WELL NAME	J. F. WELDER C-10	WELDER RANCH LANDS NO. 2	E. H. WELDER C NO. 151
LOCATION	JOHN HART & SONS SUR. A-10	NOT GIVEN	SEC. 48, WELDER RANCH S/D
OWNER	TEXACO INC.	STANOLIND OIL & GAS CO.	MARATHON OIL CO.
COMPLETED	09/13/68	02/18/45	12/11/68
SAMPLED	05/20/69	06/11/45	03/23/71
FORMATION	OLIG-VICKSBURG	MIOC-	OLIG-5820 FT.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7890	3368	5789
WELLHEAD PRESSURE,PSIG	5439	1470	NOT GIVEN
OPEN FLOW, MCFD	7600	7400	5180
COMPONENT, MOLE PCT			
METHANE	91.6	98.3	91.2
ETHANE	3.7	1.2	4.3
PROPANE	1.4	---	1.4
N-BUTANE	0.7	---	0.3
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.2	---	0.1
HEXANES PLUS	0.8	---	0.3
NITROGEN	0.3	0.0	1.1
OXYGEN	0.1	0.0	0.2
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1141	1017	1099
SPECIFIC GRAVITY	0.643	0.565	0.626

	INDEX 9328 SAMPLE 14271	INDEX 9329 SAMPLE 15406	INDEX 9330 SAMPLE 15056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	PORTILLA	PORTILLA	PORTLAND N
WELL NAME	MINNIE S. WELDER NO. 40	M. S. WELDER NO 55	SIMONS GAS UNIT NO. B-2
LOCATION	SEC. 23, PORTILLA GRANT	E. PORTILLA GR. A-25	W. B. RHEW SUR. A-318
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	GALAXY OIL CO.
COMPLETED	01/03/73	05/06/76	01/09/75
SAMPLED	02/20/75	10/11/78	07/19/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6974	7052	10550
WELLHEAD PRESSURE,PSIG	930	1531	5600
OPEN FLOW, MCFD	291	8808	18000
COMPONENT, MOLE PCT			
METHANE	89.7	90.1	88.5
ETHANE	4.7	4.8	6.2
PROPANE	2.7	2.4	2.3
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.7	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.7	0.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1150	1128	1123
SPECIFIC GRAVITY	0.647	0.636	0.643

	INDEX 9331 SAMPLE 11194	INDEX 9332 SAMPLE 3871	INDEX 9333 SAMPLE 11195
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	ROOKE	SINTON	SINTON N
WELL NAME	WELDER F NO. 1	SAN ANTONIO LOAN&TRUST NO. 1	R. H. WELDER C NO. 5
LOCATION	SEC. 40, E.H.WELDER F LEASE	3 MI. SW OF SINTON	2 MI. N. SINTON, TEX.
OWNER	MARATHON OIL CO.	TIDE WATER ASSOC. OIL CO.	J. RAY MCDERMOTT & CO., INC.
COMPLETED	06/16/66	12/22/41	NOT GIVEN
SAMPLED	10/27/66	08/27/44	10/31/67
FORMATION	MIOC-6100 FOOT	OLIG-FRIO	MIOC-2300 FOOT SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6210	6563	2300
WELLHEAD PRESSURE,PSIG	1480	NOT GIVEN	920
OPEN FLOW, MCFD	33000	2530	58000
COMPONENT, MOLE PCT			
METHANE	90.6	91.4	99.0
ETHANE	4.0	7.5	0.1
PROPANE	2.0	---	TRACE
N-BUTANE	0.7	---	0.0
ISOBUTANE	0.6	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.3	---	0.0
NITROGEN	0.8	---	0.7
OXYGEN	0.1	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1122	1060	1005
SPECIFIC GRAVITY	0.634	0.601	0.558

	INDEX 9334 SAMPLE 14275	INDEX 9335 SAMPLE 15206	INDEX 9336 SAMPLE 13868
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	TAFT W	TRIPLE A	WHITE POINT E
WELL NAME	MAYO NO. 1	OLA MCCANN NO. 1	SOLAR FICKE DEEP G.U. NO. 1
LOCATION	T. T. WILLIAMSON SUR. A-151	J. GARCIA SUR. A-129	SEC. 47, GEO. H. PAUL SUBD.
OWNER	EDWIN L. COX	C & K PETROLEUM, INC.	MARATHON OIL CO.
COMPLETED	01/22/73	01/25/76	02/13/72
SAMPLED	02/10/75	01/25/78	01/17/74
FORMATION	MIOC-CATAHOULA	OLIG-FRIO	TERT-8750 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3900	9211	8736
WELLHEAD PRESSURE,PSIG	1447	3866	1700
OPEN FLOW, MCFD	3900	4700	6200
COMPONENT, MOLE PCT			
METHANE	98.3	79.8	89.1
ETHANE	0.1	4.2	5.0
PROPANE	0.1	4.2	2.4
N-BUTANE	0.1	1.7	0.6
ISOBUTANE	TRACE	2.4	0.8
N-PENTANE	0.1	0.8	0.2
ISOPENTANE	0.1	1.3	0.3
CYCLOPENTANE	TRACE	0.4	0.1
HEXANES PLUS	0.1	1.7	0.3
NITROGEN	1.0	2.5	0.5
OXYGEN	0.0	0.8	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1017	1322	1142
SPECIFIC GRAVITY	0.569	0.784	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9337 SAMPLE 13869		INDEX 9338 SAMPLE 13874		INDEX 9339 SAMPLE 13875	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SAN PATRICIO		SAN PATRICIO		SAN PATRICIO	
FIELD	WHITE POINT E		WHITE POINT E		WHITE POINT E	
WELL NAME	F.H. FICKE NO. 11J		MAYO-OWENS G.U. NO. 1		MAYO-OWENS G.U. NO. 1	
LOCATION	SEC. 50, G.H. PAUL SUBD.		SEC. 62, H.S.DAY SUR. A-102		SEC. 62, H.S.DAY SUR. A-102	
OWNER	MARATHON OIL CO.		MOBIL OIL CORP.		MOBIL OIL CORP.	
COMPLETED	03/14/72		02/04/72		02/04/72	
SAMPLED	01/17/74		01/18/74		01/18/74	
FORMATION	TERT-2850 FT. SAND		OLIG-FRIO (OWENS)		OLIG-FRIO (MAYO)	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2937		10294		10158	
WELLHEAD PRESSURE,PSIG	1107		6858		5692	
OPEN FLOW, MCFD	35000		5000		16500	
COMPONENT, MOLE PCT						
METHANE	98.A		89.3		87.7	
ETHANE	0.1		5.6		6.1	
PROPANE	TRACE		2.3		2.7	
N-BUTANE	0.0		0.5		0.6	
ISOBUTANE	0.0		0.5		1.0	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.1		0.3	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.2	
NITROGEN	1.0		0.3		0.4	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		1.2		0.A	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1103		1112		1149	
SPECIFIC GRAVITY	0.558		0.640		0.657	

	INDEX 9340 SAMPLE 15174		INDEX 9341 SAMPLE 14105		INDEX 9342 SAMPLE 11187	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SAN PATRICIO		SCHLEICHER		SCHLEICHER	
FIELD	WHITE POINT E		BLOCK 56		CODY HELL	
WELL NAME	MAYO KOONCE UNIT NO. 1		UNIVERSITY LANDS Y NO. 1		C. M. BELL NO. 1	
LOCATION	H.S. DAY SUR. A-102		SEC. 7, BLK. 56, U L SUR		SEC. 10, BLK. LL, TCRR SUR.	
OWNER	MARATHON OIL CO.		PHILLIPS PETROLEUM CO.		SKELLY OIL CO.	
COMPLETED	09/11/76		08/14/73		08/23/67	
SAMPLED	12/27/77		07/09/74		10/25/67	
FORMATION	OLIG-FRIO		ORDO-ELLENBURGER		PENN-CANYON D	
GEOLOGIC PROVINCE CODE	220		430		430	
DEPTH, FEET	10994		8364		6445	
WELLHEAD PRESSURE,PSIG	1100		2480		2122	
OPEN FLOW, MCFD	5200		600		3000	
COMPONENT, MOLE PCT						
METHANE	89.0		76.1		74.7	
ETHANE	5.6		12.1		8.9	
PROPANE	2.4		5.1		5.8	
N-BUTANE	0.6		1.3		1.2	
ISOBUTANE	0.5		0.6		0.9	
N-PENTANE	0.3		0.3		0.3	
ISOPENTANE	0.1		0.4		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	0.5		3.2		6.6	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.A		0.3		0.9	
HELIUM	TRACE		0.08		0.12	
HEATING VALUE*	1129		1228		1173	
SPECIFIC GRAVITY	0.645		0.729		0.741	

	INDEX 9343 SAMPLE 12946		INDEX 9344 SAMPLE 9589		INDEX 9345 SAMPLE 11032	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SCHLEICHER		SCHLEICHER		SCHLEICHER	
FIELD	CODY BELL E		ELDORADO		ELDORADO	
WELL NAME	MORA LEE WEST ET AL NO. 1		PARKER NO. 1		L. I. WHITTEN NO. 1	
LOCATION	SEC. 43, BLK. TT, TCRR SUR.		SEC. 40, BLK. 11, TCRR SUR.		SEC. 25, BLK. LL, TCRR SUR.	
OWNER	WESLEY WEST		DELTA DRILLING CO., ET AL.		SKELLY OIL CO.	
COMPLETED	09/20/70		08/02/64		08/13/66	
SAMPLED	08/05/71		09/25/64		07/19/67	
FORMATION	PENN-CANYON		PENN-CANYON		PENN-CANYON	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	6075		6296		6380	
WELLHEAD PRESSURE,PSIG	2200		2100		2050	
OPEN FLOW, MCFD	3300		1900		920	
COMPONENT, MOLE PCT						
METHANE	77.5		73.3		74.2	
ETHANE	7.8		9.8		8.6	
PROPANE	5.5		6.3		5.9	
N-BUTANE	1.0		1.9		1.8	
ISOBUTANE	0.7		0.8		1.1	
N-PENTANE	0.1		0.4		0.6	
ISOPENTANE	0.2		0.7		0.9	
CYCLOPENTANE	0.1		0.2		0.3	
HEXANES PLUS	0.2		0.6		0.8	
NITROGEN	6.3		5.2		5.3	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	5.2		0.6		0.3	
HELIUM	0.14		0.11		0.13	
HEATING VALUE*	1152		1258		1273	
SPECIFIC GRAVITY	0.715		0.773		0.778	

	INDEX 9346 SAMPLE 11033		INDEX 9347 SAMPLE 12457		INDEX 9348 SAMPLE 10852	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SCHLEICHER		SCHLEICHER		SCHLEICHER	
FIELD	ELDORADO		ELDORADO E		ELDORADO N	
WELL NAME	L. I. WHITTEN NO. 1		JOHN E. OYER NO. 1		MATTIE ROYSTER NO. 1	
LOCATION	SEC. 25, BLK. LL, TCRR SUR.		SEC.20, BLK.A, HE&WTRY SUR.		SEC. 23, BLK. LL, TCRY SUR.	
OWNER	SKELLY OIL CO.		INGER DRILLING CO., INC.		SKELLY OIL CO.	
COMPLETED	06/23/66		06/04/69		08/18/66	
SAMPLED	07/13/67		10/15/70		01/25/67	
FORMATION	PENN-CANYON A		PENN-CANYON		PENN-CANYON A	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	6199		5982		6295	
WELLHEAD PRESSURE,PSIG	1460		800		2114	
OPEN FLOW, MCFD	6400		5130		7700	
COMPONENT, MOLE PCT						
METHANE	31.1		74.5		75.5	
ETHANE	20.1		10.2		9.2	
PROPANE	22.9		6.2		5.4	
N-BUTANE	6.7		1.3		1.3	
ISOBUTANE	4.1		0.9		1.1	
N-PENTANE	2.3		0.4		0.5	
ISOPENTANE	2.6		0.2		0.1	
CYCLOPENTANE	0.3		TRACE		0.1	
HEXANES PLUS	0.7		0.1		0.4	
NITROGEN	2.8		5.4		5.6	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.2		0.0	
HYDROGEN	1.1		0.1		TRACE	
HYDROGEN SULFIDE**	1.4		0.3		0.0	
CARBON DIOXIDE	0.A		0.1		0.7	
HELIUM	1.24		0.14		0.13	
HEATING VALUE*	1391		1218		1200	
SPECIFIC GRAVITY	1.215		0.743		0.748	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9349 SAMPLE 13780	INDEX 9350 SAMPLE 5722	INDEX 9351 SAMPLE 12691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	ELDORADO N	FILLERY	FORT MCKAVETT
WELL NAME	PAGE BROTHERS NO. 1	POWELL NO. 3	SHEEN NO. 1-C
LOCATION	LGE. 2, CONCHO CSL SUR.	SEC. 3, BLK. A, AB&M SUR.	NOT GIVEN
OWNER	TUCKER DRILLING CO. INC.	SOUTHERN MINERALS CORP.	EL PASO NATURAL GAS CO.
COMPLETED	07/03/72	02/17/54	09/21/64
SAMPLED	10/--/73	10/26/54	02/23/71
FORMATION	PENN-CANYON	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6543	4031	4058
WELLHEAD PRESSURE,PSIG	2100	1576	1186
OPEN FLOW, MCFD	3000	4600	3675
COMPONENT, MOLE PCT			
METHANE	74.5	78.6	79.2
ETHANE	9.8	5.8	6.3
PROPANE	6.2	2.8	3.3
N-BUTANE	1.8	0.8	0.8
ISOBUTANE	0.9	0.5	0.6
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.6	0.3	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	4.6	10.1	9.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.13	0.22	0.20
HEATING VALUE*	1253	1052	1071
SPECIFIC GRAVITY	0.761	0.689	0.688

	INDEX 9352 SAMPLE 12695	INDEX 9353 SAMPLE 14317	INDEX 9354 SAMPLE 7557
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	FORT MCKAVETT	HULLOALF W	HULLOATE
WELL NAME	ANGE WEBSTER NO. 1	BYARS NO. 1	THOMSON
LOCATION	SEC. 2, BLK. 8, TW&NG SUR.	T. J. ALLCORN SUR. 79-1/2	NOT GIVEN
OWNER	SKELLY OIL CO.	I. W. LOVELADY	OHIO OIL CO.
COMPLETED	09/23/65	07/23/74	--/--/52
SAMPLED	03/01/71	04/09/75	05/17/60
FORMATION	PENN-4270 FT. LIME	PENN-HARKEY	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4172	5462	5800
WELLHEAD PRESSURE,PSIG	750	1850	NOT GIVEN
OPEN FLOW, MCFD	7000	5880	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	77.1	54.5
ETHANE	5.9	6.4	19.2
PROPANE	2.7	4.5	13.2
N-BUTANE	0.6	1.0	4.5
ISOBUTANE	0.5	0.7	2.5
N-PENTANE	0.0	0.2	0.8
ISOPENTANE	0.1	0.2	1.2
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	9.3	9.5	1.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	1.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	1.8
HELIUM	0.27	0.25	0.02
HEATING VALUE*	1029	1092	1598
SPECIFIC GRAVITY	0.663	0.705	0.968

	INDEX 9355 SAMPLE 10721	INDEX 9356 SAMPLE 10722	INDEX 9357 SAMPLE 15348
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	JUDYALICE	JUDYALICE	KAMA
WELL NAME	WHITEHEAD CO. NO. 2	WHITEHEAD CO. NO. 2	JEFFERS 18 NO. 1
LOCATION	SEC.14,BLK.H,GH&SARR CO.SUR.	SEC.14,BLK.H,GH&SARR CO.SUR.	SEC. 18, BLK. 2, GC&SF SUR.
OWNER	JAMES K. ANDERSON, ET AL.	JAMES K. ANDERSON, ET AL.	MITCHELL ENERGY CORP.
COMPLETED	03/25/65	06/08/65	11/26/76
SAMPLED	09/13/66	09/13/66	08/16/78
FORMATION	PENN-STRAWN	PENN-GOEN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4449	4772	7396
WELLHEAD PRESSURE,PSIG	1459	1468	2451
OPEN FLOW, MCFD	5000	4200	7000
COMPONENT, MOLE PCT			
METHANE	75.3	73.5	29.1
ETHANE	5.5	7.4	12.8
PROPANE	3.2	4.5	28.8
N-BUTANE	0.9	1.2	12.0
ISOBUTANE	0.4	0.5	5.2
N-PENTANE	0.2	0.3	2.0
ISOPENTANE	0.3	0.3	2.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.8
NITROGEN	13.5	10.5	0.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	5.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.1	0.2
HELIUM	0.29	0.38	0.05
HEATING VALUE*	1029	1096	2124
SPECIFIC GRAVITY	0.710	0.740	1.262

	INDEX 9358 SAMPLE 15555	INDEX 9359 SAMPLE 14674	INDEX 9360 SAMPLE 7176
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	KAMA	O'HARROW	TOE NAIL
WELL NAME	JEFFERS 18 NO. 1	O'HARROW NO. 1	HARKEY A NO. 1
LOCATION	SEC. 18, BLK. 2, GC&SF SUR.	SEC. 68, BLK. H, GH&SA SUR.	SEC. 74, BLK. H, GH&SA SUR.
OWNER	MITCHELL ENERGY CORP.	I. W. LOVELADY	SHELL OIL CO.
COMPLETED	12/03/76	03/05/75	11/04/58
SAMPLED	01/--/79	05/17/76	08/15/59
FORMATION	PENN-CANYON	PENN-CANYON	PENN-HARKEY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7396	5056	4690
WELLHEAD PRESSURE,PSIG	2464	1460	1371
OPEN FLOW, MCFD	7000	3150	11800
COMPONENT, MOLE PCT			
METHANE	41.0	77.4	75.4
ETHANE	8.3	6.0	9.2
PROPANE	15.2	3.2	4.2
N-BUTANE	7.0	0.8	1.1
ISOBUTANE	3.1	0.4	0.5
N-PENTANE	1.5	0.2	0.0
ISOPENTANE	2.2	0.3	0.7
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	1.0	0.2	0.2
NITROGEN	2.2	11.0	8.4
OXYGEN	0.2	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	17.9	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.06	0.31	0.20
HEATING VALUE*	1578	1050	1132
SPECIFIC GRAVITY	0.926	0.697	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9361 SAMPLE 12769	INDEX 9362 SAMPLE 12768	INDEX 9363 SAMPLE 10472
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	TOE NAIL	TOENAIL	TUCKER-WRIGHT
WELL NAME	R. L. STANSBERRY NO. 3	A. B. THOMERSON NO. 2	ROBERT MILLIGAN
LOCATION	20 MI. NE OF ELDORADO	20 MI. NE OF ELDORADO	SEC. 71, BLK. LL, TCRR SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	TUCKER DRILLING CO., INC.
COMPLETED	--/--/59	--/--/54	12/08/65
SAMPLED	04/20/71	04/19/71	03/19/66
FORMATION	PENN-CANYON	PENN-MARKEY	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6644	6590	5806
WELLHEAD PRESSURE, PSIG	NOT GIVEN	490	1704
OPEN FLOW, MCFD	1500	800	6200
COMPONENT, MOLE PCT			
METHANE	72.0	72.2	71.0
ETHANE	10.1	9.8	9.9
PROPANE	5.6	5.2	5.8
N-BUTANE	1.5	1.3	1.7
ISOBUTANE	0.9	0.7	0.9
N-PENTANE	0.7	0.2	0.4
ISOPENTANE	0.0	0.6	0.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	8.2	9.1	8.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.7
HELIUM	0.22	0.25	0.19
HEATING VALUE*	1186	1163	1201
SPECIFIC GRAVITY	0.755	0.749	0.772

	INDEX 9364 SAMPLE 15129	INDEX 9365 SAMPLE 15148	INDEX 9366 SAMPLE 10394
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	UNIVERSITY 53	UNIVERSITY 53	VELREX SW
WELL NAME	STATE "TH" NO. 18-53	STATE "TI" 18-53	J. I. CASE NO. 1
LOCATION	SEC. 18, BLK. 53, ULSUR.	SEC. 18, BLK. 53, UL SUR.	SEC. 25, BLK. TT, TC RR SUR.
OWNER	GULF ENERGY & MINERALS CO.	GULF ENERGY & MINERALS CO.	TUCKER DRILLING CO., INC.
COMPLETED	03/15/76	10/26/76	10/05/65
SAMPLED	10/25/77	11/17/77	02/11/66
FORMATION	ORDO-ELLENBURGER	PENN-CANYON	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7806	7046	7346
WELLHEAD PRESSURE, PSIG	2315	1140	2240
OPEN FLOW, MCFD	16000	2600	18000
COMPONENT, MOLE PCT			
METHANE	75.8	77.0	77.2
ETHANE	11.8	9.1	9.3
PROPANE	5.1	5.7	4.7
N-BUTANE	1.9	2.6	1.2
ISOBUTANE	0.5	0.9	0.6
N-PENTANE	0.3	0.4	0.6
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	3.8	3.5	4.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.6
HELIUM	0.09	0.10	0.11
HEATING VALUE*	1315	1236	1206
SPECIFIC GRAVITY	0.731	0.739	0.734

	INDEX 9367 SAMPLE 10395	INDEX 9368 SAMPLE 15147	INDEX 9369 SAMPLE 10564
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	VELREX SW	VELREX SW	K-BAR
WELL NAME	J. I. CASE NO. 1	W.E. DELONG NO. 1	C. L. MEADOR NO. 1
LOCATION	SEC. 25, BLK. TT, TC RR SUR.	SEC. 6, BLK. TT, TCRR SUR.	SEC. 66, BLK.D, GCASF SUR.
OWNER	TUCKER DRILLING CO., INC.	GULF ENERGY & MINERALS CO.	CABOT CORP.
COMPLETED	10/05/65	10/10/76	08/12/64
SAMPLED	02/11/66	11/01/77	05/12/66
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6616	7257	6652
WELLHEAD PRESSURE, PSIG	1983	1870	1502
OPEN FLOW, MCFD	1475	4300	2000
COMPONENT, MOLE PCT			
METHANE	75.7	78.2	83.5
ETHANE	9.6	9.7	8.0
PROPANE	4.6	4.6	3.1
N-BUTANE	1.5	1.1	0.8
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.9	0.3	0.3
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	0.9	0.3	0.2
NITROGEN	4.2	3.7	2.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.4	0.7
HELIUM	0.10	0.09	0.14
HEATING VALUE*	1249	1195	1139
SPECIFIC GRAVITY	0.763	0.721	0.675

	INDEX 9370 SAMPLE 3764	INDEX 9371 SAMPLE 8151	INDEX 9372 SAMPLE 3766
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	BLUFF CREEK	CHASTAIN	WENDRICK
WELL NAME	J. P. MORRIS EST. NO. 28	R. A. WEDDINGTON NO. 1	T. G. WENDRICK NO. 1
LOCATION	SEC. 166	UNIVERSITY LAND SUR.	SEC. 1, BLK. A, ABAM SUR.
OWNER	KLEINER & MELTZEL	BEN WIRKKALA	KITTERY OIL CO.
COMPLETED	08/31/43	09/11/49	10/15/40
SAMPLED	03/27/44	08/17/61	04/08/44
FORMATION	PENN-CISCO	PENN-LAKE	PENN-COOK
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1990	3703	1598
WELLHEAD PRESSURE, PSIG	400	NOT GIVEN	145
OPEN FLOW, MCFD	1460	1300	500
COMPONENT, MOLE PCT			
METHANE	70.6	71.0	66.8
ETHANE	9.6	10.7	7.5
PROPANE	---	5.6	---
N-BUTANE	---	2.2	---
ISOBUTANE	---	1.1	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.8	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.6	---
NITROGEN	22.4	6.8	24.4
OXYGEN	1.4	TRACE	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	1.01	0.25	0.91
HEATING VALUE*	812	1261	811
SPECIFIC GRAVITY	0.674	0.787	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9373 SAMPLE 12717		INDEX 9374 SAMPLE 12282		INDEX 9375 SAMPLE 12283	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SHACKELFORD		SHACKELFORD		SHACKELFORD	
FIELD	IBEX		LEA ANNE		LEA ANNE	
WELL NAME	GURNEY NO. 1		WALKER-BUCKLER NO. 2		WALKER-BUCKLER NO. 2	
LOCATION	SEC. 49, BAL SUR.		SEC. 380, TE&L SUR.		SEC. 380, TE&L SUR.	
OWNER	PETROLEUM CORP. OF TEXAS		A. V. JONES & SONS		A. V. JONES & SONS	
COMPLETED	10/27/66		03/29/69		03/23/69	
SAMPLED	NOT GIVEN		06/--/70		06/--/70	
FORMATION	PENN-CADDO		PENN-CADDO		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3498		3902		4158	
WELLHEAD PRESSURE,PSIG	100		1246		1566	
OPEN FLOW, MCFD	1600		21000		14500	
COMPONENT, MOLE PCT						
METHANE	64.8		70.5		66.5	
ETHANE	12.6		10.3		11.7	
PROPANE	10.0		7.5		8.3	
N-BUTANE	3.3		1.8		2.7	
ISOBUTANE	1.4		0.6		1.0	
N-PENTANE	0.7		TRACE		0.6	
ISOPENTANE	0.9		1.1		0.8	
CYCLOPENTANE	0.3		TRACE		0.2	
HEXANES PLUS	0.6		0.1		0.4	
NITROGEN	4.9		7.4		7.2	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.4		0.4	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		TRACE		0.3	
HELIUM	0.05		0.16		0.12	
HEATING VALUE*	1411		1228		1313	
SPECIFIC GRAVITY	0.862		0.768		0.824	

	INDEX 9376 SAMPLE 12284		INDEX 9377 SAMPLE 116		INDEX 9378 SAMPLE 13279	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SHACKELFORD		SHACKELFORD		SHACKELFORD	
FIELD	LEA ANNE		MORAN		MORAN E	
WELL NAME	WALKER-BUCKLER NO. 2		J. O. FITE NO. 1		TERRY JENNINGS NO. 1	
LOCATION	SEC. 380, TE&L SUR.		SEC. 37		SEC. 56, UNIV. LANDS	
OWNER	A. V. JONES & SONS		TEXAS CO.		O. P. LEONARD	
COMPLETED	03/29/69		11/--/14		NOT GIVEN	
SAMPLED	06/--/70		03/04/20		06/24/72	
FORMATION	MISS-		PENN-STRAWN		EOCE-JENNINGS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4590		2865		2300	
WELLHEAD PRESSURE,PSIG	700		125		600	
OPEN FLOW, MCFD	NOT GIVEN		962		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	65.6		75.6		70.1	
ETHANE	16.4		9.1		8.9	
PROPANE	9.0		---		5.9	
N-BUTANE	1.4		---		1.6	
ISOBUTANE	0.5		---		0.8	
N-PENTANE	0.1		---		0.5	
ISOPENTANE	0.8		---		0.1	
CYCLOPENTANE	0.1		---		0.1	
HEXANES PLUS	0.1		---		0.3	
NITROGEN	5.5		12.6		11.4	
OXYGEN	0.3		2.0		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.3		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		0.4		0.1	
HELIUM	0.02		0.12		0.30	
HEATING VALUE*	1304		929		1148	
SPECIFIC GRAVITY	0.801		0.665		0.762	

	INDEX 9379 SAMPLE 14127		INDEX 9380 SAMPLE 11884		INDEX 9381 SAMPLE 11885	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SHACKELFORD		SHACKELFORD		SHACKELFORD	
FIELD	MORAN-BURTON		ONETA		ONETA	
WELL NAME	ALTON BURTON NO. 1		TRICE NO. 1		TRICE NO. 1	
LOCATION	SEC. 73-UNIVERSITY LANDS SUR		SEC. 817, TE&L SUR.		SEC. 817, TE&L SUR.	
OWNER	PREWITT OIL CORP.		PREWITT & CHANCELLOR		PREWITT & CHANCELLOR	
COMPLETED	02/22/73		05/17/68		05/17/68	
SAMPLED	07/31/74		05/15/69		05/15/69	
FORMATION	PENN-CONGLOMERATE		PENN-MARBLE FALLS		MISS-	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3944		4158		4330	
WELLHEAD PRESSURE,PSIG	1577		2040		520	
OPEN FLOW, MCFD	3950		5390		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	74.7		74.3		73.1	
ETHANE	9.6		9.2		9.7	
PROPANE	4.1		5.2		4.4	
N-BUTANE	1.1		1.5		1.3	
ISOBUTANE	0.4		0.6		0.3	
N-PENTANE	0.2		0.5		0.2	
ISOPENTANE	0.3		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.3		0.2	
NITROGEN	8.8		7.6		9.8	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.3	
HELIUM	0.34		0.21		0.25	
HEATING VALUE*	1121		1172		1114	
SPECIFIC GRAVITY	0.718		0.740		0.727	

	INDEX 9382 SAMPLE 10849		INDEX 9383 SAMPLE 10850		INDEX 9384 SAMPLE 16091	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SHACKELFORD		SHACKELFORD		SHACKELFORD	
FIELD	PALM		PALM		ROCKWELL S	
WELL NAME	F. N. PALM NO. 2		F. N. PALM NO. 2		WALKER BUCKLER 78 NO. 1	
LOCATION	SEC. 67, LAL SUR.		SEC. 67, LAL SUR.		SEC. 78, BLK. 12, T&PRR SUR.	
OWNER	H. R. STASNEY		H. R. STASNEY		JONES CO.	
COMPLETED	07/22/66		07/22/66		10/11/79	
SAMPLED	01/23/67		01/23/67		10/10/80	
FORMATION	MISS-		PENN-CADDO		-CONGLOMERATE	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4060		3511		4578	
WELLHEAD PRESSURE,PSIG	1700		1550		1383	
OPEN FLOW, MCFD	NOT GIVEN		38000		7500	
COMPONENT, MOLE PCT						
METHANE	71.8		72.0		70.6	
ETHANE	10.0		8.7		10.5	
PROPANE	4.6		5.0		5.5	
N-BUTANE	1.2		1.4		1.4	
ISOBUTANE	0.5		0.5		0.6	
N-PENTANE	0.3		0.2		0.4	
ISOPENTANE	0.2		0.4		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.3	
NITROGEN	10.5		10.8		10.0	
OXYGEN	0.0		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.4		0.1	
HELIUM	0.31		0.25		0.27	
HEATING VALUE*	1119		1119		1162	
SPECIFIC GRAVITY	0.737		0.743		0.757	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9385 SAMPLE 8173	INDEX 9386 SAMPLE 5680	INDEX 9387 SAMPLE 11932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHELBY
FIELD	HUXLEY	JOAQUIN	JOAQUIN
WELL NAME	PICKERING LUMBER CORP. NO. 1	HANSON NO. 1	PICKERING LBR. CO. NO. B-4
LOCATION	ST. FRANCES SUR.	NOT GIVEN	DAN S. HAIGHT SUR. A-354
OWNER	HUMBLE OIL & REFINING CO.	LION OIL CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	03/26/46	11/29/50	07/06/68
SAMPLED	11/26/46	08/25/54	06/13/69
FORMATION	CRET-L	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6606	6176	6299
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1240
OPEN FLOW, MCFD	NOT GIVEN	1000	24000
COMPONENT, MOLE PCT			
METHANE	96.0	71.9	94.9
ETHANE	2.6	9.8	1.9
PROPANE	---	4.6	0.3
N-BUTANE	---	2.9	0.1
ISOBUTANE	---	2.8	0.1
N-PENTANE	---	2.3	0.1
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.4	TRACE
HEXANES PLUS	---	3.0	0.1
NITROGEN	0.0	0.8	1.8
OXYGEN	0.5	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	1.3	0.7
HELIUM	0.03	TRACE	0.02
HEATING VALUE*	1019	1497	1018
SPECIFIC GRAVITY	0.579	0.879	0.588

	INDEX 9388 SAMPLE 12449	INDEX 9389 SAMPLE 15531	INDEX 9390 SAMPLE 15532
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHELBY
FIELD	JOAQUIN	JOAQUIN	JOAQUIN
WELL NAME	J. S. PRICE UNIT NO. 1	W. M. TAYLOR NO. 1	W. M. TAYLOR NO. 1
LOCATION	J. M. WHITE SUR.	S.O. PENNINGTON SUR., A-555	S.O. PENNINGTON SUR., A-555
OWNER	ATLANTIC RICHFIELD CO.	KEY PRODUCTION CO.	KEY PRODUCTION CO.
COMPLETED	02/09/41	10/05/76	10/05/76
SAMPLED	10/15/70	12/06/78	12/06/78
FORMATION	CRET-JETER	CRET-TRAVIS PEAK	CRET-PETTIT & TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	4935	6192	6192
WELLHEAD PRESSURE,PSIG	565	2763	2763
OPEN FLOW, MCFD	1985	1500	1500
COMPONENT, MOLE PCT			
METHANE	89.2	93.8	94.0
ETHANE	2.5	2.0	2.0
PROPANE	0.7	0.4	0.4
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.4	2.3	2.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.7	0.8
HELIUM	0.05	0.02	0.02
HEATING VALUE*	995	1018	1018
SPECIFIC GRAVITY	0.621	0.593	0.595

	INDEX 9391 SAMPLE 14955	INDEX 9392 SAMPLE 10523	INDEX 9393 SAMPLE 14548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHERMAN
FIELD	STOCKMAN	TENAHA	COLD WATER CREEK
WELL NAME	GRANT NO. 1	K. POLLARD NO. 1	MURPHY NO. G-1
LOCATION	ARCADIA, TEXAS	JESSE SULLINS SUR. A-636	SEC. 128, BLK. 1C, GH&H SUR.
OWNER	ARKLA EXPLORATION CO.	HUMPLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/14/77	09/27/65	08/28/75
SAMPLED	03/24/77	03/06/66	12/17/75
FORMATION	JURA-COTTON VALLEY	JURA-SMACKOVER	PENN-MARMATON
GEOLOGIC PROVINCE CODE	260	260	360
DEPTH, FEET	10281	10745	5338
WELLHEAD PRESSURE,PSIG	4100	4775	1291
OPEN FLOW, MCFD	757	7300	42000
COMPONENT, MOLE PCT			
METHANE	92.6	88.6	73.7
ETHANE	3.6	2.4	8.8
PROPANE	0.6	0.2	5.5
N-BUTANE	0.2	0.0	1.5
ISOBUTANE	0.2	0.0	0.6
N-PENTANE	TRACE	0.0	0.3
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	2.2	5.1	8.8
OXYGEN	0.3	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.4	3.4	0.1
HELIUM	TRACE	0.04	0.22
HEATING VALUE*	1061	946	1153
SPECIFIC GRAVITY	0.613	0.624	0.737

	INDEX 9394 SAMPLE 3482	INDEX 9395 SAMPLE 3483	INDEX 9396 SAMPLE 3484
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	S. J. CALVIRD NO. 1-A	S. J. CALVIRD NO. 1	MOLLIE DAVIS NO. 1
LOCATION	SEC. 369, BLK. 1T, T&NO SUR.	SEC. 582, BLK. 1-T, T&NO SUR.	SEC. 404, BLK. 1-T, T&NO SUR.
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/12/40	09/27/41	04/18/38
SAMPLED	06/02/42	06/02/42	06/02/42
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2270	2088	2550
WELLHEAD PRESSURE,PSIG	450	450	430
OPEN FLOW, MCFD	27500	48000	43000
COMPONENT, MOLE PCT			
METHANE	61.4	62.8	62.2
ETHANE	22.7	19.4	20.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.8	16.3	15.9
OXYGEN	0.6	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.82	0.81	0.45
HEATING VALUE*	933	996	934
SPECIFIC GRAVITY	0.726	0.722	0.721

* GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9397 SAMPLE 3835	INDEX 9398 SAMPLE 4111	INDEX 9399 SAMPLE 4112
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	SEELEY NO. 1	FLOREY NO. 1	PRICE NO. 3
LOCATION	SEC.413, BLK. 1-T, T&NO SUR.	SEC. 8, BLK. 2-T, T&NO SUR.	SEC. 20, BLK. 2-B, GH&H SUR.
OWNER	KERLYN OIL CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	NOT GIVEN	04/25/45	NOT GIVEN
SAMPLED	05/18/44	08/--/46	08/--/46
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3713	3290	3220
WELLHEAD PRESSURE,PSIG	413	423	418
OPEN FLOW, MCFD	4800	26000	11500
COMPONENT, MOLE PCT			
METHANE	63.4	65.2	61.0
ETHANE	20.2	21.2	20.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.1	12.6	17.2
OXYGEN	0.4	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.76	0.82	0.61
HEATING VALUE*	1004	1040	991
SPECIFIC GRAVITY	0.718	0.710	0.730

	INDEX 9400 SAMPLE 4309	INDEX 9401 SAMPLE 4310	INDEX 9402 SAMPLE 4311
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	T. E. DURHAM NO. 1	H. BASKIN NO. 1	MAUD SEATON NO. 1
LOCATION	SEC.335, BLK.1-T,T&NORR SUR.	SEC.444, BLK.1-T,T&NORR SUR.	SEC. 3, BLK. 2-T,T&NORR SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/17/46	01/14/47	01/13/47
SAMPLED	05/28/47	05/28/47	05/28/47
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2435	2905	2930
WELLHEAD PRESSURE,PSIG	424	424	424
OPEN FLOW, MCFD	31600	14200	22700
COMPONENT, MOLE PCT			
METHANE	60.9	60.0	61.0
ETHANE	21.9	22.5	22.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	16.1	15.2
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.78	0.81	0.77
HEATING VALUE*	1009	1011	1021
SPECIFIC GRAVITY	0.729	0.733	0.729

	INDEX 9403 SAMPLE 4314	INDEX 9404 SAMPLE 4857	INDEX 9405 SAMPLE 4858
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	CLUCK NO. 1	M. E. RANSDELL NO. 1	WALTER LASLEY NO. 1
LOCATION	SEC. 5, BLK. 3-B, GH&H SUR.	SEC. 125, BLK. 1-C, GH&H SUR	SEC. 126, BLK. 1-C, GH&H SUR
OWNER	PHILLIPS PETROLEUM CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/47	01/21/50	01/21/50
SAMPLED	05/22/47	03/24/50	03/24/50
FORMATION	PERM-WICHITA-ALBANY	PERM-	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3015	2893	2992
WELLHEAD PRESSURE,PSIG	428	416	423
OPEN FLOW, MCFD	9700	2	3
COMPONENT, MOLE PCT			
METHANE	61.6	72.3	73.0
ETHANE	21.8	6.3	6.4
PROPANE	---	3.6	3.7
N-BUTANE	---	1.1	1.1
ISOBUTANE	---	0.2	0.4
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	14.8	15.0	13.9
OXYGEN	0.1	0.1	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.1	0.3
HELIUM	0.82	0.68	0.58
HEATING VALUE*	1015	1007	1026
SPECIFIC GRAVITY	0.729	0.713	0.719

	INDEX 9406 SAMPLE 5049	INDEX 9407 SAMPLE 5278	INDEX 9408 SAMPLE 5279
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	RAY NO. 1	DOOLEY NO. 3	POLLAN NO. 1
LOCATION	SEC. 66, BLK. 1-C, GH&H SUR.	SEC. 68, BLK. 3-T, T&NO SUR.	BLK. 3-T, T&NO SUR.
OWNER	TASCOSA GAS CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	NOT GIVEN	09/20/52	05/08/52
SAMPLED	04/23/51	09/30/52	09/19/52
FORMATION	PERM-CLEAR FORK M	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1A70	3335	3136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	414	417
OPEN FLOW, MCFD	NOT GIVEN	482	1367
COMPONENT, MOLE PCT			
METHANE	2.4	70.3	70.8
ETHANE	0.2	6.6	6.7
PROPANE	0.2	3.8	3.8
N-BUTANE	0.2	0.9	0.9
ISOBUTANE	TRACE	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	95.8	16.5	16.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.20	0.76	0.74
HEATING VALUE*	48	993	998
SPECIFIC GRAVITY	0.967	0.721	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9409 SAMPLE 5281	INDEX 9410 SAMPLE 5282	INDEX 9411 SAMPLE 5294
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	PRICE NO. B-1	AMEND NO. 1	DOOLEY NO. 1
LOCATION	SEC. 25, BLK. 2-B, GH&H SUR.	SEC. 2, BLK. 3, GH&H SUR.	SEC. 67, BLK. 3-T, T&NO SUR.
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	05/21/52	06/18/52	08/05/52
SAMPLED	09/19/52	09/30/52	09/30/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3205	3170	3350
WELLHEAD PRESSURE, PSIG	368	419	425
OPEN FLOW, MCFD	1407	363	2579
COMPONENT, MOLE PCT			
METHANE	67.1	75.7	70.5
ETHANE	6.3	6.6	6.5
PROPANE	3.7	3.5	3.7
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.6	11.7	16.4
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.96	0.76	0.77
HEATING VALUE*	457	1034	995
SPECIFIC GRAVITY	0.733	0.694	0.722

	INDEX 9412 SAMPLE 5311	INDEX 9413 SAMPLE 5326	INDEX 9414 SAMPLE 5362
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	DOOLEY NO. 4	CAPROCK NO. 1	PRONGER NO. A-1
LOCATION	SEC. A3, BLK. 3-T, T&NO SUR.	SEC. 173, BLK. 1-T, T&NO SUR	SEC. 350, BLK. 1-T, T&NO SUR
OWNER	SHAMROCK OIL & GAS CORP.	TASCOSA GAS CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	08/14/52	02/14/51	09/15/52
SAMPLED	11/13/52	11/19/52	12/18/52
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3167	2838	2430
WELLHEAD PRESSURE, PSIG	410	398	357
OPEN FLOW, MCFD	636	NOT GIVEN	31803
COMPONENT, MOLE PCT			
METHANE	50.3	64.9	68.8
ETHANE	4.6	5.7	6.1
PROPANE	6.0	3.8	4.0
N-BUTANE	0.7	1.2	1.1
ISOBUTANE	0.0	0.5	0.6
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	33.6	22.0	17.5
OXYGEN	4.4	0.3	TRACE
ARGON	0.3	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.29	0.78	0.83
HEATING VALUE*	772	938	990
SPECIFIC GRAVITY	0.814	0.747	0.732

	INDEX 9415 SAMPLE 5365	INDEX 9416 SAMPLE 5423	INDEX 9417 SAMPLE 5424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	COFFMAN NO. 1	A. D. FOREMAN NO. 1	PRYMECK NO. 1
LOCATION	SEC. 181, BLK. 1-C, GH&H SUR	SEC. 446, BLK. 1-T, T&NO SUR	SEC. 122, BLK. 1-C, GH&H SUR
OWNER	UNITED PRODUCING CO., INC.	STANOLIND OIL & GAS CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	07/01/52	01/02/53	10/31/52
SAMPLED	01/10/53	03/23/53	03/23/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2851	2965	NOT GIVEN
WELLHEAD PRESSURE, PSIG	364	362	392
OPEN FLOW, MCFD	2176	9927	943
COMPONENT, MOLE PCT			
METHANE	70.5	72.1	70.9
ETHANE	6.1	6.0	5.5
PROPANE	4.1	3.0	3.7
N-BUTANE	1.2	0.9	1.1
ISOBUTANE	0.5	0.7	0.3
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.9	15.5	16.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.0
HELIUM	0.77	0.70	0.84
HEATING VALUE*	1023	1001	986
SPECIFIC GRAVITY	0.733	0.719	0.719

	INDEX 9418 SAMPLE 5783	INDEX 9419 SAMPLE 5784	INDEX 9420 SAMPLE 6477
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	BROWDER A-1	PRICE F-1	BIVINS NO. 2
LOCATION	SEC. [illegible], BLK. 3-T, T&NO SUR.	SEC. 38, BLK. 3-T, T&NO SUR.	SEC. 50, BLK. 3B, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	SMITH & CREE
COMPLETED	11/11/53	07/06/54	NOT GIVEN
SAMPLED	03/01/55	03/01/55	01/17/58
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3110	3166	NOT GIVEN
WELLHEAD PRESSURE, PSIG	[illegible]	399	NOT GIVEN
OPEN FLOW, MCFD	6944	2030	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	69.7	68.5
ETHANE	6.3	6.2	8.7
PROPANE	3.5	3.1	4.6
N-BUTANE	0.9	0.7	1.1
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	10.7	18.7	10.2
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.83	0.95	0.90
HEATING VALUE*	984	947	984
SPECIFIC GRAVITY	0.721	0.712	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9421 SAMPLE 6657	INDEX 9422 SAMPLE 7857	INDEX 9423 SAMPLE 7858
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	BAYSHORE NO. 1	EDEN NO. 1	ROSS NO. 1
LOCATION	NOT GIVEN	SEC. 101	SEC. 66
OWNER	PHILLIPS PETROLEUM CO.	J. M. OIL CORP.	J. M. OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/--/58	02/15/61	02/15/61
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	248	262
OPEN FLOW, MCFD	NOT GIVEN	452	187
COMPONENT, MOLE PCT			
METHANE	80.9	63.9	60.5
ETHANE	6.4	6.0	5.7
PROPANE	3.8	3.8	4.0
N-BUTANE	1.2	1.2	1.2
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	5.6	22.6	26.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.1
HELIUM	0.20	1.00	0.60
HEATING VALUE*	1144	945	914
SPECIFIC GRAVITY	0.698	0.758	0.775

	INDEX 9424 SAMPLE 7891	INDEX 9425 SAMPLE 8709	INDEX 9426 SAMPLE 8711
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	JOHNSON NO. 1	BASKIN NO. 1	PRONGER C NO. 1
LOCATION	SEC. 3, T3N, T&NO SUR.	SEC. 444, BLK. 1-T, T&NO SUR	SEC. 299, BLK. 1T, T&NO SUR.
OWNER	HOLBERT OPERATING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/30/61	01/14/47	01/00/48
SAMPLED	05/04/61	10/10/62	10/10/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3198	2905	2504
WELLHEAD PRESSURE,PSIG	410	155	165
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.0	69.2	64.8
ETHANE	4.6	6.6	5.7
PROPANE	1.8	4.3	3.8
N-BUTANE	0.2	1.4	1.3
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.4	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	33.9	15.8	20.8
OXYGEN	0.0	0.3	1.2
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.90	0.71	0.65
HEATING VALUE*	723	1038	961
SPECIFIC GRAVITY	0.736	0.743	0.761

	INDEX 9427 SAMPLE 8712	INDEX 9428 SAMPLE 8713	INDEX 9429 SAMPLE 8714
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	R. C. BUCKLES NO. 1	T. H. DURHAM NO. 1	LM PRICE NO. 1
LOCATION	SEC. 453, BLK. 1-T, T&NO SUR	SEC. 335, BLK. 1-T, T&NO SUR	SEC. 372, BLK. 1-T, T&NO SUR
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/06/48	12/17/48	11/07/47
SAMPLED	10/10/62	10/10/62	10/10/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2849	2435	2726
WELLHEAD PRESSURE,PSIG	155	160	165
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	65.0	68.4
ETHANE	6.5	5.9	6.5
PROPANE	4.3	3.8	4.4
N-BUTANE	1.4	1.1	1.5
ISOBUTANE	0.7	0.6	0.9
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	* 0.1	0.2
NITROGEN	15.6	20.4	16.2
OXYGEN	TRACE	1.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.75	0.69	0.73
HEATING VALUE*	1038	950	1049
SPECIFIC GRAVITY	0.741	0.752	0.755

	INDEX 9430 SAMPLE 11858	INDEX 9431 SAMPLE 11860	INDEX 9432 SAMPLE 11861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	L. M. PRICE NO. 2	W. A. WHORTON NO. 2	W. A. SPURLOCK NO. 2
LOCATION	SEC. 309, BLK. 1T, T&NO SUR.	SEC. 104, BLK. 1T, T&NO SUR.	SEC. 25, BLK. 2B, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	11/29/47	11/29/48	12/06/47
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2960	2805	3303
WELLHEAD PRESSURE,PSIG	106	158	100
OPEN FLOW, MCFD	511	104	698
COMPONENT, MOLE PCT			
METHANE	68.2	65.8	67.6
ETHANE	6.5	6.0	6.5
PROPANE	4.6	4.1	4.2
N-BUTANE	1.4	1.2	1.1
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	16.4	20.4	18.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.76	0.87	0.99
HEATING VALUE*	1050	980	998
SPECIFIC GRAVITY	0.754	0.754	0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9433 SAMPLE 11862	INDEX 9434 SAMPLE 11863	INDEX 9435 SAMPLE 11865
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	W. A. SPURLOCK NO. 1	H. J. COLLIER NO. 1	L. M. PRICE NO. 1
LOCATION	SEC. 26, BLK. 2B, GH&H SUR.	SEC. 179, BLK. 1C, SH&H SUR.	SEC. 60, BLK. 2B, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	11/22/69	09/00/50	02/21/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3041	2932	2990
WELLHEAD PRESSURE,PSIG	234	100	100
OPEN FLOW, MCFD	289	499	444
COMPONENT, MOLE PCT			
METHANE	70.6	68.8	68.0
ETHANE	6.5	6.7	6.6
PROPANE	3.5	5.0	4.3
N-BUTANE	1.0	1.5	1.5
ISOBUTANE	0.4	1.2	0.6
N-PENTANE	0.2	0.8	0.3
ISOPENTANE	0.2	0.0	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	16.5	14.7	16.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.88	0.60	0.81
HEATING VALUE*	992	1096	1043
SPECIFIC GRAVITY	0.720	0.763	0.756

	INDEX 9436 SAMPLE 11866	INDEX 9437 SAMPLE 11867	INDEX 9438 SAMPLE 11869
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	W. A. WHARTON NO. 1	R. H. COFFMAN NO. 1	M. WHORTON NO. 1
LOCATION	SEC. 137, BLK. 1T, T&NO SUR.	SEC. 181, BLK. 1C, GH&H SUR.	SEC. 188, BLK. 1C, GH&H SUR.
OWNER	TERRELL & STALLTER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	10/15/48	07/01/52	10/29/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2851	2840
WELLHEAD PRESSURE,PSIG	NOT GIVEN	98	119
OPEN FLOW, MCFD	NOT GIVEN	288	298
COMPONENT, MOLE PCT			
METHANE	66.8	69.2	69.7
ETHANE	6.0	6.5	6.3
PROPANE	4.0	4.1	3.9
N-BUTANE	1.2	1.4	1.3
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	19.9	16.2	16.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.87	0.75	0.69
HEATING VALUE*	977	1036	1017
SPECIFIC GRAVITY	0.746	0.746	0.737

	INDEX 9439 SAMPLE 11870	INDEX 9440 SAMPLE 11871	INDEX 9441 SAMPLE 11872
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	NANNIE NO. 1
WELL NAME	J. W. STERL NO. 1	L. B. HAILE NO. 1	SEC. 207, BLK. 1T, T&NO SUR.
LOCATION	SEC. 135, BLK. 1T, T&NO SUR.	SEC. 182, BLK. 1C, GH&H SUR.	ASHLAND OIL & REFINING CO.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	05/21/51
COMPLETED	02/07/69	10/10/50	05/13/69
SAMPLED	05/13/69	05/13/69	PERM-CHASE GROUP
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	360
GEOLOGIC PROVINCE CODE	360	360	2878
DEPTH, FEET	2802	2862	80
WELLHEAD PRESSURE,PSIG	174	95	366
OPEN FLOW, MCFD	112	221	
COMPONENT, MOLE PCT			
METHANE	63.9	69.0	65.1
ETHANE	5.9	6.6	6.4
PROPANE	4.2	5.0	4.8
N-BUTANE	1.3	1.6	1.6
ISOBUTANE	0.7	1.2	1.1
N-PENTANE	0.4	0.7	0.6
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	22.0	14.4	18.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.93	0.64	0.72
HEATING VALUE*	974	1101	1047
SPECIFIC GRAVITY	0.766	0.764	0.778

	INDEX 9442 SAMPLE 11873	INDEX 9443 SAMPLE 11874	INDEX 9444 SAMPLE 11875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	J. L. HASS NO. 1	W. M. LASLEY NO. 1	SAM LASLEY NO. 1
LOCATION	SEC. 215, BLK. 1C, GH&H SUR.	SEC. 172, BLK. 1C, GH&H SUR.	SEC. 184, BLK. 1C, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	01/20/48	12/17/48	01/06/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2769	NOT GIVEN	8
WELLHEAD PRESSURE,PSIG	84	186	76
OPEN FLOW, MCFD	154	249	389
COMPONENT, MOLE PCT			
METHANE	64.1	67.9	66.7
ETHANE	6.2	6.4	7.3
PROPANE	5.3	4.0	5.6
N-BUTANE	1.7	1.2	2.2
ISOBUTANE	0.5	0.8	1.3
N-PENTANE	0.5	0.3	0.8
ISOPENTANE	0.6	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.6
NITROGEN	20.6	18.1	14.4
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.32	0.70	0.52
HEATING VALUE*	1009	1065	1156
SPECIFIC GRAVITY	0.735	0.746	0.799

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9445 SAMPLE 13022	INDEX 9446 SAMPLE 7836	INDEX 9447 SAMPLE 7843
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	PALO DURO CREEK	PALO DURO CREEK
WELL NAME	DEAR NO. 1	WILLCLO NO. 2	KATHRYN A NO. 1
LOCATION	SEC. 10, BLK. 2T, T&NO SUR.	SEC. 15, BLK. 3, T&NO SUR.	SEC. 8, BLK. 3-B, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	NOT GIVEN	06/05/50	04/08/49
SAMPLED	09/20/71	02/01/61	02/07/61
FORMATION	PERM-CHASE GROUP	PENN-KATHRYN	PENN-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5343	5312
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1241	1110
OPEN FLOW, MCFD	NOT GIVEN	27984	25000
COMPONENT, MOLE PCT			
METHANE	70.3	77.3	77.2
ETHANE	6.2	8.1	7.6
PROPANE	4.6	3.9	3.7
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	0.7	0.9	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.5	0.6	0.1
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.2	1.2	0.1
NITROGEN	15.2	5.5	8.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.73	0.20	0.30
HEATING VALUE*	1043	1212	1098
SPECIFIC GRAVITY	0.738	0.740	0.706

	INDEX 9448 SAMPLE 8228	INDEX 9449 SAMPLE 5609	INDEX 9450 SAMPLE 5610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	PALO DURO CREEK	STRATFORD	STRATFORD
WELL NAME	MORRIS C NO. 1	STRATFORD GAS UNIT NO. 2	STRATFORD GAS UNIT NO. 1
LOCATION	SEC. 23, BLK. 2, GH&H SUR.	SEC. 61, BLK.1-T,T&NO SUR.	SEC. 79, BLK.1-T, T&NO SUR.
OWNER	PHILLIPS PETROLEUM CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	06/11/61	04/23/54	04/03/54
SAMPLED	10/02/61	04/20/54	04/20/54
FORMATION	PENN-LIME	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5364	3260	3273
WELLHEAD PRESSURE,PSIG	1223	473	468
OPEN FLOW, MCFD	64529	14000	21500
COMPONENT, MOLE PCT			
METHANE	72.8	72.4	71.8
ETHANE	8.2	5.9	6.0
PROPANE	4.2	3.7	3.7
N-BUTANE	1.1	1.3	1.3
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	11.6	14.8	15.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.27	0.55	0.57
HEATING VALUE*	1084	1027	1021
SPECIFIC GRAVITY	0.728	0.723	0.724

	INDEX 9451 SAMPLE 7044	INDEX 9452 SAMPLE 7163	INDEX 9453 SAMPLE 7236
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	STRATFORD	STRATFORD	STRATFORD
WELL NAME	JUDD NO. 1	LEROY JUDD NO. 1	O'BRIEN NO. 1
LOCATION	SEC. 3, BLK. 1, PSL SUR.	SEC. 13, BLK. 1-T, T&NO SUR.	SEC. 8, BLK.1-T, T&NORR SUR.
OWNER	PHILLIPS PETROLEUM CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	02/06/59	06/12/59	07/30/59
SAMPLED	04/27/59	08/06/59	10/08/59
FORMATION	PENN-MASSIVE LIME	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3272	3500	3328
WELLHEAD PRESSURE,PSIG	464	398	456
OPEN FLOW, MCFD	1340	3160	2800
COMPONENT, MOLE PCT			
METHANE	76.1	74.3	77.7
ETHANE	5.4	5.7	5.2
PROPANE	3.3	3.3	2.8
N-BUTANE	1.3	1.2	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.2	0.6	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	11.8	13.2	11.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.60	0.60	0.50
HEATING VALUE*	1053	1045	1043
SPECIFIC GRAVITY	0.707	0.716	0.696

	INDEX 9454 SAMPLE 7297	INDEX 9455 SAMPLE 7307	INDEX 9456 SAMPLE 7427
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	STRATFORD	STRATFORD	STRATFORD
WELL NAME	W. G. O'BRIEN ESTATE NO. 1	MORRIS SMITH NO. 1	W. G. O'BRIEN NO. 2-A
LOCATION	SEC. 29, BLK. 1-T, T&NO SUR.	SEC. 24, BLK. 1-T, T&NO SUR.	SEC. 7, BLK. 1-T, T&NO SUR.
OWNER	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	06/10/58	10/20/59	12/23/59
SAMPLED	12/04/59	12/10/59	02/29/60
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3291	3518	3361
WELLHEAD PRESSURE,PSIG	472	398	462
OPEN FLOW, MCFD	820	117	1140
COMPONENT, MOLE PCT			
METHANE	76.5	73.1	76.3
ETHANE	5.1	5.6	5.2
PROPANE	3.2	3.5	3.0
N-BUTANE	1.2	1.3	1.1
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.9	14.5	12.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.60	0.50
HEATING VALUE*	1041	1028	1020
SPECIFIC GRAVITY	0.700	0.719	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9457 SAMPLE 12171		INDEX 9458 SAMPLE 6998		INDEX 9459 SAMPLE 13754	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SHERMAN		SHERMAN		SHERMAN	
FIELD	STRATFORD (WILDCAT)		WILDCAT		WILDCAT	
WELL NAME	M. DORTCH NO. 1		CLARINE F. BROWN NO. 1		CALVIRD-A NO. 2	
LOCATION	SEC. 25, BLK. 1-T, T&NO SUR.		SEC. 75, BLK. 3-T, T&NO SUR.		SEC. 382, BLK. 1T, T&NO SUR.	
OWNER	W. V. MARLOW ET AL.		SHAMROCK OIL & GAS CORP.		CITIES SERVICE OIL CO.	
COMPLETED	NOT GIVEN		03/10/59		08/09/73	
SAMPLED	01/17/70		03/12/59		10/16/73	
FORMATION	PERM-RED CAVE		PERM-TUBB		PENN-LIME	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	1720		1925		3010	
WELLHEAD PRESSURE,PSIG	400		600		84	
OPEN FLOW, MCFD	206		600		13300	
COMPONENT, MOLE PCT						
METHANE	40.3	----------	62.2	----------	68.0	----------
ETHANE	4.6		3.9		6.6	
PROPANE	3.6	----------	2.1	----------	4.8	----------
N-BUTANE	0.9		0.5		1.5	
ISOBUTANE	0.3	----------	0.3	----------	0.7	----------
N-PENTANE	0.1		0.1		0.4	
ISOPENTANE	0.3	----------	0.0	----------	0.4	----------
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1	----------	0.1	----------	0.2	----------
NITROGEN	48.9		30.2		16.0	
OXYGEN	0.9	----------	0.6	----------	0.0	----------
ARGON	0.2		TRACE		0.1	
HYDROGEN	0.0	----------	0.2	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0	----------	TRACE	----------	0.4	----------
HELIUM	0.75		0.40		0.80	
HEATING VALUE*	647	----------	791	----------	1054	----------
SPECIFIC GRAVITY	0.842		0.739		0.758	

	INDEX 9460 SAMPLE 4191		INDEX 9461 SAMPLE 12442		INDEX 9462 SAMPLE 12443	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SMITH		SMITH		SMITH	
FIELD	CHAPEL HILL		CHAPEL HILL		CHAPEL HILL	
WELL NAME	B. MOSLEY NO. 1		I. RUDMAN NO. 1		BISHOP MOSLEY NO. 1	
LOCATION	LEVI HINDS SUR.		THOMAS PAYNE SUR.		LEVI HINDS SUR.	
OWNER	SHELL OIL CO.		ATLANTIC RICHFIELD CO.		ATLANTIC RICHFIELD CO.	
COMPLETED	10/13/40		09/10/43		03/05/41	
SAMPLED	09/14/46		10/14/70		10/14/70	
FORMATION	CRET-PALUXY		CRET-RODESSA		CRET-PALUXY	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	5785		7295		5778	
WELLHEAD PRESSURE,PSIG	1725		NOT GIVEN		837	
OPEN FLOW, MCFD	6600		NOT GIVEN		2250	
COMPONENT, MOLE PCT						
METHANE	73.8	----------	78.7	----------	74.9	----------
ETHANE	24.2		8.5		13.6	
PROPANE	---	----------	5.0	----------	6.9	----------
N-BUTANE	---		1.9		0.6	
ISOBUTANE	---	----------	1.5	----------	0.6	----------
N-PENTANE	---		0.9		0.1	
ISOPENTANE	---	----------	0.4	----------	TRACE	----------
CYCLOPENTANE	---		0.2		0.1	
HEXANES PLUS	---	----------	1.2	----------	0.2	----------
NITROGEN	1.0		1.5		2.0	
OXYGEN	0.6	----------	TRACE	----------	0.0	----------
ARGON	---		0.0		0.0	
HYDROGEN	---	----------	0.1	----------	0.1	----------
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.7	----------	1.0	----------	0.7	----------
HELIUM	0.05		0.02		0.04	
HEATING VALUE*	1177	----------	1319	----------	1240	----------
SPECIFIC GRAVITY	0.688		0.767		0.733	

	INDEX 9463 SAMPLE 12480		INDEX 9464 SAMPLE 14177		INDEX 9465 SAMPLE 14794	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SMITH		SMITH		SMITH	
FIELD	CHAPEL HILL W		OVERTON		OVERTON	
WELL NAME	THEOTTIS WARREN G.U. NO. 1		OVERTON G.U. 1 NO. 1		OVERTON GAS UNIT 2 NO. 1	
LOCATION	J. A. BROCK SUR.		M.G. HERIQUEZ SUR.		E. DANIELS SUR. A-329	
OWNER	TEXACO INC.		EXXON CO., U.S.A.		EXXON CO., U.S.A.	
COMPLETED	06/07/60		NOT GIVEN		12/03/74	
SAMPLED	10/22/70		10/--/74		10/01/76	
FORMATION	CRET-PALUXY		JURA-HAYNESVILLE		JURA-HAYNESVILLE	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	5310		12000		12034	
WELLHEAD PRESSURE,PSIG	940		5205		5400	
OPEN FLOW, MCFD	1200		7800		16000	
COMPONENT, MOLE PCT						
METHANE	81.8	----------	95.9	----------	96.5	----------
ETHANE	8.6		0.7		1.2	
PROPANE	4.8	----------	0.1	----------	0.2	----------
N-BUTANE	1.6		TRACE		0.1	
ISOBUTANE	1.3	----------	TRACE	----------	0.1	----------
N-PENTANE	0.7		TRACE		TRACE	
ISOPENTANE	0.3	----------	TRACE	----------	0.1	----------
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.2	----------	0.1	----------	0.1	----------
NITROGEN	0.5		1.2		0.4	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5	----------	2.0	----------	1.4	----------
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1054	----------	992	----------	1019	----------
SPECIFIC GRAVITY	0.720		0.586		0.585	

	INDEX 9466 SAMPLE 14803		INDEX 9467 SAMPLE 12550		INDEX 9468 SAMPLE 12605	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	SMITH		SMITH		SMITH	
FIELD	OVERTON		RED SPRINGS		TYLER	
WELL NAME	OVERTON GAS UNIT NO. 1		RED SPRINGS GAS UNIT 6 NO. 1		ELMTON GAS UNIT NO. 2	
LOCATION	M. G. HENRIQUEZ A-11 SUR.		CASSEY GREEN&M.G.ESTRADA SUR		1-1/2 MI. S TYLER	
OWNER	EXXON CO., U.S.A.		HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	10/17/74		12/30/50		09/09/63	
SAMPLED	10/04/76		11/21/70		12/17/70	
FORMATION	JURA-HAYNESVILLE A-11		CRET-RODESSA L		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	12012		9564		9600	
WELLHEAD PRESSURE,PSIG	5190		430		4600	
OPEN FLOW, MCFD	7400		684		6515	
COMPONENT, MOLE PCT						
METHANE	96.3	----------	85.0	----------	93.7	----------
ETHANE	0.9		5.5		2.8	
PROPANE	0.1	----------	2.9	----------	0.7	----------
N-BUTANE	0.0		1.0		0.2	
ISOBUTANE	0.0	----------	1.0	----------	0.3	----------
N-PENTANE	0.0		0.6		0.1	
ISOPENTANE	0.0	----------	0.5	----------	0.1	----------
CYCLOPENTANE	0.0		0.1		TRACE	
HEXANES PLUS	0.0	----------	0.7	----------	0.1	----------
NITROGEN	1.1		0.9		0.6	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.6	----------	0.1	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.6	----------	1.9	----------	1.4	----------
HELIUM	0.01		0.02		0.01	
HEATING VALUE*	994	----------	1141	----------	1048	----------
SPECIFIC GRAVITY	0.590		0.699		0.605	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9469 SAMPLE 4675	INDEX 9470 SAMPLE 13340	INDEX 9471 SAMPLE 15204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SMITH	SMITH	STARR
FIELD	TYLER S	WILDCAT	ARKANSAS CITY
WELL NAME	MCMINN NO. 1	LAVELLE RHODES NO. 1-A	P. H. LONGORIA NO. 1
LOCATION	M. M. LONG SUR.	THOMAS QUEVADO SUR. A-18	J. WOODRIDGE SUR. 286, A-273
OWNER	PHILLIPS PETROLEUM CO.	FAIR OIL CO.	HARKINS & CO.
COMPLETED	01/26/49	10/05/71	06/29/76
SAMPLED	04/12/49	07/31/72	01/24/78
FORMATION	CRET-RODESSA	CRET-PALUXY	OLIG-FRIO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	9550	7498	5106
WELLHEAD PRESSURE,PSIG	2390	2900	1546
OPEN FLOW, MCFD	1700	16000	13000
COMPONENT, MOLE PCT			
METHANE	91.9	90.3	84.1
ETHANE	3.8	4.2	4.5
PROPANE	1.4	1.5	2.0
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.6	0.8
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.6	0.2
NITROGEN	0.3	1.3	5.4
OXYGEN	0.1	0.0	1.3
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	0.5	0.3
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1089	1116	1075
SPECIFIC GRAVITY	0.628	0.641	0.672

	INDEX 9472 SAMPLE 13451	INDEX 9473 SAMPLE 13526	INDEX 9474 SAMPLE 4586
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	BOROSA S	BOROSA S	BOYLE
WELL NAME	T. B. SLICK EST. "A" NO. 2	T.B.SLICK EST."A" NO. 1	M. M. GARCIA D-14
LOCATION	16 MI. NE RIO GRANDE CITY	SEC. 531, CCSD+RGN RR SUR.	SEC. 908
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	12/04/71	03/25/48
SAMPLED	10/16/72	02/07/73	10/12/48
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	6300	3782
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2473	1450
OPEN FLOW, MCFD	72000	16400	1750
COMPONENT, MOLE PCT			
METHANE	89.6	84.5	79.2
ETHANE	6.1	6.3	19.5
PROPANE	2.2	3.9	---
N-BUTANE	0.5	1.3	---
ISOBUTANE	0.7	1.5	---
N-PENTANE	0.2	0.4	---
ISOPENTANE	0.1	0.9	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.7	---
NITROGEN	0.2	0.3	1.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1137	1259	1152
SPECIFIC GRAVITY	0.638	0.713	0.656

	INDEX 9475 SAMPLE 13928	INDEX 9476 SAMPLE 3677	INDEX 9477 SAMPLE 4689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	CAMERON NW	COMEVON	DOSS
WELL NAME	DALLAS LAND BANK NO. 1	W. I. COMEVON NO. 2	AUSTIN ESTATE NO. 1
LOCATION	CCSD & RGNG SUR. 509	SEC. 138, G. W. SMITH SUR.	PORCION 39
OWNER	TENNECO OIL CO.	CONTINENTAL OIL CO.	SUN OIL CO.
COMPLETED	11/15/71	09/23/43	10/30/48
SAMPLED	02/27/74	10/08/43	02/07/49
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4480	4126	3723
WELLHEAD PRESSURE,PSIG	470	1716	1659
OPEN FLOW, MCFD	270	NOT GIVEN	9000
COMPONENT, MOLE PCT			
METHANE	86.0	62.7	93.4
ETHANE	6.6	36.8	4.2
PROPANE	3.7	---	1.1
N-BUTANE	0.9	---	0.3
ISOBUTANE	1.4	---	0.2
N-PENTANE	0.3	---	0.0
ISOPENTANE	0.5	---	0.3
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.4	---	0.2
NITROGEN	0.1	0.1	0.2
OXYGEN	TRACE	0.3	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1221	1295	1089
SPECIFIC GRAVITY	0.686	0.740	0.605

	INDEX 9478 SAMPLE 10533	INDEX 9479 SAMPLE 5116	INDEX 9480 SAMPLE 15399
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	EL RENADITO	EL JAVALI	EL STAGG
WELL NAME	F.W.W. HEARD NO. 1	BESSIE H. COCKE NO. 1	RAFAEL A GUERRA NO. 1
LOCATION	SEC.21,BLK.4,MELTONS SUB.	NOT GIVEN	SAN JOSE GRANT, A-78
OWNER	LANDA OIL CO.	CHICAGO CORP.	GEORGE H. COATES ESTATE
COMPLETED	09/12/63	06/06/51	09/23/76
SAMPLED	04/20/66	11/02/51	10/--/78
FORMATION	OLIG-VICKSBURG	EOCE-COCKFIELD	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9264	2223	7320
WELLHEAD PRESSURE,PSIG	6663	915	3575
OPEN FLOW, MCFD	4500	8200	19000
COMPONENT, MOLE PCT			
METHANE	91.2	97.0	88.2
ETHANE	4.8	0.8	5.7
PROPANE	1.7	0.1	2.1
N-BUTANE	0.4	0.1	0.5
ISOBUTANE	0.6	0.1	0.6
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.2
NITROGEN	0.3	0.4	1.3
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.9	0.7
HELIUM	0.01	0.40	TRACE
HEATING VALUE*	1120	1010	1118
SPECIFIC GRAVITY	0.629	0.574	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9481 SAMPLE 13910	INDEX 9482 SAMPLE 3815	INDEX 9483 SAMPLE 2658
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	FLORES	GARCIA	GUERRA
WELL NAME	S.D. BLOOMBERG NO. 1	Z. SOLIS A NO. 1	GUERRA NO. 1-C
LOCATION	X. ZAMORA PORCION 41, A-77	2 MI. S. OF FROST FIELD	SACATOSA GRANT
OWNER	TEXACO INC.	SUN OIL CO.	SUN OIL CO.
COMPLETED	09/09/58	02/13/44	08/21/33
SAMPLED	02/--/74	04/20/44	11/14/33
FORMATION	OLIG-FRIO	OLIG-FRIO	EOCE-JACKSON L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5627	4070	2141
WELLHEAD PRESSURE,PSIG	500	1500	810
OPEN FLOW, MCFD	900	2000	10000
COMPONENT, MOLE PCT			
METHANE	90.6	80.6	92.6
ETHANE	5.3	14.2	5.9
PROPANE	1.9	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.5	4.7	0.4
OXYGEN	0.0	0.4	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1132	1071	1044
SPECIFIC GRAVITY	0.634	0.647	0.594

	INDEX 9484 SAMPLE 2659	INDEX 9485 SAMPLE 5126	INDEX 9486 SAMPLE 4956
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	GUERRA	JAY SIMMONS S	KELSEY S
WELL NAME	NO. C-2	MINAJOSA NO. 1	ALVAREZ NO. 1
LOCATION	SACATOSA GRANT	SANTA CRUZ GRANT	SANTA TERSEA GRANT
OWNER	SUN OIL CO.	SUN OIL CO.	HUGH KIRKPATRICK, ET AL.
COMPLETED	11/01/33	08/18/51	06/17/50
SAMPLED	11/14/33	11/24/51	11/23/50
FORMATION	EOCE-JACKSON L	OLIG-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2160	6137	4590
WELLHEAD PRESSURE,PSIG	800	2810	2110
OPEN FLOW, MCFD	3000	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	89.8	88.8
ETHANE	7.5	5.2	5.7
PROPANE	---	2.2	2.3
N-BUTANE	---	0.6	0.6
ISOBUTANE	---	0.6	0.5
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.4
NITROGEN	1.1	0.9	0.7
OXYGEN	0.3	0.1	0.2
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1056	1123	1138
SPECIFIC GRAVITY	0.599	0.636	0.646

	INDEX 9487 SAMPLE 13549	INDEX 9488 SAMPLE 3727	INDEX 9489 SAMPLE 16097
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	LA REFORMA	LOCKHART	NOT GIVEN
WELL NAME	C.V. DE LOPEZ "A" NO. 2	DOMINGO-GARZA NO. 2	I.V.MONTALVO "C" NO.39L
LOCATION	SANTA CRUZ SUR, A-79	SEC. 80	LOS RETACHEZ GNT. A347
OWNER	SUN OIL CO.	LOCKHART & DAVENPORT	SUN GAS CO.
COMPLETED	03/27/71	09/02/43	NOT GIVEN
SAMPLED	02/23/73	03/22/44	10/14/80
FORMATION	OLIG-VICKSBURG	EOCE-	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7989	4014	7140
WELLHEAD PRESSURE,PSIG	3065	1500	NOT GIVEN
OPEN FLOW, MCFD	7255	NOT GIVEN	3222
COMPONENT, MOLE PCT			
METHANE	88.8	81.4	91.1
ETHANE	5.8	17.8	4.6
PROPANE	2.4	---	2.0
N-BUTANE	0.7	---	0.6
ISOBUTANE	0.7	---	0.5
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.4	---	0.3
NITROGEN	0.8	0.4	0.2
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1151	1144	1135
SPECIFIC GRAVITY	0.652	0.647	0.633

	INDEX 9490 SAMPLE 3676	INDEX 9491 SAMPLE 4646	INDEX 9492 SAMPLE 12056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	RINCON	RINCON	RINCON
WELL NAME	T. R. SLICK E 9	SEE DAVENPORT NO. 5	M.M. GARCIA B538 NO. 20
LOCATION	SEC. 37, CCSD & RGNG SUR.	SEC. 280, S-2	CCSD SUR. NO. 538
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	08/19/43	12/31/48	01/24/68
SAMPLED	10/05/43	12/30/48	10/01/69
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3830	4245	6860
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1650	2000
OPEN FLOW, MCFD	17000	14000	5000
COMPONENT, MOLE PCT			
METHANE	87.0	58.2	74.9
ETHANE	12.8	39.9	6.8
PROPANE	---	---	5.6
N-BUTANE	---	---	2.4
ISOBUTANE	---	---	2.5
N-PENTANE	---	---	1.4
ISOPENTANE	---	---	1.3
CYCLOPENTANE	---	---	0.8
HEXANES PLUS	---	---	2.9
NITROGEN	0.1	0.8	0.4
OXYGEN	0.1	0.6	TRACE
ARGON	---	---	0.6
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.5	0.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1135	1014	1519
SPECIFIC GRAVITY	0.619	0.765	0.873

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9493 SAMPLE 4669	INDEX 9494 SAMPLE 15379	INDEX 9495 SAMPLE 3757
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	RINCON N	RINCON N	ROSS
WELL NAME	R. J. MOORE NO. 1	F. F. MARTINEZ NO. 1	GARZA NO. 2
LOCATION	SEC. 513	E. RANGEL SUR. 546, A-1015	SEC. 44, PORCION 88
OWNER	LA GLORIA CORP.	HARKINS & CO.	W. L. GOLDSTON
COMPLETED	09/10/48	07/07/77	12/03/43
SAMPLED	01/19/49	09/19/78	03/31/44
FORMATION	OLIG-	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3287	7074	2775
WELLHEAD PRESSURE,PSIG	1500	3690	900
OPEN FLOW, MCFD	12000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	81.9	96.0
ETHANE	1.5	7.6	1.6
PROPANE	0.3	3.9	---
N-BUTANE	0.1	0.9	---
ISOBUTANE	0.2	1.0	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.6	3.1	1.9
OXYGEN	0.1	0.7	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1038	1163	1001
SPECIFIC GRAVITY	0.580	0.690	0.573

	INDEX 9496 SAMPLE 12212	INDEX 9497 SAMPLE 12213	INDEX 9498 SAMPLE 11169
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	ROSS N	ROSS N	SAN ROMAN W
WELL NAME	D.L. GARZA B NO. 1	D.L. GARZA B NO. 3	H. P. GUERRA NO. 2
LOCATION	11 MI. NE RIO GRANDE CITY	10 MI. NE RIO GRANDE CITY	PORCION 109, SUR. A-97
OWNER	SOUTH STATES OIL & GAS CO.	SOUTH STATES OIL & GAS CO.	MOKEEN OIL CO.
COMPLETED	05/12/56	01/23/69	09/28/66
SAMPLED	02/25/70	02/25/70	10/15/67
FORMATION	OLIG-FRIO	OLIG-FRIO	EOCE-2600 FOOT SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2453	2488	4012
WELLHEAD PRESSURE,PSIG	287	498	1014
OPEN FLOW, MCFD	2000	1720	6000
COMPONENT, MOLE PCT			
METHANE	90.7	95.1	95.8
ETHANE	4.1	2.8	3.6
PROPANE	0.5	0.4	0.1
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.7	0.8	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.7	0.1
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1038	1028	1038
SPECIFIC GRAVITY	0.627	0.583	0.575

	INDEX 9499 SAMPLE 13547	INDEX 9500 SAMPLE 13548	INDEX 9501 SAMPLE 13524
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	SUN	SUN	SUN E
WELL NAME	LEE M. GREEN NO. 1	LEE M. GREEN NO. 1	LAUREL NO. 1
LOCATION	SANTA TERESA GRANT A-220	SANTA TERESA GRANT A-220	CCSD&RGNG RR SUR NO 241,A202
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	BOBBY M. BURNS ET AL
COMPLETED	01/30/71	01/30/71	10/16/71
SAMPLED	02/25/73	02/21/73	02/04/73
FORMATION	OLIG-VICKSBURG I-4	OLIG-VICKSBURG J-1	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6773	7417	6390
WELLHEAD PRESSURE,PSIG	2615	2865	2380
OPEN FLOW, MCFD	7400	8500	2500
COMPONENT, MOLE PCT			
METHANE	89.1	88.8	93.2
ETHANE	4.2	4.1	3.8
PROPANE	1.6	1.6	1.4
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.4	3.5	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1063	1058	1095
SPECIFIC GRAVITY	0.630	0.630	0.610

	INDEX 9502 SAMPLE 13525	INDEX 9503 SAMPLE 4305	INDEX 9504 SAMPLE 4481
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	SUN E	SUN N	SUN N
WELL NAME	LAUREL NO. 1	LEE M. GREEN NO. 4	RAMON OLIVARES NO. 1
LOCATION	CCSD+RGNG RR SUR, A-202	SANTA TERESA GRANT	3 MI. SE OF SANTA ELENA
OWNER	BOBBY M. BURNS ET AL	SUN OIL CO.	SUN OIL CO.
COMPLETED	10/16/71	02/20/47	01/07/48
SAMPLED	02/04/73	05/09/47	03/30/48
FORMATION	OLIG-VICKSBURG	OLIG-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6390	6460	4500
WELLHEAD PRESSURE,PSIG	2380	2918	2402
OPEN FLOW, MCFD	2500	7800	10500
COMPONENT, MOLE PCT			
METHANE	93.0	84.7	84.0
ETHANE	3.8	14.9	15.0
PROPANE	1.5	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.5	0.0	0.2
OXYGEN	TRACE	0.3	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.1	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1091	1125	1120
SPECIFIC GRAVITY	0.609	0.631	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9505 SAMPLE 12525		INDEX 9506 SAMPLE 4820		INDEX 9507 SAMPLE 10143	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STARR		STARR		STEPHENS	
FIELD	SUN N		YZAGUIRRE		AKIN	
WELL NAME	O. JUAREZ NO. 2		T. B. SLICK NO. 2		N. J. BROOKS 13-F	
LOCATION	SANTA TERESA GR., A-220		SEC. 230		SEC. 3390 TE&L SUR.	
OWNER	SUN OIL CO.		BRITISH-AMER. OIL PROD. CO.		TEXACO INC.	
COMPLETED	01/11/69		05/12/49		05/27/63	
SAMPLED	11/06/69		12/30/49		09/22/65	
FORMATION	OLIG-FRIO F.2		OLIG-FRIO		PENN-BUCK CREEK	
GEOLOGIC PROVINCE CODE	220		220		425	
DEPTH, FEET	5500		4809		2020	
WELLHEAD PRESSURE,PSIG	1200		2103		540	
OPEN FLOW, MCFD	10200		5800		2200	
COMPONENT, MOLE PCT						
METHANE	91.5		90.2		84.6	
ETHANE	4.5		5.4		0.5	
PROPANE	1.8		2.0		0.4	
N-BUTANE	0.5		0.5		0.3	
ISOBUTANE	0.5		0.4		0.1	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.2		0.4		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	0.4		0.5		13.4	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE		0.1		0.2	
HELIUM	TRACE		TRACE		0.30	
HEATING VALUE*	1119		1134		8990	
SPECIFIC GRAVITY	0.626		0.634		0.627	

	INDEX 9508 SAMPLE 10144		INDEX 9509 SAMPLE 10145		INDEX 9510 SAMPLE 139	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	AKIN		AKIN		BRECKENRIDGE	
WELL NAME	N. J. BROOKS 13-D		N. J. BROOKS 13-G		J. M. PARKS NO. A6	
LOCATION	SEC. 3390 TE&L SUR.		SEC. 3390 TE&L SUR.		SEC. 3373, T.L.&E. CO. LEASE	
OWNER	TEXACO INC.		TEXACO INC.		TEXAS CO.	
COMPLETED	05/27/63		05/27/63		01/21/20	
SAMPLED	09/22/65		09/22/65		03/12/20	
FORMATION	PENN-BRANNONBRIDGE		PENN-MARBLE FALLS		-BLACK LIME	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	2366		3908		3088	
WELLHEAD PRESSURE,PSIG	680		1680		1150	
OPEN FLOW, MCFD	1050		2800		18578	
COMPONENT, MOLE PCT						
METHANE	83.9		76.0		73.2	
ETHANE	3.3		9.8		21.6	
PROPANE	2.7		4.4		---	
N-BUTANE	1.0		1.3		---	
ISOBUTANE	0.4		0.6		---	
N-PENTANE	0.2		0.4		---	
ISOPENTANE	0.3		0.2		---	
CYCLOPENTANE	0.1		0.2		---	
HEXANES PLUS	0.2		0.4		---	
NITROGEN	7.4		6.2		4.5	
OXYGEN	0.0		0.0		0.4	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		0.3		0.1	
HELIUM	0.18		0.20		0.17	
HEATING VALUE*	1062		1177		1129	
SPECIFIC GRAVITY	0.668		0.729		0.682	

	INDEX 9511 SAMPLE 140		INDEX 9512 SAMPLE 143		INDEX 9513 SAMPLE 1791	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	BRECKENRIDGE		BRECKENRIDGE		BRECKENRIDGE	
WELL NAME	J. C. CURRY NO. 2		J. R. SMITH NO. 1		ROSS ELLIOTT NO. 2	
LOCATION	SEC. 3391		SEC. 1		NOT GIVEN	
OWNER	TEXAS CO.		TEXAS CO.		LONE STAR GAS CO.	
COMPLETED	07/01/19		06/14/19		NOT GIVEN	
SAMPLED	03/12/20		03/12/20		06/07/29	
FORMATION	-GREY LIME		-GREY GAS SAND		NOT GIVEN	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3286		3099		2187	
WELLHEAD PRESSURE,PSIG	900		820		840	
OPEN FLOW, MCFD	10000		8000		9000	
COMPONENT, MOLE PCT						
METHANE	72.7		76.5		69.3	
ETHANE	21.3		19.7		18.7	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	4.0		3.5		11.4	
OXYGEN	0.8		0.1		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.0		0.0		0.2	
HELIUM	0.14		0.21		0.40	
HEATING VALUE*	1118		1128		1037	
SPECIFIC GRAVITY	0.674		0.666		0.697	

	INDEX 9514 SAMPLE 4575		INDEX 9515 SAMPLE 3732		INDEX 9516 SAMPLE 8122	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	BRECKENRIDGE		BROWNSVILLE		ECHOLS	
WELL NAME	A. M. MOON NO. 1		JESSE BROWN C NO. 2		M. O. KENNEDY	
LOCATION	SEC. 1306, T.E.L. SUR.		SEC. 114, BARRETT SUR. A-68		SEC. 10, T3, SPRR SUR.	
OWNER	TEXAS CO.		TEXAS PACIFIC COAL & OIL CO.		AMBASSADOR	
COMPLETED	04/01/48		12/11/43		01/14/55	
SAMPLED	10/11/48		03/25/44		08/08/61	
FORMATION	PENN-MARBLE FALLS		NOT GIVEN		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	4130		3978		3914	
WELLHEAD PRESSURE,PSIG	1583		NOT GIVEN		1440	
OPEN FLOW, MCFD	11300		5700		2777	
COMPONENT, MOLE PCT						
METHANE	69.6		67.6		81.8	
ETHANE	25.1		24.3		9.0	
PROPANE	---		---		3.7	
N-BUTANE	---		---		1.1	
ISOBUTANE	---		---		0.5	
N-PENTANE	---		---		0.2	
ISOPENTANE	---		---		0.3	
CYCLOPENTANE	---		---		0.1	
HEXANES PLUS	---		---		0.2	
NITROGEN	4.6		7.4		2.7	
OXYGEN	0.3		0.4		TRACE	
ARGON	---		---		0.0	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.3		0.2	
HELIUM	0.21		0.26		0.10	
HEATING VALUE*	1165		1139		1175	
SPECIFIC GRAVITY	0.700		0.711		0.683	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9517 SAMPLE 8123	INDEX 9518 SAMPLE 8124	INDEX 9519 SAMPLE 8118
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	ECHOLS	ECHOLS	ELIASVILLE N
WELL NAME	WEST NO. 4	ECHOLS B-1	PRATT A-2U.T.
LOCATION	ED. ROMERSHAURSER SUR.	SEC. 9, BLK. 3, SPRR SUR.	SEC. 1119, TE&L SUR.
OWNER	C. K. WEST	GEO. W. GRAHAM	CURRY OIL CO.
COMPLETED	05/23/60	07/31/51	11/08/60
SAMPLED	08/08/61	08/08/61	08/08/61
FORMATION	PENN-DUFFER	PENN-LAKE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4032	3850	3992
WELLHEAD PRESSURE,PSIG	1550	950	1360
OPEN FLOW, MCFD	2416	1337	1650
COMPONENT, MOLE PCT			
METHANE	79.2	79.5	78.1
ETHANE	9.9	9.6	8.8
PROPANE	4.1	4.1	4.2
N-BUTANE	1.1	1.2	1.2
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.1	4.1	6.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1171	1173	1150
SPECIFIC GRAVITY	0.702	0.702	0.707

	INDEX 9520 SAMPLE 5370	INDEX 9521 SAMPLE 8143	INDEX 9522 SAMPLE 8145
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	FLUX E	LEE RAY	LEE RAY
WELL NAME	L. T. WILD NO. 1	J. S. MCKEE NO. 1	R. W. BROOKS NO. 3
LOCATION	SEC. 58, B&L SUR.	SEC. 41, TP&RR SUR.	SEC. 54, BLK. 7, TP&RR SUR.
OWNER	IBEX CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
COMPLETED	09/29/52	08/01/38	04/24/59
SAMPLED	01/05/53	08/10/61	08/30/61
FORMATION	NOT GIVEN	PENN-BOND	PENN-LAKE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2383	3723	3562
WELLHEAD PRESSURE,PSIG	955	440	325
OPEN FLOW, MCFD	2000	415	5500
COMPONENT, MOLE PCT			
METHANE	76.9	74.1	72.4
ETHANE	2.8	10.5	10.9
PROPANE	1.3	5.5	6.2
N-BUTANE	0.2	1.5	1.8
ISOBUTANE	0.1	0.7	1.0
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.0	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	17.6	6.5	5.9
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.46	0.20	0.20
HEATING VALUE*	882	1196	1242
SPECIFIC GRAVITY	0.665	0.742	0.765

	INDEX 9523 SAMPLE 8146	INDEX 9524 SAMPLE 12648	INDEX 9525 SAMPLE 12649
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	LEE RAY	MOON	MOON
WELL NAME	J. A. CALLOWAY NO. 6	A. M. MOON NO. 1	L. R. COCKRELL NO. 1
LOCATION	SEC. 381, BLK. C, SP&RR SUR.	SEC. 1306, TE&L SUR.	TE&L SUR.
OWNER	LONE STAR GAS CO.	TEXACO INC.	TEXACO INC.
COMPLETED	04/24/48	03/29/48	05/07/51
SAMPLED	08/10/61	02/02/71	02/02/71
FORMATION	PENN-CADDO	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3302	4145	4152
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1490	1430
OPEN FLOW, MCFD	NOT GIVEN	8000	1950
COMPONENT, MOLE PCT			
METHANE	67.8	77.9	78.2
ETHANE	10.8	9.3	8.7
PROPANE	7.8	4.4	4.4
N-BUTANE	3.0	1.2	1.2
ISOBUTANE	1.4	0.5	0.5
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.9	0.4	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.2	0.2
NITROGEN	6.1	5.4	6.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.10	0.17	0.18
HEATING VALUE*	1338	1171	1155
SPECIFIC GRAVITY	0.831	0.715	0.709

	INDEX 9526 SAMPLE 12628	INDEX 9527 SAMPLE 12634	INDEX 9528 SAMPLE 12719
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NECESSITY	SEAMAN	STEPHENS CO, REGULAR
WELL NAME	B. F. SATTERWHITE NO. 1	SEAMAN RANCH NO. 2-C	W. B. STEVENSON NO. 1
LOCATION	SEC. 15, BLK. 6, T&PRR SUR.	8 MI. SE OF IVAN	SEC. 14, LAL SUR.
OWNER	GULF OIL CO. - U.S.	GEORGE MITCHELL & ASSOC.	PETROLEUM CORP. OF TEXAS
COMPLETED	08/11/55	NOT GIVEN	09/26/67
SAMPLED	01/11/71	01/18/71	03/--/71
FORMATION	PENN-DUFFER	PENN-ATOKA	PENN-CADDO
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3943	3851	3192
WELLHEAD PRESSURE,PSIG	NOT GIVEN	425	120
OPEN FLOW, MCFD	NOT GIVEN	100000	1500
COMPONENT, MOLE PCT			
METHANE	73.3	75.2	38.6
ETHANE	12.9	11.6	19.8
PROPANE	5.1	5.4	21.6
N-BUTANE	1.5	1.5	8.3
ISOBUTANE	0.9	0.7	3.0
N-PENTANE	0.3	0.3	2.1
ISOPENTANE	0.5	0.4	2.2
CYCLOPENTANE	0.1	TRACE	0.6
HEXANES PLUS	0.2	0.2	1.4
NITROGEN	4.5	4.1	2.2
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	0.10	0.11	0.03
HEATING VALUE*	1235	1224	1966
SPECIFIC GRAVITY	0.752	0.737	1.180

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9529 SAMPLE 13009		INDEX 9530 SAMPLE 4577		INDEX 9531 SAMPLE 4626	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	STEPHENS CO, REGULAR		STEPHENS COUNTY		STEPHENS COUNTY REGULAR	
WELL NAME	EAST GREEN B NO. 1		C. L. TRAMMELL NO. 1		CLAUD MCCAULEY	
LOCATION	W. E. BAKER SUR, A-22		SEC. 42, BLK. 8, T&P RR SUR.		SEC. 18, BLK. 6, T&P RY SUR.	
OWNER	A. V. JONES & SONS		TEXAS PACIFIC COAL & OIL CO.		WARREN OIL CORP.	
COMPLETED	09/02/70		05/03/48		08/25/48	
SAMPLED	08/31/71		10/02/48		11/17/48	
FORMATION	PENN-CONGLOMERATE		MISS-LIME		PENN-MARBLE FALLS	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	9140		4098		3955	
WELLHEAD PRESSURE,PSIG	1983		1700		1615	
OPEN FLOW, MCFD	10931		17839		4100	
COMPONENT, MOLE PCT						
METHANE	74.9		68.9		72.7	
ETHANE	8.2		24.5		21.9	
PROPANE	5.0		---		---	
N-BUTANE	1.1		---		---	
ISOBUTANE	0.6		---		---	
N-PENTANE	0.2		---		---	
ISOPENTANE	0.3		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1		---		---	
NITROGEN	9.4		5.5		3.8	
OXYGEN	0.0		0.2		0.4	
ARGON	0.0		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.0		0.7		1.0	
HELIUM	0.28		0.18		0.24	
HEATING VALUE*	1119		1137		1129	
SPECIFIC GRAVITY	0.721		0.705		0.690	

	INDEX 9532 SAMPLE 4837		INDEX 9533 SAMPLE 4973		INDEX 9534 SAMPLE 8142	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	STEPHENS COUNTY REGULAR		STEPHENS COUNTY REGULAR		TRAMMELL	
WELL NAME	O. TOMLIN NO. 1		W. H. GREEN NO. 1		C. L. TRAMELL NO. 1	
LOCATION	SEC. 70, BLIND ASYLUM LANDS		A. J. ROE SUR.		SEC. 42, BLK. 8, T&RR SUR.	
OWNER	TEXAS CO.		G. B. CREE		TEXAS PACIFIC COAL & OIL CO.	
COMPLETED	09/13/49		03/27/50		03/02/48	
SAMPLED	12/06/49		09/28/50		08/10/61	
FORMATION	PENN-LAKE		PENN-CADDO		MISS-	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3610		3572		4127	
WELLHEAD PRESSURE,PSIG	1550		1475		590	
OPEN FLOW, MCFD	4100		3000		6000	
COMPONENT, MOLE PCT						
METHANE	71.1		71.3		75.3	
ETHANE	8.7		6.9		11.3	
PROPANE	6.1		4.5		4.7	
N-BUTANE	2.8		1.1		1.4	
ISOBUTANE	1.2		0.4		0.6	
N-PENTANE	0.9		0.3		0.3	
ISOPENTANE	0.1		TRACE		0.3	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.6		0.2		0.2	
NITROGEN	8.2		14.2		5.3	
OXYGEN	0.1		0.4		TRACE	
ARGON	TRACE		0.1		0.0	
HYDROGEN	TRACE		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3		0.4		0.3	
HELIUM	0.21		0.21		0.20	
HEATING VALUE*	1230		1038		1194	
SPECIFIC GRAVITY	0.786		0.732		0.730	

	INDEX 9535 SAMPLE 8119		INDEX 9536 SAMPLE 8120		INDEX 9537 SAMPLE 8121	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	WALKER-DAVIS		WALKER-DAVIS		WALKER-DAVIS	
WELL NAME	ALICE WALKER A-1-C		ALICE WALKER A-1-T		COOPER NO. 1	
LOCATION	SEC. 1324, TE&L SUR.		SEC. 1324, TE&L SUR.		SEC. 1335, TE&L SUR.	
OWNER	WOODSON OIL CO.		WOODSON OIL CO.		TEXOMA PRODUCTION CO.	
COMPLETED	03/30/58		03/30/58		09/15/58	
SAMPLED	08/08/61		08/08/61		08/08/61	
FORMATION	PENN-DUFFER		PENN-MARBLE FALLS		PENN-CADDO	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3943		4030		3058	
WELLHEAD PRESSURE,PSIG	1440		1545		750	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	80.6		79.6		76.2	
ETHANE	8.6		8.2		8.3	
PROPANE	3.5		3.1		4.4	
N-BUTANE	1.0		0.9		1.2	
ISOBUTANE	0.5		0.5		0.5	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	4.8		6.8		8.4	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.20		0.30		0.10	
HEATING VALUE*	1134		1099		1122	
SPECIFIC GRAVITY	0.685		0.684		0.714	

	INDEX 9538 SAMPLE 3990		INDEX 9539 SAMPLE 4992		INDEX 9540 SAMPLE 14248	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	STEPHENS		STEPHENS		STERLING	
FIELD	WILDCAT		WILDCAT		CONGER	
WELL NAME	ADAMS NO. 1		GREEN B NO. 1		FOSTER CONGER NO. 1	
LOCATION	BLK. 2955, TE&L SUR.		SEC. 1505, TE&L SUR.		SEC. 5, BLK. 21, H&TCRR SUR.	
OWNER	WOOSE OIL CO.		MCELROY RANCH CO.		DORCHESTER EXPLORATION, INC.	
COMPLETED	12/1944		09/26/50		05/31/74	
SAMPLED	03/07/45		01/20/51		12/26/74	
FORMATION	PENN-MARBLE FALLS		PENN-L		PENN-CANYON	
GEOLOGIC PROVINCE CODE	425		425		430	
DEPTH, FEET	3870		3988		7301	
WELLHEAD PRESSURE,PSIG	1140		1920		1735	
OPEN FLOW, MCFD	987		1350		7200	
COMPONENT, MOLE PCT						
METHANE	51.0		72.7		70.2	
ETHANE	46.1		8.5		9.6	
PROPANE	---		4.5		9.1	
N-BUTANE	---		1.3		3.2	
ISOBUTANE	---		0.4		1.4	
N-PENTANE	---		0.3		0.9	
ISOPENTANE	---		0.1		0.9	
CYCLOPENTANE	---		0.1		0.3	
HEXANES PLUS	---		0.3		0.7	
NITROGEN	1.8		6.3		3.5	
OXYGEN	0.0		0.1		TRACE	
ARGON	---		TRACE		0.0	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.9		5.2		0.2	
HELIUM	0.29		0.21		0.09	
HEATING VALUE*	1343		1098		1398	
SPECIFIC GRAVITY	0.798		0.761		0.837	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9541 SAMPLE 16022	INDEX 9542 SAMPLE 12945	INDEX 9543 SAMPLE 7994
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STERLING	STERLING	STONEWALL
FIELD	STERLING CITY	WAM S	DOVE CREEK
WELL NAME	WILLIAMS NO. 2-4	E. R. FOSTER NO. 2	NO. C-4
LOCATION	SEC. 4, BLK. T, T&P SUR.	SEC. 5, BLK. 7, H&TC SUR.	SEC. 183, BLK. F, H&TC SUR.
OWNER	MESA PETROLEUM CO.	SKELLY OIL CO.	WILLIAM SPRINGER, JR.
COMPLETED	05/13/79	03/06/66	--/--/55
SAMPLED	07/30/80	08/03/71	05/25/61
FORMATION	SILU-FUSSELMAN	SILU-FUSSELMAN	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8400	8583	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2398	625	NOT GIVEN
OPEN FLOW, MCFD	3400	8500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	61.0	2.1
ETHANE	15.8	18.4	TRACE
PROPANE	7.3	10.7	TRACE
N-BUTANE	1.8	2.9	0.0
ISOBUTANE	0.8	1.2	0.0
N-PENTANE	0.3	0.9	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.4	0.0
NITROGEN	6.3	3.4	95.9
OXYGEN	0.4	0.0	TRACE
ARGON	TRACE	0.0	1.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.3	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.1
HELIUM	0.03	0.03	0.60
HEATING VALUE*	1268	1439	21
SPECIFIC GRAVITY	0.799	0.868	0.958

	INDEX 9544 SAMPLE 9140	INDEX 9545 SAMPLE 12675	INDEX 9546 SAMPLE 12888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	DENISON	DENISON	FT. TERRETT RANCH
WELL NAME	G. B. HILL NO. 1	G. B. HILL NO. 1	J. E. ADAMS A NO. 1
LOCATION	SEC. 2, BLK. C, CC, DENISON SUR	SEC. 2, BLK. C, CC, DENISON SUR	SEC. 65, BLK. A, GWT&P SUR.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	LONE STAR PRODUCING CO.
COMPLETED	10/20/62	10/20/62	10/13/66
SAMPLED	11/01/63	02/05/71	06/18/71
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8138	8138	2992
WELLHEAD PRESSURE,PSIG	2900	1005	1031
OPEN FLOW, MCFD	14000	1343	5803
COMPONENT, MOLE PCT			
METHANE	95.9	95.7	80.6
ETHANE	1.9	1.8	4.7
PROPANE	0.2	0.2	2.0
N-BUTANE	0.0	0.0	0.5
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.1	1.1	11.2
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.2	0.1
HELIUM	0.10	0.05	0.31
HEATING VALUE*	1011	1007	986
SPECIFIC GRAVITY	0.578	0.582	0.660

	INDEX 9547 SAMPLE 13486	INDEX 9548 SAMPLE 14432	INDEX 9549 SAMPLE 4107
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	HOLMAN RANCH	KEN	MIERS
WELL NAME	MORRISS NO. 1-83	ADAMS NO. 1	DUKE WILSON NO. 1
LOCATION	SEC. 83, BLK. C, HE&WTRR SUR	SEC. 59, BLK. A, GWT&P SUR.	SEC. 38, BLK. 14, TW&NG SUR.
OWNER	HNG OIL CO.	ESTORIL PRODUCING CORP.	SHELL OIL CO.
COMPLETED	06/29/72	03/12/74	05/23/46
SAMPLED	12/11/72	08/02/75	07/09/46
FORMATION	PENN-HOLMAN	PENN-CROSS CUT	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6256	3065	4190
WELLHEAD PRESSURE,PSIG	2300	650	1425
OPEN FLOW, MCFD	11000	5000	9200
COMPONENT, MOLE PCT			
METHANE	84.3	80.6	74.9
ETHANE	6.9	5.1	12.6
PROPANE	3.5	2.4	---
N-BUTANE	0.8	0.4	---
ISOBUTANE	0.6	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	TRACE	---
NITROGEN	2.6	10.6	8.6
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.1	3.4
HELIUM	0.10	0.32	0.26
HEATING VALUE*	1156	998	985
SPECIFIC GRAVITY	0.678	0.659	0.685

	INDEX 9550 SAMPLE 5220	INDEX 9551 SAMPLE 5221	INDEX 9552 SAMPLE 8168
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS	MIERS	MIERS
WELL NAME	W. A. MIERS NO. 3	W. A. MIERS NO. 1	WILSON NO. 1-T
LOCATION	SEC. 53, BLK. 14, TW&NG SUR.	SEC. 54, BLK. 14, TW&NG SUR.	TW&NG RR SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/--/51	11/13/51	04/--/46
SAMPLED	03/18/51	03/18/52	08/14/61
FORMATION	PENN-DES MOINES	PENN-DES MOINES	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4284	4333	4195
WELLHEAD PRESSURE,PSIG	1442	1439	820
OPEN FLOW, MCFD	12500	22500	1674
COMPONENT, MOLE PCT			
METHANE	79.5	73.1	82.4
ETHANE	5.9	5.9	5.9
PROPANE	2.4	3.6	1.9
N-BUTANE	0.4	2.3	0.4
ISOBUTANE	0.3	1.2	0.3
N-PENTANE	0.1	0.8	0.1
ISOPENTANE	0.5	1.8	0.1
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.3	0.8	0.1
NITROGEN	8.7	8.2	7.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	1.6	1.1
HELIUM	0.33	0.27	0.26
HEATING VALUE*	1042	1221	1027
SPECIFIC GRAVITY	0.688	0.797	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9553 SAMPLE 8169	INDEX 9554 SAMPLE 11896	INDEX 9555 SAMPLE 14709
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS	MIERS E	MIERS E
WELL NAME	J. M. VANDERSTUCKEN NO. 1	VANDERSTUCKEN NO. 1	WALLACE NO. 1
LOCATION	TW&NG RR SUR.	SEC. 67, BLK. 7, TW&NG SUR.	SEC. 68, BLK. 7, TW&NG SUR.
OWNER	CLAUDE E. AIKMAN	SOUTHWESTERN NATURAL GAS INC	TRINIDAD PETROLEUM CORP.
COMPLETED	07/07/52	04/19/68	08/10/74
SAMPLED	08/14/61	05/17/69	06/10/76
FORMATION	PENN-CANYON	PENN-CISCO A	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3610	2901	2850
WELLHEAD PRESSURE,PSIG	990	779	800
OPEN FLOW, MCFD	2135	4100	3700
COMPONENT, MOLE PCT			
METHANE	86.5	88.8	87.6
ETHANE	3.6	1.9	2.3
PROPANE	1.6	1.3	1.0
N-BUTANE	0.4	0.0	0.2
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	6.8	7.2	7.8
OXYGEN	TRACE	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.20	0.34	0.37
HEATING VALUE*	1019	967	969
SPECIFIC GRAVITY	0.633	0.606	0.617

	INDEX 9556 SAMPLE 14710	INDEX 9557 SAMPLE 14170	INDEX 9558 SAMPLE 12819
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS E	NOT GIVEN	SAWYER
WELL NAME	WALLACE NO. 1	HOLL NO.1	SHURLEY NO. 1
LOCATION	SEC. 68, BLK. 7, TW&NG SUR.	SEC. 121, BLK. A, HE&WT SUR.	SEC. 98, BLK. C, HE&WT SUR.
OWNER	TRINIDAD PETROLEUM CORP.	PETROLEUM CORP.	DELTA DRILLING CO.
COMPLETED	09/08/74	02/17/73	10/20/63
SAMPLED	06/--/76	10/10/74	05/07/71
FORMATION	PENN-STRAWN	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4100	5723	5380
WELLHEAD PRESSURE,PSIG	600	1440	520
OPEN FLOW, MCFD	1700	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.9	82.7	76.5
ETHANE	2.3	8.2	6.6
PROPANE	1.0	3.6	3.7
N-BUTANE	0.2	0.8	0.9
ISOBUTANE	0.1	0.6	1.0
N-PENTANE	0.0	0.1	0.5
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	7.5	2.8	8.2
OXYGEN	TRACE	TRACE	1.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	1.0
HELIUM	0.37	0.10	0.06
HEATING VALUE*	972	1153	1089
SPECIFIC GRAVITY	0.613	0.682	0.721

	INDEX 9559 SAMPLE 13122	INDEX 9560 SAMPLE 13633	INDEX 9561 SAMPLE 14052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	SAWYER	SAWYER	SAWYER
WELL NAME	ESPY NO. 41-1	DAVID 109 NO. 1	REINHARDT "6" NO. 2
LOCATION	NOT GIVEN	SEC. 109, BLK. 14, TW+NG SUR	G.C. CORBIN SUR.
OWNER	RODEN OIL CO.	HNG OIL CO.	HNG OIL CO.
COMPLETED	12/07/71	03/11/73	02/04/74
SAMPLED	12/23/71	06/26/73	07/17/74
FORMATION	PENN-CANYON	PENN-CANYON	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5365	3840	8036
WELLHEAD PRESSURE,PSIG	1420	1500	2300
OPEN FLOW, MCFD	NOT GIVEN	2180	14000
COMPONENT, MOLE PCT			
METHANE	86.0	85.7	87.7
ETHANE	7.1	7.3	5.8
PROPANE	3.0	3.1	2.0
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	1.5	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	1.8
HELIUM	0.08	0.09	0.06
HEATING VALUE*	1140	1145	1109
SPECIFIC GRAVITY	0.660	0.659	0.656

	INDEX 9562 SAMPLE 14037	INDEX 9563 SAMPLE 5791	INDEX 9564 SAMPLE 14934
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SHURLEY	SUTTON
FIELD	SAWYER CANYON	C. SHURLEY NO. 1	SHURLEY RANCH
WELL NAME	CUSENBARY "60" NO. 1	SEC. 73, BLK. C, HE&WT SUR.	GENONI "39" NO. 1
LOCATION	SEC. 60, CCSD&RGNG SUR.	EL PASO NATURAL GAS CO.	SEC. 39, TTRR SUR., A-759
OWNER	W.B. OSBORN OPERATOR	11/01/54	MITCHELL ENERGY CORP.
COMPLETED	03/30/74	03/09/55	05/13/76
SAMPLED	06/26/74	PENN-CANYON	03/08/77
FORMATION	PENN-CANYON	430	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	5166	430
DEPTH, FEET	4416	1398	8301
WELLHEAD PRESSURE,PSIG	400	2000	1499
OPEN FLOW, MCFD	500		2650
COMPONENT, MOLE PCT			
METHANE	87.0	85.5	85.6
ETHANE	5.3	6.7	7.0
PROPANE	3.2	3.0	2.1
N-BUTANE	0.9	0.7	0.6
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.7	1.9	2.3
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	1.1
HELIUM	0.12	0.08	0.04
HEATING VALUE*	1149	1140	1113
SPECIFIC GRAVITY	0.663	0.664	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9565 SAMPLE 5968	INDEX 9566 SAMPLE 12692	INDEX 9567 SAMPLE 4949
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	SONORA	SONORA GAS	WILDCAT
WELL NAME	DE BERRY NO. 1	DE BERRY NO. 1	S. B. ROBERTS NO. 1
LOCATION	SEC. 90, BLK. D, HE&WTRR SUR	NOT GIVEN	SEC. 7, BLK. 7, TWNG SUR.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	SHELL OIL CO.
COMPLETED	05/20/55	05/20/55	08/29/49
SAMPLED	11/08/55	02/23/71	06/03/50
FORMATION	PENN-CANYON	PENN-CANYON U	PENN-DES MOINES U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5479	5471	3408
WELLHEAD PRESSURE,PSIG	1473	1473	1200
OPEN FLOW, MCFD	7300	7300	165
COMPONENT, MOLE PCT			
METHANE	85.0	85.4	85.5
ETHANE	6.6	6.5	4.5
PROPANE	3.2	3.0	1.7
N-BUTANE	0.8	0.7	0.4
ISOBUTANE	0.5	0.5	0.1
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	2.1	2.5	5.6
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.7
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.5	0.9
HELIUM	0.08	0.08	0.17
HEATING VALUE*	1147	1131	1024
SPECIFIC GRAVITY	0.671	0.664	0.637

	INDEX 9568 SAMPLE 9936	INDEX 9569 SAMPLE 9934	INDEX 9570 SAMPLE 6534
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TAYLOR	TAYLOR	TERRELL
FIELD	INKUM	PROCTOR	BROWN-BASSETT
WELL NAME	EDGAR DAVIS NO. 2	L. CARTWRIGHT NO. 1	BROWN-BASSETT NO. 1
LOCATION	SEC. 296, BLK. 64, H&TC SUR.	THEO D. MALTBY SUR. NO. 270	SEC. 218, BLK. Y, TC&RR SUR.
OWNER	HORIZON OIL & GAS CO.	SUN OIL CO.	WEST. NAT. GAS & MAGNOLIA
COMPLETED	03/07/64	04/14/56	02/25/58
SAMPLED	06/23/65	06/22/65	03/26/58
FORMATION	EOCE-JENNINGS	PENN-GRAY SAND	SILU-
GEOLOGIC PROVINCE CODE	425	425	430
DEPTH, FEET	5054	4610	12387
WELLHEAD PRESSURE,PSIG	1575	350	5045
OPEN FLOW, MCFD	6183	2290	72000
COMPONENT, MOLE PCT			
METHANE	67.5	69.3	95.9
ETHANE	9.6	10.9	0.5
PROPANE	6.0	5.3	0.0
N-BUTANE	1.9	1.3	TRACE
ISOBUTANE	0.7	0.0	TRACE
N-PENTANE	0.4	0.2	0.0
ISOPENTANE	0.6	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	TRACE
NITROGEN	12.1	11.1	0.4
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	3.0
HELIUM	0.25	0.27	0.04
HEATING VALUE*	1166	1133	980
SPECIFIC GRAVITY	0.784	0.737	0.587

	INDEX 9571 SAMPLE 7143	INDEX 9572 SAMPLE 7830	INDEX 9573 SAMPLE 8226
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TERRELL	TERRELL	TERRELL
FIELD	BROWN-BASSETT	BROWN-BASSETT	BROWN-BASSETT
WELL NAME	GOODF ESTATE NO. 2	BROWN-BASSETT NO. 1-LT	NO. 1 LT
LOCATION	SEC. 1, BLK. R, TCRY SUR.	SEC. 227, BLK. Y, TCRR SUR.	SEC. 21, BLK. 1, TCRR SUR.
OWNER	MAGNOLIA PETROLEUM CO.	CONTINENTAL OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	06/25/59	12/29/58	11/16/60
SAMPLED	07/14/59	01/27/61	10/02/61
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13888	13924	14008
WELLHEAD PRESSURE,PSIG	3139	4025	2883
OPEN FLOW, MCFD	2950	28750	4000
COMPONENT, MOLE PCT			
METHANE	60.6	45.9	88.5
ETHANE	0.4	0.2	5.0
PROPANE	0.0	0.1	2.8
N-BUTANE	0.0	0.0	0.8
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	0.6	0.5	1.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	38.4	53.2	0.2
HELIUM	0.10	0.03	0.06
HEATING VALUE*	621	471	1139
SPECIFIC GRAVITY	0.933	1.077	0.651

	INDEX 9574 SAMPLE 8374	INDEX 9575 SAMPLE 8376	INDEX 9576 SAMPLE 12961
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TERRELL	TERRELL	TERRELL
FIELD	BROWN-BASSETT	BROWN-BASSETT	UNIVERSITY BLOCK 34
WELL NAME	ALMA H. POULTER NO. 1	ALMA H. POULTER NO. 1	CITGO UNIVERSITY NO. 1
LOCATION	SEC. 21, BLK. 1, TC&RR SUR.	SEC. 21, BLK. 1, TC&RR SUR.	SEC. 13, BLK. 34
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SKELLY OIL CO.
COMPLETED	05/02/61	05/02/61	08/06/70
SAMPLED	01/17/62	01/17/62	08/16/71
FORMATION	ORDO-ELLENBURGER	PERM-WICHITA-ALBANY	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14030	6221	11448
WELLHEAD PRESSURE,PSIG	2803	2263	2679
OPEN FLOW, MCFD	10500	4850	3500
COMPONENT, MOLE PCT			
METHANE	38.7	88.7	94.6
ETHANE	0.2	4.6	2.7
PROPANE	0.2	2.7	0.5
N-BUTANE	TRACE	0.8	0.2
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.4	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	10.5	1.5	0.9
OXYGEN	2.6	TRACE	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	47.5	0.3	0.8
HELIUM	0.02	0.06	0.02
HEATING VALUE*	401	1131	1040
SPECIFIC GRAVITY	1.078	0.649	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9577 SAMPLE 9618		INDEX 9578 SAMPLE 15573		INDEX 9579 SAMPLE 13346	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	TERRELL		TERRY		THROCKMORTON	
FIELD	WILDCAT		BECKER		BRAMLETT	
WELL NAME	GEORGE K. MITCHELL NO. 1		HOFFMAN NO. 1-A		WALKER BUCKLER TRUST NO. 1	
LOCATION	SEC. 11, BLK. 1, CCSD&RGNG SUR		SEC. 41, BLK. DD, JM GIBSON		BRAMLETT SUR. NO. 5, A-26	
OWNER	SOCONY MOBIL OIL CO., INC.		NRM PETROLEUM CORP.		GULF OIL CO.-U.S.	
COMPLETED	11/06/63		02/09/78		02/05/71	
SAMPLED	10/26/64		03/01/79		07/28/72	
FORMATION	PENN-STRAWN L		PERM-YATES		PENN-CADDO	
GEOLOGIC PROVINCE CODE	430		430		425	
DEPTH, FEET	11050		3123		4218	
WELLHEAD PRESSURE,PSIG	4700		2400		1686	
OPEN FLOW, MCFD	3000		21800		4000	
COMPONENT, MOLE PCT						
METHANE	89.9		43.9		69.4	
ETHANE	5.8		6.8		10.0	
PROPANE	1.9		2.3		5.3	
N-BUTANE	0.6		0.6		1.1	
ISOBUTANE	0.2		0.2		0.5	
N-PENTANE	0.1		0.2		0.3	
ISOPENTANE	0.2		0.1		TRACE	
CYCLOPENTANE	0.2		TRACE		TRACE	
HEXANES PLUS	0.3		0.3		0.1	
NITROGEN	0.3		45.4		12.4	
OXYGEN	0.0		0.0		0.5	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		TRACE		0.2	
HELIUM	0.02		0.03		0.21	
HEATING VALUE*	1127		681		1092	
SPECIFIC GRAVITY	0.636		0.823		0.745	

	INDEX 9580 SAMPLE 12276		INDEX 9581 SAMPLE 12277		INDEX 9582 SAMPLE 4993	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	THROCKMORTON		THROCKMORTON		THROCKMORTON	
FIELD	COUNTY REGULAR		COUNTY REGULAR		WILDCAT	
WELL NAME	MATTHEWS RANCH NO. 5		MATTHEWS RANCH NO. 28-B		WATT R. MATTHEWS B NO. 1	
LOCATION	SEC. 25, BLK. 1-T, T&NO SUR.		SEC. 6, BLK. X, AB&M SUR.		THOMAS MOUNTS SUR. NO. A-229	
OWNER	C. E. JACOBS		C. E. JACOBS		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	NOT GIVEN		NOT GIVEN		10/02/50	
SAMPLED	06/02/70		06/02/70		01/23/51	
FORMATION	PENN-AVIS		PENN-BLUFF CREEK		MISS-LIME	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	NOT GIVEN		960		4542	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		300		2400	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		14700	
COMPONENT, MOLE PCT						
METHANE	72.8		72.9		66.6	
ETHANE	1.2		0.8		11.9	
PROPANE	0.6		0.3		5.9	
N-BUTANE	0.2		0.1		1.4	
ISOBUTANE	0.4		0.2		0.5	
N-PENTANE	0.1		TRACE		0.4	
ISOPENTANE	0.1		TRACE		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		TRACE		0.3	
NITROGEN	23.4		24.4		11.8	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.2		0.2		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	TRACE		0.0		0.8	
HELIUM	0.84		0.93		0.34	
HEATING VALUE*	813		771		1139	
SPECIFIC GRAVITY	0.676		0.662		0.775	

	INDEX 9583 SAMPLE 6274		INDEX 9584 SAMPLE 9691		INDEX 9585 SAMPLE 8167	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	THROCKMORTON		TOM GREEN		TOM GREEN	
FIELD	WILDCAT		BTU, NE		CARLSBAD	
WELL NAME	TESE 38 - NO. 1		BILL UPTON NO. 2-A		KENNEMER NO. 1	
LOCATION	BLK. 38, TRAVIS CO. SCHL. LD		SEC. 3, BLK 8		H&TC SUR.	
OWNER	ANDERSON-PRICHARD		TUCKER DRILLING & SUN OIL		PERKINS & PROTHRO	
COMPLETED	01/09/57		09/16/63		02/03/50	
SAMPLED	01/08/57		01/18/65		08/14/61	
FORMATION	PENN-TANNEHILL		PENN-HARKEY		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	425		430		430	
DEPTH, FEET	700		4087		5640	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1395		1850	
OPEN FLOW, MCFD	NOT GIVEN		1200		14410	
COMPONENT, MOLE PCT						
METHANE	53.0		72.9		72.3	
ETHANE	0.5		5.2		12.1	
PROPANE	0.2		2.3		6.2	
N-BUTANE	0.3		2.9		1.0	
ISOBUTANE	0.3		1.2		0.6	
N-PENTANE	0.1		0.9		TRACE	
ISOPENTANE	0.1		0.6		0.2	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.1		0.4		TRACE	
NITROGEN	43.3		12.7		7.2	
OXYGEN	0.2		TRACE		TRACE	
ARGON	0.1		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.0		0.3	
HELIUM	1.53		0.32		0.10	
HEATING VALUE*	585		1143		1172	
SPECIFIC GRAVITY	0.750		0.769		0.737	

	INDEX 9586 SAMPLE 15708		INDEX 9587 SAMPLE 9967		INDEX 9588 SAMPLE 4665	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	TOM GREEN		TOM GREEN		TYLER	
FIELD	HAZEL JONES		WALL NE		HILLISTER E	
WELL NAME	HAZEL JONES NO. 1		J. WEISMUHN NO. 1		WM. RICE INSTITUTE NO. 1	
LOCATION	SEC. 22, BLK. 29, H&TC SUR.		SEC. 84, DIST. 11, SPRR SUR.		ARTHUR HUTCHINS SUR. A-846	
OWNER	SIMPSON-MANN OIL PROD.		TEXACO INC.		HUMBLE OIL & REFINING CO.	
COMPLETED	04/19/79		09/29/64		10/27/48	
SAMPLED	07/23/79		07/05/65		02/25/49	
FORMATION	PENN-STRAWN		PENN-HARKEY		COCE-WILCOX	
GEOLOGIC PROVINCE CODE	435		430		220	
DEPTH, FEET	5501		4222		8260	
WELLHEAD PRESSURE,PSIG	1440		1442		2975	
OPEN FLOW, MCFD	2414		460		16400	
COMPONENT, MOLE PCT						
METHANE	74.1		39.2		74.7	
ETHANE	8.9		31.5		8.3	
PROPANE	4.8		18.6		8.7	
N-BUTANE	1.2		5.0		2.3	
ISOBUTANE	0.6		2.3		1.9	
N-PENTANE	0.3		0.7		0.5	
ISOPENTANE	0.2		0.9		0.6	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.6		0.4	
NITROGEN	8.9		0.6		1.3	
OXYGEN	0.2		0.0		0.3	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.5		0.1	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.6		0.0		0.9	
HELIUM	0.29		TRACE		0.01	
HEATING VALUE*	1131		1793		1342	
SPECIFIC GRAVITY	0.730		1.055		0.793	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9589 SAMPLE 5146	INDEX 9590 SAMPLE 14877	INDEX 9591 SAMPLE 14892
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TYLER	TYLER	TYLER
FIELD	NOT GIVEN	PAVEY KIRBY	SUGAR CREEK
WELL NAME	HEAD, ET AL. NO. 1	KIRBY LUMBER CO. NO. 1	ARCO ABBOTT G.U. NO. 1
LOCATION	BBB & C SUR. NO. A-109	F. HELFONSTEIN SUR., A-352	MARTIN L ABBOTT SUR. A-742
OWNER	HUMBLE OIL & REFINING CO.	SHELL OIL CO.	C & K PETROLEUM, INC.
COMPLETED	NOT GIVEN	07/25/74	10/08/75
SAMPLED	01/24/52	12/30/76	01/27/77
FORMATION	NOT GIVEN	EOCE-WILCOX	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	10883	11008
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	3500
OPEN FLOW, MCFD	NOT GIVEN	3500	87000
COMPONENT, MOLE PCT			
METHANE	85.2	85.6	87.4
ETHANE	7.0	6.8	3.4
PROPANE	3.0	2.8	0.8
N-BUTANE	0.7	0.7	0.2
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	0.7	0.4	2.7
OXYGEN	0.1	TRACE	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.0	2.4	4.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1141	1137	1069
SPECIFIC GRAVITY	0.672	0.676	0.647

	INDEX 9592 SAMPLE 4522	INDEX 9593 SAMPLE 12130	INDEX 9594 SAMPLE 12681
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TYLER	UPSHUR	UPTON
FIELD	WILDCAT	GILMER	ADAMC
WELL NAME	C. G. HOOKS NO. 1	INDIAN ROCK GAS UNIT NO. 1	ADAMC UNIT NO. D-362
LOCATION	BBB&C RR CO. SUR. AB-113	2 MI. SE OF GILMER	SEC. 187, BLK.F, CCSD&RGNGRR
OWNER	AMERADA PETROLEUM CORP.	WM. D. MCBEE	GULF OIL CORP.
COMPLETED	09/30/47	NOT GIVEN	NOT GIVEN
SAMPLED	05/13/48	12/03/69	02/03/71
FORMATION	EOCE-COCKFIELD 2ND	JURA-COTTON VALLEY	DEVO-
GEOLOGIC PROVINCE CODE	220	260	430
DEPTH, FEET	4925	11600	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2130	5860	NOT GIVEN
OPEN FLOW, MCFD	30000	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	88.5	68.5
ETHANE	17.5	4.4	15.5
PROPANE	---	1.5	7.8
N-BUTANE	---	0.5	2.4
ISOBUTANE	---	0.7	1.0
N-PENTANE	---	0.3	0.7
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.4	0.3
NITROGEN	0.8	1.1	3.2
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	2.4	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1131	1088	1351
SPECIFIC GRAVITY	0.653	0.652	0.808

	INDEX 9595 SAMPLE 12688	INDEX 9596 SAMPLE 15292	INDEX 9597 SAMPLE 9922
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	AMACKER-TIPPETT	AMACKER-TIPPETT S	BENEDUM
WELL NAME	AMACKER-TIPPETT NO. 5	LANE "B" NO. 2	D. L. ALFORD NO. 1
LOCATION	SEC. 106	SEC. 13, BLK. 2, MK&T SUR.	SEC. 50, P. B. SCOTT SUR.
OWNER	HUNT OIL CO.	COTTON PETROLEUM CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	NOT GIVEN	11/17/75	12/28/63
SAMPLED	02/--/71	NOT GIVEN	06/14/65
FORMATION	DEVO-	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	11275	10002
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2797	2435
OPEN FLOW, MCFD	NOT GIVEN	2700	2100
COMPONENT, MOLE PCT			
METHANE	76.5	71.6	78.1
ETHANE	13.4	15.9	11.3
PROPANE	5.1	7.3	4.5
N-BUTANE	1.2	2.3	1.5
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	TRACE	0.4	0.4
ISOPENTANE	0.9	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.3	0.6
NITROGEN	1.5	0.6	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1249	1355	1257
SPECIFIC GRAVITY	0.732	0.783	0.737

	INDEX 9598 SAMPLE 12728	INDEX 9599 SAMPLE 12729	INDEX 9600 SAMPLE 12938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	BENEDUM	BENEDUM	BFP
WELL NAME	GORDON A NO. 1	W. F. NEAL B NO. 1	BELL PETROLEUM NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 2, F. COOMER SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	TEXAS OIL & GAS CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	09/14/70
SAMPLED	03/13/71	03/19/71	07/27/71
FORMATION	ORDO-ELLENBURGER	SILU-FUSSELMAN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12000	11500	8856
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	2400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7100
COMPONENT, MOLE PCT			
METHANE	63.2	68.3	79.6
ETHANE	16.5	14.5	10.7
PROPANE	9.5	8.0	4.5
N-BUTANE	3.2	2.7	0.9
ISOBUTANE	1.7	1.3	0.8
N-PENTANE	1.0	0.8	0.3
ISOPENTANE	0.6	0.6	0.5
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.6	0.5	0.5
NITROGEN	3.3	2.9	1.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.06	0.05
HEATING VALUE*	1454	1383	1239
SPECIFIC GRAVITY	0.871	0.822	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9601 SAMPLE 12682	INDEX 9602 SAMPLE 15322	INDEX 9603 SAMPLE 13859
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	PRADEAN	FULMER	HADACOL CORNER
WELL NAME	KING RANCH OIL CO. NO. 6-1	CHRISTY NO. 1	JOHN M. HUTT ESTATE NO. 1
LOCATION	SEC. 26, BLK. 2, MK&TRR SUR.	SEC. 36, BLK. B, C&M SUR.	SEC. 17, BLK.38, T&P SUR.
OWNER	GULF OIL CORP.	BELCO PETROLEUM CORP.	GENERAL CRUDE OIL CO.
COMPLETED	NOT GIVEN	12/01/76	01/30/72
SAMPLED	02/05/71	07/19/78	01/02/74
FORMATION	DEVO-	PENN-BEND	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	10442	12372
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2865	1180
OPEN FLOW, MCFD	NOT GIVEN	6800	1548
COMPONENT, MOLE PCT			
METHANE	78.3	82.2	78.1
ETHANE	13.8	9.4	11.7
PROPANE	6.3	3.5	5.2
N-BUTANE	1.3	0.8	1.5
ISOBUTANE	1.1	0.5	0.7
N-PENTANE	0.7	0.2	0.5
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	2.0	2.1	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.2
HELIUM	0.03	0.04	0.06
HEATING VALUE*	1301	1171	1254
SPECIFIC GRAVITY	0.767	0.686	0.724

	INDEX 9604 SAMPLE 12680	INDEX 9605 SAMPLE 12650	INDEX 9606 SAMPLE 12651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	JACK HERBERT	KING MOUNTAIN	KING MOUNTAIN
WELL NAME	MCELROY RANCH CO. L NO.8-U	ROSA BARNET "A" NO. 3	W. W. MC CLURE NO. 7
LOCATION	SEC. 109, BLK.D, CCSD&RGNGRR	SEC. 20, BLK. 2, MK&TRR SUR.	SEC.18,BLK.4-1/2,GC&SFRR SUR
OWNER	GULF OIL CORP.	TEXAS PACIFIC OIL CO.	TEXAS PACIFIC OIL CO.
COMPLETED	NOT GIVEN	08/05/64	01/31/58
SAMPLED	02/04/71	02/03/71	02/03/71
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	8613	8735
WELLHEAD PRESSURE,PSIG	NOT GIVEN	748	482
OPEN FLOW, MCFD	NOT GIVEN	406	272
COMPONENT, MOLE PCT			
METHANE	76.8	76.2	78.1
ETHANE	11.1	13.2	12.0
PROPANE	5.8	5.3	4.5
N-BUTANE	1.8	1.2	0.7
ISOBUTANE	1.1	0.5	0.5
N-PENTANE	0.5	0.1	0.2
ISOPENTANE	0.3	0.5	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	1.7	2.3	2.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.03	0.05	0.06
HEATING VALUE*	1287	1243	1208
SPECIFIC GRAVITY	0.750	0.727	0.711

	INDEX 9607 SAMPLE 2051	INDEX 9608 SAMPLE 14496	INDEX 9609 SAMPLE 2050
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	MCCAMEY	PEGASUS S	SHIRK
WELL NAME	RICKER NO. 2, OIL WELL	VIRGIL POWELL NO. 10-1	E. SHIRK NO. 1
LOCATION	SEC. 5, MARY S. DENTON SUR.	SEC.10, BLK 41, TSS, T&P SUR	SEC. 35, BLK. 1
OWNER	HUMBLE OIL & REFINING CO.	CLINTON OIL CO.	GULF PRODUCTION CO.
COMPLETED	02/24/27	05/21/75	12/07/26
SAMPLED	06/17/30	10/21/75	06/17/30
FORMATION	PERM-GRAYBURG	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2160	12010	2290
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3307	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4550	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	79.4	4.7
ETHANE	13.0	12.5	86.3
PROPANE	---	3.9	---
N-BUTANE	---	0.8	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.3	1.6	2.0
OXYGEN	0.3	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	2.7	0.9	6.7
HELIUM	TRACE	0.03	0.00
HEATING VALUE*	1050	1188	1594
SPECIFIC GRAVITY	0.651	0.697	1.057

	INDEX 9610 SAMPLE 14905	INDEX 9611 SAMPLE 7144	INDEX 9612 SAMPLE 16071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VAL VERDE	VAL VERDE	VAL VERDE
FIELD	DEVIL'S RIVER	L. M. MORRISON	MASSIE
WELL NAME	J. V. DRISDALE NO. 1	L. M. MORRISON NO. 1	WEST A NO. 1
LOCATION	SEC.1,BLK.6,GWT&P SUR A-933	SEC. 10, BLK. 10, TCRY SUR.	SEC. 13, BLK. D, GH&SA SUR.
OWNER	NATIONAL EXPLORATION CO.	MAGNOLIA PETROLEUM CO.	CITIES SERVICE CO.
COMPLETED	04/13/75	03/29/56	07/10/80
SAMPLED	02/14/77	07/10/59	09/16/80
FORMATION	PENN-STRAWN	ORDO-ELLENBURGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10223	13944	11100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4571	4200
OPEN FLOW, MCFD	4435	1250	3975
COMPONENT, MOLE PCT			
METHANE	95.6	84.6	93.4
ETHANE	0.3	0.2	0.3
PROPANE	TRACE	0.0	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.9	1.5	1.1
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	13.4	4.9
HELIUM	0.06	0.12	0.06
HEATING VALUE*	972	865	992
SPECIFIC GRAVITY	0.591	0.694	0.608

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9613 SAMPLE 5978	INDEX 9614 SAMPLE 5164	INDEX 9615 SAMPLE 15194
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VAL VERDE	VAL VERDE	VAL VERDE
FIELD	VINEGARROON	WILDCAT	WILL O
WELL NAME	CAUTHORN NO. 1	GUIDA ROSE NO. 1	EXXON MILLS NO. 1
LOCATION	SEC. 49, BLK. A, C&M SUR.	SEC. 2, GS&SF SUR.	SEC.16, BLK.Q4,TCRR SUR.
OWNER	PHILLIPS PETROLEUM CO.	WESTERN NAT. GAS CO., ET AL.	C & K PETROLEUM, INC.
COMPLETED	04/07/55	05/17/51	07/10/76
SAMPLED	11/30/55	01/28/52	01/23/78
FORMATION	PENN-STRAWN	PENN-STRAWN	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9982	10050	14208
WELLHEAD PRESSURE,PSIG	5019	6665	4826
OPEN FLOW, MCFD	42000	3519	9600
COMPONENT, MOLE PCT			
METHANE	96.4	91.6	85.9
ETHANE	0.8	0.9	0.2
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.6	4.8	0.7
OXYGEN	0.1	1.1	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.6	1.3	13.2
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1003	954	774
SPECIFIC GRAVITY	0.581	0.602	0.687

	INDEX 9616 SAMPLE 15170	INDEX 9617 SAMPLE 12499	INDEX 9618 SAMPLE 12501
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VAL VERDE	VAN ZANDT	VAN ZANDT
FIELD	WILL-O	EDGEWOOD	EDGEWOOD NE
WELL NAME	MILLS MINERAL TRUST NO. 1	PARKER GAS UNIT A NO. 1	PARKER GAS UNIT B NO. 1
LOCATION	SEC. 29, BLK. Q-3, TCRR SUR.	J. H. PARKER TRACT	I. R. CHISUM A-157 SUR.
OWNER	MOBIL OIL CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/11/75	09/--/61	06/--/62
SAMPLED	12/--/77	10/25/70	10/25/70
FORMATION	ORDO-ELLENBURGER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	430	260	260
DEPTH, FEET	14695	12834	12583
WELLHEAD PRESSURE,PSIG	4710	3662	5526
OPEN FLOW, MCFD	7900	19600	78460
COMPONENT, MOLE PCT			
METHANE	83.4	57.1	57.6
ETHANE	0.2	6.5	8.5
PROPANE	TRACE	2.9	3.3
N-BUTANE	0.0	0.9	1.0
ISOBUTANE	0.0	1.1	1.0
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.4	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.3
NITROGEN	0.4	3.4	3.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	24.0	21.6
CARBON DIOXIDE	15.9	3.0	2.7
HELIUM	0.03	0.02	0.01
HEATING VALUE*	848	1037	1077
SPECIFIC GRAVITY	0.711	0.862	0.859

	INDEX 9619 SAMPLE 2278	INDEX 9620 SAMPLE 2610	INDEX 9621 SAMPLE 3991
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VAN ZANDT	VAN ZANDT	VICTORIA
FIELD	VAN	VAN	ANAQUA
WELL NAME	R. S. BLAKE NO. 5	WHITE 500 NO. 5	MARY SIMMONS NO. 1
LOCATION	JOHN WALLING SUR.	NACOGDOCHES SCHOOL LAND SUR.	15 MI. W OF MCFADDIN N FIELD
OWNER	HUMBLE OIL & REFINING CO.	TEXAS CO.	GULF OIL CO.
COMPLETED	12/10/30	12/19/32	NOT GIVEN
SAMPLED	02/10/31	02/23/33	03/08/45
FORMATION	CRET-WOODBINE	CRET-WOODBINE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	2605	2756	5350
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	2050
OPEN FLOW, MCFD	1000	3864	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.4	89.3	84.5
ETHANE	57.7	9.3	15.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.3	0.0
OXYGEN	0.4	0.7	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.00	0.03	0.00
HEATING VALUE*	1453	1071	1127
SPECIFIC GRAVITY	0.847	0.609	0.632

	INDEX 9622 SAMPLE 11996	INDEX 9623 SAMPLE 4645	INDEX 9624 SAMPLE 4744
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	ANAQUA N	COLETTO CREEK	COLETTO CREEK
WELL NAME	KEMPER WILLIAMS NO. 1-C	J. H. FLEMING NO. 1	KATIE WILLEMIN NO. 2-1
LOCATION	DE LA GARZA SUR. A-46	BLK. A-61, F.O. HIDALGO SUR.	PEDRO GALLARDO SUR.
OWNER	HARKINS & CO. ET AL	JERGINS OIL CO.	JERGINS OIL CO. OF TEXAS
COMPLETED	07/17/68	09/02/48	02/27/49
SAMPLED	08/14/69	01/06/49	05/17/49
FORMATION	OLIG-FRIO	MIOC-CATAHOULA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5374	3264	4522
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	1850
OPEN FLOW, MCFD	29000	NOT GIVEN	742
COMPONENT, MOLE PCT			
METHANE	92.3	97.6	96.3
ETHANE	2.8	1.3	1.6
PROPANE	TRACE	---	0.3
N-BUTANE	0.2	---	0.1
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.7	---	0.1
ISOPENTANE	0.4	---	0.1
CYCLOPENTANE	0.3	---	0.1
HEXANES PLUS	0.5	---	0.2
NITROGEN	2.0	0.6	0.8
OXYGEN	0.3	0.4	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.2	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1076	1012	1042
SPECIFIC GRAVITY	0.622	0.566	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9625 SAMPLE 11618	INDEX 9626 SAMPLE 10171	INDEX 9627 SAMPLE 12490
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	ELOISE	HELEN GOLKE SW	HEYSER
WELL NAME	J. F. PETTY NO. 1	HAMILTON NURSERY RANCH NO. 1	W. H. BENNETT NO. 12
LOCATION	A. B. WILLIAMS SUR. A-353	SA&MG SUR. NO. 18, A-326	JOSE ESTEVAN GALBAN SUR.A-34
OWNER	CROWN CENTRAL PETROLEUM CORP	EDWARDS, HAMILTON AND FORD	SUN OIL CO.
COMPLETED	06/22/67	07/02/64	03/15/69
SAMPLED	08/06/68	09/01/65	10/26/70
FORMATION	OLIG-MOSES	EOCE-SLICK	MIOC-3700 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5660	8512	3655
WELLHEAD PRESSURE,PSIG	1400	3306	1383
OPEN FLOW, MCFD	12600	88000	74000
COMPONENT, MOLE PCT			
METHANE	95.3	88.9	99.2
ETHANE	1.8	5.5	0.2
PROPANE	0.3	2.4	TRACE
N-BUTANE	0.2	0.4	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	1.5	0.0	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.4	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1051	1087	1009
SPECIFIC GRAVITY	0.595	0.640	0.558

	INDEX 9628 SAMPLE 12491	INDEX 9629 SAMPLE 9649	INDEX 9630 SAMPLE 4528
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	HEYSER	IDA WEITZ	INEZ
WELL NAME	W. H. BENNETT NO. 12	IDA WEITZ NO. 1-T	BAKER NO. 1
LOCATION	JOSE ESTEVAN GALBAN SUR.A-34	F. BUENO LEAGUE SUR.	LOT NO.55, A-45 GARCIA GRANT
OWNER	SUN OIL CO.	SUN OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	03/13/69	05/04/65	03/28/48
SAMPLED	10/26/70	11/25/64	06/01/48
FORMATION	MIOC-3800 FT. SAND	OLIG-FRIO	OLIG-INEZ SOUTH
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3760	3512	5238
WELLHEAD PRESSURE,PSIG	1551	1030	2350
OPEN FLOW, MCFD	15000	2600	10300
COMPONENT, MOLE PCT			
METHANE	99.2	99.0	95.5
ETHANE	0.1	0.2	3.4
PROPANE	TRACE	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.5	0.3	0.7
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.09	0.01	0.01
HEATING VALUE*	1007	1006	1028
SPECIFIC GRAVITY	0.558	0.562	0.577

	INDEX 9631 SAMPLE 4590	INDEX 9632 SAMPLE 9591	INDEX 9633 SAMPLE 2367
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	INEZ	KOONTZ	MCFADDIN
WELL NAME	BAKER NO. 2	KEERAN RANCH NO. 1-UT	MCFADDIN NO. 4-A
LOCATION	NOT GIVEN	MARTIN DELEON GT.	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	MOBIL OIL CORP.	UNITED PRODUCTION CORP.
COMPLETED	06/14/48	09/20/51	07/15/31
SAMPLED	10/14/48	09/05/64	08/03/31
FORMATION	OLIG-INEZ SOUTH	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5116	5272	3716
WELLHEAD PRESSURE,PSIG	2575	1815	1650
OPEN FLOW, MCFD	93000	4600	1000
COMPONENT, MOLE PCT			
METHANE	87.0	96.2	91.2
ETHANE	10.5	2.5	2.6
PROPANE	---	0.4	---
N-BUTANE	---	0.1	---
ISOBUTANE	---	TRACE	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	TRACE	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	1.9	0.1	4.6
OXYGEN	0.6	TRACE	1.6
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.4	0.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1069	1042	970
SPECIFIC GRAVITY	0.620	0.580	0.595

	INDEX 9634 SAMPLE 4186	INDEX 9635 SAMPLE 5061	INDEX 9636 SAMPLE 5123
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	MCFADDIN	MCFADDIN	MCFADDIN
WELL NAME	E. T. MORROW NO. 1	MCFADDIN B-9	MCFADDIN B NO. 10
LOCATION	ED PERRY SUR. A-48	J. W. MOORE SUR.	NOT GIVEN
OWNER	BARNSDALL OIL CO.	CHICAGO CORP.	CHICAGO CORP.
COMPLETED	09/13/46	03/05/51	05/19/51
SAMPLED	11/22/46	06/19/51	11/16/51
FORMATION	MIOC-	MIOC-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2250	3400	2200
WELLHEAD PRESSURE,PSIG	926	1510	929
OPEN FLOW, MCFD	60000	NOT GIVEN	68
COMPONENT, MOLE PCT			
METHANE	99.5	97.9	98.6
ETHANE	0.0	0.2	0.2
PROPANE	---	0.2	TRACE
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.0	1.2	0.9
OXYGEN	0.2	0.3	TRACE
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1008	999	1005
SPECIFIC GRAVITY	0.558	0.566	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9637 SAMPLE 3870	INDEX 9638 SAMPLE 10126	INDEX 9639 SAMPLE 4142
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	MCFADDIN N	MISSION VALLEY	PLACEDO E
WELL NAME	RYDOLPH NO. 4	S. F. RUSCHHAUPT NO. 1	VANDENBERGE & HILL NO. 18
LOCATION	JOHN F. KEMPER A-241 SUR.	EBEN HAVEN SUR.	E. BENAVIDES SUR.
OWNER	UNION PRODUCING CO.	LONE STAR PRODUCING CO.	STANOLIND OIL & GAS CO.
COMPLETED	08/28/43	02/20/64	06/07/46
SAMPLED	09/21/44	09/16/65	10/08/46
FORMATION	OLIG-FRIO	EOCE-WILCOX	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5445	11916	6420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	8570	2250
OPEN FLOW, MCFD	10750	5200	13500
COMPONENT, MOLE PCT			
METHANE	92.9	81.8	52.7
ETHANE	6.1	7.5	46.3
PROPANE	---	3.7	---
N-BUTANE	---	0.8	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.6	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.7	---
NITROGEN	0.0	0.4	0.1
OXYGEN	0.3	0.0	0.4
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.7	3.6	0.5
HELIUM	0.02	TRACE	0.02
HEATING VALUE*	1050	1180	1364
SPECIFIC GRAVITY	0.593	0.721	0.791

	INDEX 9640 SAMPLE 3941	INDEX 9641 SAMPLE 4521	INDEX 9642 SAMPLE 13650
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	PRIDHAM LAKE	TELFERNER E	WELDER RANCH
WELL NAME	M. F. BASS NO. 1-A	ROWAN RAGSDALE NO. 6	WELDER-CLIBURN NO. 1
LOCATION	FOUR LEAGUE GRANT	VALENTINE GARCIA SUR.	S.A. BELDING SUR., A-144
OWNER	LVO CORP.	ROWAN & HOPE	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/25/71
SAMPLED	12/27/44	05/15/48	07/16/73
FORMATION	OLIG-	OLIG-FRIO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4477	5100	5559
WELLHEAD PRESSURE,PSIG	1500	2175	3288
OPEN FLOW, MCFD	NOT GIVEN	60000	4050
COMPONENT, MOLE PCT			
METHANE	97.4	97.3	92.8
ETHANE	2.0	2.4	3.9
PROPANE	---	---	1.5
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	0.1	0.0	0.3
OXYGEN	0.4	0.1	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1023	1029	1090
SPECIFIC GRAVITY	0.568	0.569	0.610

	INDEX 9643 SAMPLE 13651	INDEX 9644 SAMPLE 4294	INDEX 9645 SAMPLE 4335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	WELDER RANCH	WILDCAT	WILDCAT
WELL NAME	WELDER-CLIBURN NO. 1	GEO. E. SCOTT NO. 1	ELIZABETH MUELLER NO. 1
LOCATION	S.A. BELDING SUR. A-144	WM. MINTER SUR. N3. 264	ELI STAPP LEAGUE A-111
OWNER	SKELLY OIL CO.	TEXAS CO.	AMERADA PETROLEUM CORP.
COMPLETED	07/25/71	03/06/47	06/01/47
SAMPLED	07/16/73	04/17/47	07/23/47
FORMATION	EOCE-YEGUA	TERT-	OLIG-FRIO U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5670	4110	2872
WELLHEAD PRESSURE,PSIG	3437	1707	1342
OPEN FLOW, MCFD	13000	18000	5600
COMPONENT, MOLE PCT			
METHANE	92.5	99.0	97.8
ETHANE	4.3	0.3	0.3
PROPANE	1.5	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.4	0.3	1.4
OXYGEN	0.1	0.3	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1087	1008	996
SPECIFIC GRAVITY	0.610	0.560	0.565

	INDEX 9646 SAMPLE 4736	INDEX 9647 SAMPLE 4862	INDEX 9648 SAMPLE 11351
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	WALKER
FIELD	WILDCAT	WILDCAT	FORT TRINIDAD SW
WELL NAME	M. E. COOLEY NO. 1	CORA HENSLEY NO. 1	FT. TRINIDAD UNIT 2 NO. 1
LOCATION	BENJ. J. WHITE SUR.	SEC. 5, BLK. A-206, IRR SUR.	NOT GIVEN
OWNER	WESTERN NATURAL GAS CO.	JERGINS OIL CO. OF TEXAS	HUMBLE OIL & REFINING CO.
COMPLETED	01/14/49	11/22/49	08/15/65
SAMPLED	04/14/49	03/21/50	03/01/68
FORMATION	EOCE-WILCOX	NOT GIVEN	CRET-GLEN ROSE B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8895	8040	10908
WELLHEAD PRESSURE,PSIG	3545	3360	640
OPEN FLOW, MCFD	4500	NOT GIVEN	21373
COMPONENT, MOLE PCT			
METHANE	89.0	87.6	84.9
ETHANE	6.3	5.6	6.4
PROPANE	2.2	2.2	2.7
N-BUTANE	0.6	0.6	0.9
ISOBUTANE	0.3	0.4	0.8
N-PENTANE	0.2	0.3	0.5
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.7
NITROGEN	0.6	1.0	1.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	1.9	1.8
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1128	1110	1163
SPECIFIC GRAVITY	0.637	0.661	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9649 SAMPLE 11550	INDEX 9650 SAMPLE 12147	INDEX 9651 SAMPLE 3788
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WALKER	WALLER	WALLER
FIELD	MOSSY GROVE	BROOKSHIRE	KATY
WELL NAME	MOSSY GROVE UNIT 1	DONIGAN GAS UNIT 1 NO. 1	L. L. SCHARFF
LOCATION	NOT GIVEN	WILLIAM COOPER LEAGUE, A-20	SEC. 130
OWNER	HUMBLE OIL & REFINING CO.	TEXACO INC.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	11/02/68	NOT GIVEN
SAMPLED	03/01/68	12/08/69	04/13/44
FORMATION	CRET-GLEN ROSE B	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11476	11240	7069
WELLHEAD PRESSURE,PSIG	5300	6495	NOT GIVEN
OPEN FLOW, MCFD	71492	38000	30
COMPONENT, MOLE PCT			
METHANE	86.2	85.9	84.0
ETHANE	4.7	7.1	14.2
PROPANE	1.6	2.6	---
N-BUTANE	0.9	0.5	---
ISOBUTANE	0.6	0.2	---
N-PENTANE	1.6	0.1	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	2.1	0.1	---
NITROGEN	TRACE	0.9	1.0
OXYGEN	0.1	0.0	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.0	2.3	0.6
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1229	1111	1105
SPECIFIC GRAVITY	0.720	0.663	0.636

	INDEX 9652 SAMPLE 12402	INDEX 9653 SAMPLE 12260	INDEX 9654 SAMPLE 13270
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WALLER	WARD	WARD
FIELD	KATY	BARSTOW	BARSTOW
WELL NAME	UNIT 1 NO. W-31	BARSTOW UNIT NO. 1	JOSEY NO. 1
LOCATION	SEC.110, T.S.REESE SUR.A-332	SEC. 37, BLK. 33, H&TC SUR.	SEC. 183, BLK. 34, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	ADOBE OIL CO.	SHELL OIL CO.
COMPLETED	08/02/69	02/28/69	10/21/71
SAMPLED	09/04/70	05/18/70	06/19/72
FORMATION	EOCE-WILCOX	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	10230	17550	18243
WELLHEAD PRESSURE,PSIG	6275	6200	5600
OPEN FLOW, MCFD	16500	132000	90000
COMPONENT, MOLE PCT			
METHANE	91.8	95.2	95.0
ETHANE	5.3	0.6	0.5
PROPANE	1.0	0.1	0.1
N-BUTANE	0.2	TRACE	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.3	0.6	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	3.1	3.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1042	1000	974
SPECIFIC GRAVITY	0.620	0.602	0.598

	INDEX 9655 SAMPLE 14413	INDEX 9656 SAMPLE 13688	INDEX 9657 SAMPLE 13689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BARSTOW	BEALL	BEALL
WELL NAME	AMERICAN NAT. INS. CO. NO. 1	MARY W. EVANS NO. 1	MARY EVANS NO. 1
LOCATION	SEC. 44, BLK. 33, H&TC SUR.	SEC. 53, BLK. 34, H&TC SUR.	SEC. 53, BLK. 34, H&TC SUR.
OWNER	NORTHERN NATURAL GAS CO.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	02/01/74	03/05/72	03/05/72
SAMPLED	07/15/75	08/23/73	08/23/73
FORMATION	PERM-WICHITA-ALBANY	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15526	14919	12247
WELLHEAD PRESSURE,PSIG	2005	5315	5300
OPEN FLOW, MCFD	14914	15000	3800
COMPONENT, MOLE PCT			
METHANE	98.1	95.1	92.8
ETHANE	0.4	2.2	2.8
PROPANE	TRACE	0.8	0.9
N-BUTANE	0.0	0.3	0.2
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	0.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	2.1
HELIUM	0.01	0.04	0.01
HEATING VALUE*	1001	1058	1036
SPECIFIC GRAVITY	0.566	0.592	0.610

	INDEX 9658 SAMPLE 14433	INDEX 9659 SAMPLE 14418	INDEX 9660 SAMPLE 12590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BEALL	BIG LION	BLOCK 16
WELL NAME	MERD GAS UNIT NO. 1	MIDLAND NATL. BK. NO. 1	WATSON ET AL. NO. 1
LOCATION	SEC. 78, BLK. 34, H&TC SUR.	SEC. 146, BLK. 34, H&TC SUR.	SEC. 76, BLK. 16, H&TC SUR.
OWNER	EXXON CO., U.S.A.	TEXAS AMERICAN OIL CORP.	MOBIL OIL CORP.
COMPLETED	03/01/74	08/26/74	08/14/70
SAMPLED	08/11/75	07/23/75	NOT GIVEN
FORMATION	DEVO-	PENN-MORROW	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12239	15879	15807
WELLHEAD PRESSURE,PSIG	4084	8067	5283
OPEN FLOW, MCFD	79031	2156	41000
COMPONENT, MOLE PCT			
METHANE	93.7	97.1	92.6
ETHANE	2.3	1.1	3.8
PROPANE	0.6	0.2	1.5
N-BUTANE	0.1	0.0	0.5
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.6	0.4	0.8
OXYGEN	0.7	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	1.2	0.2
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1022	1009	1090
SPECIFIC GRAVITY	0.605	0.575	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9661 SAMPLE 12591	INDEX 9662 SAMPLE 15323	INDEX 9663 SAMPLE 12808
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BLOCK 16	BLOCK 17	BLOCK 17 SE
WELL NAME	WATSON ET AL NO. 1	UNIVERSITY "34" NO. 1	STATE OF TEXAS DC NO. 1
LOCATION	SEC. 76, BLK. 34, H&TC SUR.	SEC. 34, BLK. 17, UNIV. LDS.	SEC. 3, BLK. 18, PSL SUR.
OWNER	MOBIL OIL CORP.	HNG OIL CO.	TEXACO INC.
COMPLETED	08/14/70	06/21/77	NOT GIVEN
SAMPLED	12/--/70	08/04/78	04/30/71
FORMATION	DEVO-	PERM-CHERRY CANYON	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12692	6089	4972
WELLHEAD PRESSURE,PSIG	4435	2525	NOT GIVEN
OPEN FLOW, MCFD	22200	5200	67
COMPONENT, MOLE PCT			
METHANE	79.0	86.2	87.6
ETHANE	2.8	5.3	5.8
PROPANE	0.9	2.5	1.9
N-BUTANE	0.2	0.9	0.5
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	12.5	3.3	2.8
OXYGEN	2.9	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.0	TRACE
HELIUM	0.01	0.03	0.02
HEATING VALUE*	897	1137	1104
SPECIFIC GRAVITY	0.669	0.667	0.642

	INDEX 9664 SAMPLE 15132	INDEX 9665 SAMPLE 12793	INDEX 9666 SAMPLE 12797
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BURKHOLDER	CRAWAR	CRAWAR
WELL NAME	BURKHOLDER N, UNIT N-1	J. B. TUBB A3G	CRAWAR UNIT NO. 4-F
LOCATION	SEC.199,BLK.34,H&TC SUR.	SEC. 13, BLK. B-20, PSL SUR.	SEC. 8, BLK. B-20, PSL SUR.
OWNER	GULF OIL CORP.	GULF OIL CO.-U.S.	GULF OIL CO.-U.S.
COMPLETED	02/11/76	01/--/55	01/--/59
SAMPLED	10/31/77	04/28/71	04/28/71
FORMATION	MISS-	PERM-GLORIETA	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16314	4100	6000
WELLHEAD PRESSURE,PSIG	6855	NOT GIVEN	1369
OPEN FLOW, MCFD	5000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	84.2	95.6
ETHANE	0.5	9.5	1.0
PROPANE	0.1	3.3	0.3
N-BUTANE	0.0	0.8	0.1
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.4	1.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	0.4	2.1
HELIUM	0.01	0.03	0.01
HEATING VALUE*	977	1167	998
SPECIFIC GRAVITY	0.596	0.675	0.586

	INDEX 9667 SAMPLE 12438	INDEX 9668 SAMPLE 15604	INDEX 9669 SAMPLE 2032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	CREWAR	DELAWARE SE	GRANDFALLS
WELL NAME	TUBB NO. 2	STATE XV NO. 2	ANDERSON NO. 1
LOCATION	SEC. 18, BLK. B-20, PSL SUR.	SEC. 13, BLK. 18, UL SUR.	SEC. 11, BLK. 5,H&TC SUR.
OWNER	MCCULLOCH OIL CORP.	GULF OIL CORP.	JOHN H. BOOGHER
COMPLETED	09/--/69	05/25/78	DRILL STEM TEST
SAMPLED	10/10/70	04/27/79	06/12/30
FORMATION	PERM-TUBB	PERM-DELAWARE	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4800	6143	2115
WELLHEAD PRESSURE,PSIG	1875	3393	NOT GIVEN
OPEN FLOW, MCFD	12000	2200	1505
COMPONENT, MOLE PCT			
METHANE	87.0	85.4	85.7
ETHANE	7.3	5.4	11.7
PROPANE	2.6	2.3	---
N-BUTANE	0.6	0.8	---
ISOBUTANE	0.4	0.7	---
N-PENTANE	0.1	0.3	---
ISOPENTANE	0.1	0.6	---
CYCLOPENTANE	TRACE	0.4	---
HEXANES PLUS	0.1	0.6	---
NITROGEN	1.1	3.4	1.7
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.0	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.2	0.0	---
CARBON DIOXIDE	0.3	0.0	0.3
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1129	1156	1078
SPECIFIC GRAVITY	0.646	0.680	0.626

	INDEX 9670 SAMPLE 2027	INDEX 9671 SAMPLE 2028	INDEX 9672 SAMPLE 2029
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	GULF-O'BRIEN	GULF-O'BRIEN	GULF-O'BRIEN
WELL NAME	O'BRIEN NO. 4	O'BRIEN NO. 6	HUTCHINGS NO. 2
LOCATION	SEC. 19, BLK. F	SEC. 20,BLK. F,GM-M BROS SUR	SEC. 7, BLK. O
OWNER	GULF PRODUCTION CO.	GULF PRODUCTION CO.	GULF PRODUCTION CO.
COMPLETED	04/22/29	10/12/29	10/29/29
SAMPLED	06/09/30	06/09/30	06/09/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2575	2610	2490
WELLHEAD PRESSURE,PSIG	36	NOT GIVEN	66
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	82.1	80.3
ETHANE	31.9	15.8	15.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	1.3	3.3
OXYGEN	0.2	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.5	0.5
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	1254	1115	1091
SPECIFIC GRAVITY	0.717	0.644	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9673 SAMPLE 9958		INDEX 9674 SAMPLE 9992		INDEX 9675 SAMPLE 13489	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	H S A		H S A		HOWE	
WELL NAME	H.S.A. NO. 596		H.S.A. NO. 617		HOWE G. U. 1 NO. 1	
LOCATION	SEC. 75, BLK N, G&MMB&A SUR.		SEC. 62, BLK N, G&MMB&A SUR.		JOSEPH HOWE SUR. NO. 1	
OWNER	GULF OIL CORP.		GULF OIL CORP.		EXXON CO. U.S.A.	
COMPLETED	12/21/63		05/09/64		06/30/72	
SAMPLED	07/07/65		07/22/65		12/21/72	
FORMATION	PENN-CANYON		PENN-STRAWN		DEVO-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	7993		7768		12176	
WELLHEAD PRESSURE,PSIG	1875		2529		4433	
OPEN FLOW, MCFD	498		14900		148000	
COMPONENT, MOLE PCT						
METHANE	59.8		84.1		83.5	
ETHANE	14.0		8.8		9.7	
PROPANE	10.5		4.1		3.1	
N-BUTANE	6.8		0.9		0.8	
ISOBUTANE	1.5		0.4		0.5	
N-PENTANE	1.7		0.1		0.2	
ISOPENTANE	2.4		0.2		TRACE	
CYCLOPENTANE	0.5		TRACE		TRACE	
HEXANES PLUS	1.3		TRACE		0.1	
NITROGEN	1.3		1.2		1.2	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.7	
HELIUM	0.01		0.04		0.02	
HEATING VALUE*	1470		1173		1158	
SPECIFIC GRAVITY	0.981		0.670		0.670	

	INDEX 9676 SAMPLE 11430		INDEX 9677 SAMPLE 11942		INDEX 9678 SAMPLE 16020	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	LOCKRIDGE		MAGNOLIA-SEALY S		MERIDIAN S	
WELL NAME	I. P. LOCKRIDGE NO. 1		GEORGE SEALY NO. 5		UNIVERSITY 27-19 NO. 1	
LOCATION	SEC. A9, BLK. 34, H&TC SUR.		SEC.43, BLK. F, G&MMB&A SUR		SEC. 27, BLK. 19, ULS SUR.	
OWNER	SHELL OIL CO.		MOBIL OIL CORP.		GETTY OIL CO.	
COMPLETED	09/07/66		05/08/68		05/15/79	
SAMPLED	04/05/68		06/25/69		07/30/80	
FORMATION	ORDO-ELLENBURGER		PERM-YATES		PERM-WICHITA ALBANY	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	19654		2785		15667	
WELLHEAD PRESSURE,PSIG	6600		1018		8650	
OPEN FLOW, MCFD	115000		10000		5100	
COMPONENT, MOLE PCT						
METHANE	95.4		87.8		94.7	
ETHANE	2.0		3.8		2.9	
PROPANE	0.5		2.3		0.6	
N-BUTANE	0.3		0.6		0.1	
ISOBUTANE	0.1		0.5		0.1	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.3		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.4		2.2		0.9	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.2		0.0	
CARBON DIOXIDE	0.9		1.8		0.5	
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1046		1087		1047	
SPECIFIC GRAVITY	0.594		0.655		0.593	

	INDEX 9679 SAMPLE 12792		INDEX 9680 SAMPLE 7171		INDEX 9681 SAMPLE 7174	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	MILLER BLOCK 8-29		MONAHANS		MONAHANS	
WELL NAME	JANE DEAN MILLER NO. 2		SEALY-SMITH NO. 46		SEALY-SMITH NO. 46	
LOCATION	SEC. 14, BLK 8-29, PSL SUR.		SEC. 38, BLK. A, GMMBA SUR.		SEC. 38, BLK. A, GMMBA SUR.	
OWNER	GULF OIL CO.-U.S.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	01/10/64		08/16/48		01/15/58	
SAMPLED	04/28/71		08/11/59		08/11/59	
FORMATION	PENN-		PERM-TUBB NO. 2		PERM-TUBB NO. 1	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	7952		5532		5470	
WELLHEAD PRESSURE,PSIG	500		1442		1935	
OPEN FLOW, MCFD	152		6582		2300	
COMPONENT, MOLE PCT						
METHANE	81.9		83.1		81.7	
ETHANE	10.8		8.4		9.0	
PROPANE	4.8		3.6		3.7	
N-BUTANE	0.9		1.0		1.1	
ISOBUTANE	0.7		0.4		0.3	
N-PENTANE	0.2		0.1		TRACE	
ISOPENTANE	TRACE		0.5		0.9	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.8		2.4		2.7	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.02		0.10		0.10	
HEATING VALUE*	1214		1173		1185	
SPECIFIC GRAVITY	0.692		0.682		0.693	

	INDEX 9682 SAMPLE 14117		INDEX 9683 SAMPLE 1267		INDEX 9684 SAMPLE 5865	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	MONROE, DEEP		NOT GIVEN		PAYTON	
WELL NAME	ROMAE UNIT NO. 1		HUTCHINS CATTLE ASSOC.		BRANDENBERG NO. 1-B	
LOCATION	SEC. 3, BLK.1, WANW SUR.		SEC. 47		SEC. 4, BLK. 32, H&TC SUR.	
OWNER	AMARILLO OIL CO.		GULF PRODUCTION CO.		CITIES SERVICE OIL CO.	
COMPLETED	02/18/73		DRILL STEM TEST		03/21/55	
SAMPLED	07/17/74		05/17/26		06/21/55	
FORMATION	PENN-ATOKA		-LIME		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	14414		NOT GIVEN		10086	
WELLHEAD PRESSURE,PSIG	3000		NOT GIVEN		3343	
OPEN FLOW, MCFD	400		1000		19	
COMPONENT, MOLE PCT						
METHANE	97.7		30.7		86.1	
ETHANE	0.7		56.3		5.8	
PROPANE	0.1		---		2.8	
N-BUTANE	0.0		---		1.3	
ISOBUTANE	0.0		---		0.5	
N-PENTANE	0.0		---		0.7	
ISOPENTANE	0.0		---		0.1	
CYCLOPENTANE	0.0		---		0.2	
HEXANES PLUS	0.0		---		0.7	
NITROGEN	0.4		7.8		1.5	
OXYGEN	TRACE		2.7		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.1		0.6		0.2	
HELIUM	0.01		TRACE		0.10	
HEATING VALUE*	1005		1156		1187	
SPECIFIC GRAVITY	0.571		0.835		0.683	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9685 SAMPLE 15342	INDEX 9686 SAMPLE 12789	INDEX 9687 SAMPLE 11931
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	PHANTOM	POQUITO	PYOTE
WELL NAME	LEE "128" NO. 1	P. WALKER ET AL. NO. 2	PYOTE GAS UNIT NO. 7-1
LOCATION	SEC. 128, BLK. 34, H&TC SUR.	SEC. 40, A. J. WILSON SUR.	BLK. 16
OWNER	HNG OIL CO.	GULF OIL CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	05/19/78	07/16/65	06/12/69
SAMPLED	08/04/78	04/14/71	06/13/69
FORMATION	PENN-ATOKA	PERM-DELAWARE	DEVO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14933	5090	12729
WELLHEAD PRESSURE,PSIG	5200	700	598
OPEN FLOW, MCFD	7700	1900	3500
COMPONENT, MOLE PCT			
METHANE	95.7	89.4	92.8
ETHANE	2.3	5.1	3.3
PROPANE	0.4	1.1	1.1
N-BUTANE	0.1	0.3	0.3
ISOBUTANE	TRACE	0.4	TRACE
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	3.0	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	1.7
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1030	1072	1060
SPECIFIC GRAVITY	0.580	0.626	0.615

	INDEX 9688 SAMPLE 15961	INDEX 9689 SAMPLE 13108	INDEX 9690 SAMPLE 13573
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	QUIBAR	QUITO	QUITO
WELL NAME	GULF NO. 1	QUITO NO. 1	SABINE GAS UNIT NO. 1
LOCATION	SEC. 181,BLK. 34, H&TC SUR.	SEC. 210, BLK. 34, H&TC SUR.	SEC. 196, BLK. 34, H&TC SUR.
OWNER	EXXON CORP.	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.
COMPLETED	06/19/79	06/11/71	NOT GIVEN
SAMPLED	05/15/80	11/30/71	04/04/73
FORMATION	SILU-FUSSELMAN	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17735	14655	17207
WELLHEAD PRESSURE,PSIG	4915	5861	5200
OPEN FLOW, MCFD	23440	16000	35000
COMPONENT, MOLE PCT			
METHANE	94.3	93.7	60.7
ETHANE	0.5	0.4	0.3
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.4	0.7	0.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.4
CARBON DIOXIDE	4.5	4.9	37.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	972	959	634
SPECIFIC GRAVITY	0.605	0.608	0.933

	INDEX 9691 SAMPLE 15044	INDEX 9692 SAMPLE 14265	INDEX 9693 SAMPLE 14429
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	QUITO	QUITO E	QUITO E
WELL NAME	PIONEER GP; STATE NO. 1	UNIVERSITY NO. 1	P. WALKER NO. 2
LOCATION	SEC. 226, BLK.34, H&TC SUR.	SEC. 31, BLK. 18	SEC. 40, A. J. WILSON SUR.
OWNER	AMARILLO OIL CO.	GULF OIL CO.-U.S.	GULF OIL CO.-U.S.
COMPLETED	09/25/76	08/30/74	08/01/74
SAMPLED	06/27/77	02/--/75	08/07/75
FORMATION	PENN-ATOKA	PENN-ATOKA	SILU- FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15378	14300	17095
WELLHEAD PRESSURE,PSIG	10822	10117	5400
OPEN FLOW, MCFD	11600	11500	43000
COMPONENT, MOLE PCT			
METHANE	97.7	96.7	94.1
ETHANE	0.5	1.9	0.5
PROPANE	0.1	0.3	0.1
N-BUTANE	TRACE	TRACE	TRACE
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.5	0.5	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	4.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1001	1034	965
SPECIFIC GRAVITY	0.569	0.578	0.605

	INDEX 9694 SAMPLE 14430	INDEX 9695 SAMPLE 11446	INDEX 9696 SAMPLE 12148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	QUITO E	RHODA WALKER	ROC
WELL NAME	P. WALKER NO. 2	CYNTHIA MONROE NO. 1	CAPRITO NO. 82-1
LOCATION	SEC. 40, A. J. WILSON SUR.	SEC. 110, BLK 34, H&TC SUR.	SEC. 82, BLK. F, G&MMB&A SUR
OWNER	GULF OIL CO.-U.S.	RODEN OIL CO.	RODEN OIL CO.
COMPLETED	08/01/74	08/22/67	01/25/69
SAMPLED	08/07/75	04/08/68	12/15/69
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	ORDO-ELLENBURGER & MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	19370	20306	14105
WELLHEAD PRESSURE,PSIG	3400	6400	4624
OPEN FLOW, MCFD	11720	105000	11750
COMPONENT, MOLE PCT			
METHANE	98.0	85.5	96.7
ETHANE	0.2	0.7	1.1
PROPANE	0.1	0.2	0.4
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.4	3.0	0.4
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	9.4	0.7
HELIUM	0.02	0.02	0.03
HEATING VALUE*	999	905	1030
SPECIFIC GRAVITY	0.569	0.676	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9697 SAMPLE 12149		INDEX 9698 SAMPLE 15724		INDEX 9699 SAMPLE 12794	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	ROC		RODGERS		SAND HILLS W	
WELL NAME	CAPRITO 82-1		RODGERS NO. 1		W. A. ESTES NO. 70 D	
LOCATION	SEC. 82, BLK. F, G&MMB&A SUR		SEC. 95, BLK. F, G&MMB&A		SEC. 24, BLK. B-20, PSL SUR.	
OWNER	RODEN OIL CO.		MONSANTO CO.		GULF OIL CO.-U.S.	
COMPLETED	01/24/69		05/--/78		01/15/64	
SAMPLED	12/15/69		08/03/79		04/28/71	
FORMATION	DEVO-		ORDO-ELLENBURGER		DEVO-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	13265		18290		6200	
WELLHEAD PRESSURE,PSIG	4419		6200		758	
OPEN FLOW, MCFD	26000		16311		39000	
COMPONENT, MOLE PCT						
METHANE	93.5	----------	97.1	----------	89.9	----------
ETHANE	2.1	----------	1.2	----------	4.8	----------
PROPANE	0.5	----------	0.3	----------	1.9	----------
N-BUTANE	0.1	----------	0.2	----------	0.6	----------
ISOBUTANE	TRACE	----------	TRACE	----------	0.3	----------
N-PENTANE	0.2	----------	0.1	----------	0.2	----------
ISOPENTANE	0.0	----------	0.1	----------	0.1	----------
CYCLOPENTANE	TRACE	----------	TRACE	----------	0.1	----------
HEXANES PLUS	0.1	----------	0.1	----------	0.2	----------
NITROGEN	0.7	----------	0.3	----------	1.0	----------
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0	----------	TRACE		0.0	----------
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0	----------	0.0	----------	0.0	----------
CARBON DIOXIDE	2.6	----------	0.6	----------	1.0	----------
HELIUM	0.01	----------	0.02	----------	0.01	----------
HEATING VALUE*	1715	----------	1033	----------	1103	----------
SPECIFIC GRAVITY	0.605		0.580		0.638	

	INDEX 9700 SAMPLE 5559		INDEX 9701 SAMPLE 2030		INDEX 9702 SAMPLE 15298	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	SCOTT		SHIPLEY		SODA LAKE	
WELL NAME	C. MONROE NO. 1		HAZLETTE NO. 4		T. B. PRUETT NO. 1	
LOCATION	SEC. 35, BLK. 33, H&TC SUR.		SEC. 17, BLK. 5, H&TC SUR.		SEC. 23, BLK. 1, WANW RR CO.	
OWNER	CONTINENTAL OIL CO.		ATLANTIC RICHFIELD CO.		GULF OIL EXPL. & PROD. CO.	
COMPLETED	02/--/53		12/01/29		02/07/77	
SAMPLED	10/23/53		06/10/30		06/02/78	
FORMATION	PERM-DELAWARE		PERM-QUEEN		SILU-FUSSELMAN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	4800		2500		19100	
WELLHEAD PRESSURE,PSIG	2000		6		6040	
OPEN FLOW, MCFD	1400		NOT GIVEN		46800	
COMPONENT, MOLE PCT						
METHANE	88.8	----------	46.3	----------	94.1	----------
ETHANE	5.1	----------	46.6	----------	0.3	----------
PROPANE	2.1	----------	---	----------	TRACE	----------
N-BUTANE	0.6		---		TRACE	
ISOBUTANE	0.2	----------	---	----------	TRACE	----------
N-PENTANE	0.2		---		TRACE	
ISOPENTANE	0.1	----------	---	----------	TRACE	----------
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.1	----------	---	----------	0.1	----------
NITROGEN	2.5		6.0		0.6	
OXYGEN	TRACE	----------	0.4	----------	TRACE	----------
ARGON	0.0		---		TRACE	
HYDROGEN	0.1	----------	---	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		---		0.4	
CARBON DIOXIDE	0.0		0.7		4.4	
HELIUM	0.04		0.00		0.02	
HEATING VALUE*	1094		1304		966	
SPECIFIC GRAVITY	0.632		0.819		0.606	

	INDEX 9703 SAMPLE 15352		INDEX 9704 SAMPLE 13755		INDEX 9705 SAMPLE 13756	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	WAR-WINK		WAR-WINK S		WAR-WINK S	
WELL NAME	UNIVERSITY 9-18 NO. 2		UNIVERSITY 1-6 NO. 1		UNIVERSITY 1-6 NO. 1	
LOCATION	SEC. 9,BLK.18,UNIV. LD. SUR.		SEC.6,BLK.18,UNIV.LANDS SUR.		SEC.6,BLK.18,UNIV.LANDS SUR.	
OWNER	GETTY OIL CO.		HNG OIL CO.		HNG OIL CO.	
COMPLETED	08/05/76		07/21/72		07/20/72	
SAMPLED	08/25/78		10/12/73		10/12/73	
FORMATION	PENN-ATOKA		SILU-FUSSELMAN		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	13839		17686		20133	
WELLHEAD PRESSURE,PSIG	2750		5500		6000	
OPEN FLOW, MCFD	4000		2250		1080	
COMPONENT, MOLE PCT						
METHANE	98.2	----------	94.0	----------	96.8	----------
ETHANE	0.5		0.5		1.2	
PROPANE	0.8	----------	0.1	----------	0.4	----------
N-BUTANE	0.2		TRACE		0.1	
ISOBUTANE	0.1	----------	TRACE	----------	0.2	----------
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.1	----------	TRACE	----------	0.1	----------
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1	----------	TRACE	----------	0.1	----------
NITROGEN	0.4		0.7		0.3	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.5		0.0	
CARBON DIOXIDE	0.6		4.1		0.7	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1158		967		1032	
SPECIFIC GRAVITY	0.596		0.603		0.581	

	INDEX 9706 SAMPLE 14414		INDEX 9707 SAMPLE 2031		INDEX 9708 SAMPLE 12799	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WARD		WARD		WARD	
FIELD	WAR-WINK S		WARD S		WARD S	
WELL NAME	UNIVERSITY 10-18 NO. 2		BENNET NO. A-1, OIL WELL		NORTH CENTRAL GAS UNIT NO. 1	
LOCATION	SEC. 10, BLK. 18, UL SUR.		SEC. 16, BLK. 34, H&TC SUR.		SEC. 19, BLK. B-29, PSL SUR.	
OWNER	SKELLY OIL CO. ET AL.		ATLANTIC RICHFIELD CO.		GULF OIL CO.-U.S.	
COMPLETED	03/26/76		12/16/29		08/31/64	
SAMPLED	07/15/76		06/09/30		04/28/71	
FORMATION	PERM- WICHITA-ALBANY		PERM-TATES & SEVEN RIVERS		PENN-LIME U	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	11466		2348		7341	
WELLHEAD PRESSURE,PSIG	7713		NOT GIVEN		440	
OPEN FLOW, MCFD	2400		NOT GIVEN		307	
COMPONENT, MOLE PCT						
METHANE	83.1	----------	51.0	----------	84.1	----------
ETHANE	9.4		43.8		8.0	
PROPANE	4.0	----------	---	----------	4.3	----------
N-BUTANE	0.9		---		1.1	
ISOBUTANE	0.4	----------	---	----------	0.6	----------
N-PENTANE	0.1		---		0.4	
ISOPENTANE	0.2	----------	---	----------	0.1	----------
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.1	----------	---	----------	0.2	----------
NITROGEN	1.4		4.8		1.0	
OXYGEN	0.0	----------	0.2	----------	0.0	----------
ARGON	TRACE		---		0.0	
HYDROGEN	0.0	----------	---	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1	----------	0.2	----------	0.1	----------
HELIUM	0.32		0.23		0.32	
HEATING VALUE*	1176	----------	1152	----------	1200	----------
SPECIFIC GRAVITY	0.678		0.734		0.684	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9709 SAMPLE 12800	INDEX 9710 SAMPLE 15054	INDEX 9711 SAMPLE 1727
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	WARD S	WILDCAT	WINK
WELL NAME	JANE DEAN MILLER NO. 3	ROBERTSON "138" NO. 1	SEALY RANCH NO. 1
LOCATION	SEC. 16, BLK. B-29, PSL SUR.	SEC.138, BLK. 34, H&TC SUR.	SEC. 95, BLK. A, GMMB&A SUR.
OWNER	GULF OIL CO.-U.S.	HNG OIL CO.	PRAIRIE OIL & GAS CO.
COMPLETED	05/22/64	11/27/76	--/--/28
SAMPLED	04/26/71	07/--/77	03/29/29
FORMATION	PENN-DETRITAL U	ORDO-ELLENBURGER	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7680	20823	2770
WELLHEAD PRESSURE,PSIG	360	4120	1100
OPEN FLOW, MCFD	680	24300	5212
COMPONENT, MOLE PCT			
METHANE	78.5	59.4	78.3
ETHANE	12.3	8.3	17.0
PROPANE	5.9	8.4	---
N-BUTANE	1.2	4.2	---
ISOBUTANE	0.6	2.9	---
N-PENTANE	0.3	0.9	---
ISOPENTANE	0.2	2.7	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	1.0	---
NITROGEN	0.7	11.5	3.6
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.5	0.9
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1265	1413	1098
SPECIFIC GRAVITY	0.721	0.934	0.663

	INDEX 9712 SAMPLE 15444	INDEX 9713 SAMPLE 15840	INDEX 9714 SAMPLE 1908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	AVIATORS S	BRUNI NE	BRUNI NW
WELL NAME	BRUNI-LOPEZ UNIT NO. 1	ROSA V. DEBENAVIDES NO. 1	BENAVIDES NO. 1
LOCATION	J.T. WRIGHT SUR. 309,A-1908	M. ARISPE GRANT, A-850	NOT GIVEN
OWNER	KILLAM & HURD, LTD.	HUGHES & HUGHES	MAGNOLIA PETROLEUM CO.
COMPLETED	06/08/77	01/26/79	--/--/29
SAMPLED	11/17/78	11/20/79	12/11/29
FORMATION	TERT-WILCOX	EOCE-	-SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10600	10354	2800
WELLHEAD PRESSURE,PSIG	7200	6920	750
OPEN FLOW, MCFD	5600	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	89.8	98.6
ETHANE	7.3	0.4	0.0
PROPANE	2.3	TRACE	---
N-BUTANE	0.4	0.1	---
ISOBUTANE	0.6	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	TRACE	---
NITROGEN	0.2	0.2	0.9
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.4	9.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1112	920	999
SPECIFIC GRAVITY	0.689	0.650	0.562

	INDEX 9715 SAMPLE 8725	INDEX 9716 SAMPLE 13539	INDEX 9717 SAMPLE 14899
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	COLE W	DOS HERMANOS	LAREDO LOBO
WELL NAME	ROSA U. BENAVIDES J NO. 1	O.S. PETTY NO. 1	W. HUBBARD NO. 2
LOCATION	NOT GIVEN	SEC.11, I&GN RR CO.SUR.A-168	14 MI. SE LAREDO
OWNER	MORGAN MINERALS CORP.	TESORO PETROLEUM CORP.	CONTINENTAL OIL CO.
COMPLETED	07/22/62	08/27/71	07/05/75
SAMPLED	10/19/62	02/13/73	02/08/77
FORMATION	EOCE-WILCOX	CRET-OLMOS	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8390	5150	8427
WELLHEAD PRESSURE,PSIG	3805	2000	1575
OPEN FLOW, MCFD	7500	7000	82000
COMPONENT, MOLE PCT			
METHANE	92.9	83.4	90.0
ETHANE	2.6	9.1	5.8
PROPANE	0.7	3.6	1.6
N-BUTANE	0.2	1.1	0.3
ISOBUTANE	0.1	0.9	0.4
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	0.5	0.2
NITROGEN	0.1	0.5	0.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.1	1.2
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1021	1232	1108
SPECIFIC GRAVITY	0.610	0.699	0.634

	INDEX 9718 SAMPLE 11605	INDEX 9719 SAMPLE 11606	INDEX 9720 SAMPLE 11607
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	LAS TIENDAS	LAS TIENDAS	LAS TIENDAS
WELL NAME	BEASLEY-CONNEVEY NO. 3	BEASLEY-CONNEVEY NO. 3	BEASLEY-CONNEVEY NO. 2
LOCATION	30 MI. NW LAREDO	30 MI. NW LAREDO	30 MI. NW LAREDO
OWNER	HUGHES & HUGHES	HUGHES & HUGHES	HUGHES & HUGHES
COMPLETED	02/--/68	02/--/68	10/21/67
SAMPLED	07/23/68	07/24/68	07/24/68
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3000	3500	3250
WELLHEAD PRESSURE,PSIG	1023	1374	1385
OPEN FLOW, MCFD	3000	6500	10500
COMPONENT, MOLE PCT			
METHANE	99.0	98.2	98.9
ETHANE	0.2	0.2	0.3
PROPANE	TRACE	TRACE	0.0
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	1.3	0.4
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1006	998	1014
SPECIFIC GRAVITY	0.559	0.562	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9721 SAMPLE 11609	INDEX 9722 SAMPLE 13608	INDEX 9723 SAMPLE 13609
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	LAS TIENDAS	LAS TIENDAS	LAS TIENDAS
WELL NAME	BEASLEY-CONNEVEY NO. 2	BOOTH NO. B-2	BEASLEY-CONNEVEY NO. 7
LOCATION	30 MI. NW LAREDO	J. GALAN SUR. NO. 2292	G. SCHWARTZ SUR. NO. 97
OWNER	HUGHES & HUGHES	HUGHES & HUGHES	HUGHES & HUGHES
COMPLETED	10/21/67	08/23/71	11/29/70
SAMPLED	07/24/68	06/04/73	06/04/73
FORMATION	-400 FOOT SAND	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	400	2833	2582
WELLHEAD PRESSURE,PSIG	125	468	508
OPEN FLOW, MCFD	NOT GIVEN	5000	390
COMPONENT, MOLE PCT			
METHANE	98.8	97.7	97.9
ETHANE	0.2	0.2	0.4
PROPANE	TRACE	0.1	0.3
N-BUTANE	0.0	0.1	TRACE
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	TRACE
NITROGEN	1.0	1.0	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1004	1029	1013
SPECIFIC GRAVITY	0.560	0.578	0.567

	INDEX 9724 SAMPLE 7047	INDEX 9725 SAMPLE 13962	INDEX 9726 SAMPLE 3879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	NICHOLSON	OWENS	RETAMIA
WELL NAME	NICHOLSON NO. 2	E.B. JONES NO. 3	BRUNI NO. 1
LOCATION	SUR. 985	P. BENAVIDES SUR. NO. 1142	7 MI. SSE OF PESCADITO
OWNER	W. L. COTTON	TEXAS OIL & GAS CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/47	03/11/72	02/16/44
SAMPLED	05/01/59	02/04/74	07/15/44
FORMATION	EOCE-WILCOX	CRET-OLMOS	EOCE-CARRIZO & WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5965	7125	4962
WELLHEAD PRESSURE,PSIG	2200	1280	NOT GIVEN
OPEN FLOW, MCFD	5400	10000	5400
COMPONENT, MOLE PCT			
METHANE	90.9	96.9	88.4
ETHANE	5.2	0.4	10.8
PROPANE	1.9	0.1	---
N-BUTANE	0.4	0.0	---
ISOBUTANE	0.4	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	TRACE	1.9	0.0
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.4	0.4
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1113	995	1089
SPECIFIC GRAVITY	0.629	0.570	0.614

	INDEX 9727 SAMPLE 14912	INDEX 9728 SAMPLE 12200	INDEX 9729 SAMPLE 14278
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	SANCHEZ HILL	TALVEZ S	THOMPSONVILLE NE
WELL NAME	KILLAM & HERD NO. 1	JACK WELHAUSER NO. 1	BRUNI ESTATE D NO. 2X
LOCATION	10 MI. NE LAREDO	W.W.GRIFFIN SUR.NO.28,A2263	BLK. 32 A. NE ARRIBA GR.A199
OWNER	GENERAL CRUDE OIL CO.	SOUTHERN PETR. EXPL. INC.	ATLANTIC RICHFIELD CO.
COMPLETED	02/07/75	09/24/68	09/17/72
SAMPLED	02/14/77	02/10/70	02/25/75
FORMATION	EOCE-WILCOX	EOCE-MIRANDO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6161	1356	9786
WELLHEAD PRESSURE,PSIG	2324	300	5300
OPEN FLOW, MCFD	6000	2660	9000
COMPONENT, MOLE PCT			
METHANE	90.6	97.0	87.8
ETHANE	3.9	0.1	4.0
PROPANE	2.0	TRACE	1.6
N-BUTANE	0.6	0.0	0.4
ISOBUTANE	0.3	0.0	0.4
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.6	0.0	0.3
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.1
NITROGEN	0.7	2.7	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	5.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1123	985	1051
SPECIFIC GRAVITY	0.642	0.565	0.665

	INDEX 9730 SAMPLE 15288	INDEX 9731 SAMPLE 4331	INDEX 9732 SAMPLE 11608
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	UMBRELLA	WILDCAT	WILDCAT
WELL NAME	FEE 1-P-25	AMADO PEREZ NO. 1	PALAFOX EXP. CO. NO. 12-1
LOCATION	3 MI. NE LAREDO	SEC. 459	40 MI. NW LAREDO
OWNER	KILLAM & HURD, LTD.	HICKOK & REYNOLDS, INC.	HUGHES & HUGHES
COMPLETED	10/13/76	04/20/47	07/05/68
SAMPLED	05/24/78	06/05/47	07/24/68
FORMATION	EOCE-WILCOX	EOCE-CLAIBORNE L	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7150	1264	2800
WELLHEAD PRESSURE,PSIG	2900	498	1105
OPEN FLOW, MCFD	2400	25500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	98.8	97.2
ETHANE	4.5	0.0	0.2
PROPANE	1.8	---	0.1
N-BUTANE	0.4	---	0.0
ISOBUTANE	0.2	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.3	0.9	2.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1047	1001	991
SPECIFIC GRAVITY	0.617	0.560	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9733 SAMPLE 15202	INDEX 9734 SAMPLE 5021	INDEX 9735 SAMPLE 11146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEST BAT, ROUGE	WHARTON	WHARTON
FIELD	J. C. MARTIN	BERNARD W	BLUE BASIN
WELL NAME	E. T. MARTINEZ NO. 1	B. G. WOMACK NO. 1	ANNA SHULT NO. 1
LOCATION	J. A. TRAVINO PORC 56, A-97	JOHN F. STEPHENS SUR. A-415	JOS. HYLAND SUR. A-626
OWNER	GULF OIL & MINERALS CO.	TIDEWATER ASSOC. OIL CO.	HAAS BROTHERS
COMPLETED	07/03/76	11/15/50	07/22/66
SAMPLED	01/31/78	03/05/51	10/04/67
FORMATION	EOCE-WILCOX	EOCE-CLODINE	OLIG-5900
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7754	7086	5901
WELLHEAD PRESSURE,PSIG	4700	3434	2053
OPEN FLOW, MCFD	110000	13900	9600
COMPONENT, MOLE PCT			
METHANE	94.4	90.2	99.0
ETHANE	3.2	5.5	0.3
PROPANE	0.6	2.1	TRACE
N-BUTANE	0.2	0.6	0.0
ISOBUTANE	0.1	0.4	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.3	0.3	0.0
NITROGEN	0.2	0.0	0.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.0	0.5	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1053	1130	1008
SPECIFIC GRAVITY	0.598	0.639	0.558

	INDEX 9736 SAMPLE 11147	INDEX 9737 SAMPLE 15389	INDEX 9738 SAMPLE 13390
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	BLUE BASIN	BLUE BASIN	BONUS
WELL NAME	ANNA SHULT NO. 1	G. A. DUFFY "B" NO. 3	C. C. BOETTCHER UNIT NO. 1
LOCATION	JOS. HYLAND SUR. A-626	SOUTH OF PIERCE	JOSEPH NEWMAN SUR. A-48
OWNER	HAAS BROTHERS	TEXACO INC.	TEXAS OIL & GAS CORP.
COMPLETED	07/22/66	02/21/76	06/20/71
SAMPLED	10/04/67	09/29/78	09/21/72
FORMATION	OLIG-CH-1	OLIG-FRIO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5842	4522	7566
WELLHEAD PRESSURE,PSIG	1727	1795	2500
OPEN FLOW, MCFD	17700	109000	8350
COMPONENT, MOLE PCT			
METHANE	99.1	96.4	89.7
ETHANE	0.3	0.2	5.6
PROPANE	TRACE	0.0	2.3
N-BUTANE	0.0	0.1	0.5
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	2.5	0.1
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1009	989	1124
SPECIFIC GRAVITY	0.559	0.572	0.639

	INDEX 9739 SAMPLE 12562	INDEX 9740 SAMPLE 5150	INDEX 9741 SAMPLE 4549
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	DABOVAL	DUFFY	EGYPT
WELL NAME	GUS LILLIE NO. 1	DUFFY NO. 1	DUNCAN NO. 1
LOCATION	SEC.73, ETRR CO. SUR. A-130	NOT GIVEN	ALEX. EDGAR SUR.
OWNER	NAFCO OIL & GAS INC.	F. WM. CARR	CLAUD B. HAMILL
COMPLETED	05/17/69	01/10/51	02/10/48
SAMPLED	12/01/79	11/30/51	06/11/48
FORMATION	OLIG-FRIO	NOT GIVEN	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6210	NOT GIVEN	6720
WELLHEAD PRESSURE,PSIG	1800	2295	2400
OPEN FLOW, MCFD	7600	30000	1000
COMPONENT, MOLE PCT			
METHANE	94.7	96.3	69.3
ETHANE	3.0	2.1	21.4
PROPANE	1.0	0.4	---
N-BUTANE	0.2	0.1	---
ISOBUTANE	0.3	TRACE	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	0.3	0.6	8.4
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1073	1032	1086
SPECIFIC GRAVITY	0.599	0.578	0.703

	INDEX 9742 SAMPLE 13728	INDEX 9743 SAMPLE 4347	INDEX 9744 SAMPLE 9595
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	EGYPT	EL CAMPO	HILLIE
WELL NAME	F.B. DUNCAN NO. 1-C	R. HOLUB B NO. 1	MILLER NO. 1
LOCATION	ALEX EDGAR SUR. A-93	SEC. 48, W.D. IVEY A-516 SUR	SEC. 76, BAGNAL SUR. A-501
OWNER	MCCORMICK OIL & GAS CORP.	SEABOARD OIL CO.	ARMOUR PROPERTIES
COMPLETED	01/09/71	06/30/47	03/13/63
SAMPLED	09/26/73	09/02/47	10/07/64
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2773	6094	6970
WELLHEAD PRESSURE,PSIG	755	2405	2625
OPEN FLOW, MCFD	7676	6500	105000
COMPONENT, MOLE PCT			
METHANE	98.8	90.8	93.1
ETHANE	0.1	7.8	3.9
PROPANE	0.1	---	1.3
N-BUTANE	0.0	---	0.4
ISOBUTANE	0.0	---	0.4
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	0.8	0.6	0.1
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1005	1060	1100
SPECIFIC GRAVITY	0.561	0.601	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9745 SAMPLE 10881	INDEX 9746 SAMPLE 13958	INDEX 9747 SAMPLE 15267
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	HOLUB	HUNGERFORD	HUNGERFORD E
WELL NAME	EDMUND HOLUB NO. 1-U	6.C. DUNCAN NO. 2	CARL HOSMAN NO. 1
LOCATION	SEC. 38, E. C. OGDEN SUR.	HUGH ROGERS SUR. A-325	I&GN RR SUR. A-285
OWNER	PERRY R. BASS, INC.	TEXAS OIL & GAS CORP.	CADDO OIL CO.
COMPLETED	03/30/66	03/08/72	09/18/76
SAMPLED	03/03/67	03/07/74	04/19/78
FORMATION	OLIG-FRIO	MIOC-3000 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6356	3048	3165
WELLHEAD PRESSURE,PSIG	2279	594	1057
OPEN FLOW, MCFD	20200	8400	7002
COMPONENT, MOLE PCT			
METHANE	98.4	98.2	98.3
ETHANE	3.0	TRACE	0.1
PROPANE	0.6	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0 *
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.1	1.6	1.1
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1045	996	1000
SPECIFIC GRAVITY	0.592	0.563	0.564

	INDEX 9748 SAMPLE 4719	INDEX 9749 SAMPLE 13381	INDEX 9750 SAMPLE 13820
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	HUTCHINS	HUTCHINS S	JONES CREEK
WELL NAME	ZAPP NO. 1	LACY W. ARMOUR ET AL NO. 3	ZIMMERMAN-NOHAVITZA NO. 1
LOCATION	SEC. 15, I&GN SUR.	I&GN RR SUR. NO. 22, A 240	I&GN RR SUR.
OWNER	MCDONNALD OIL CO.	PERRY R. BASS, INC.	TERRA RESOURCES, INC.
COMPLETED	NOT GIVEN	02/17/72	04/04/73
SAMPLED	07/08/49	09/15/72	11/20/73
FORMATION	MIOC-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3110	4978	4650
WELLHEAD PRESSURE,PSIG	1225	1800	1850
OPEN FLOW, MCFD	150000	17700	3400
COMPONENT, MOLE PCT			
METHANE	98.1	98.6	97.8
ETHANE	0.1	0.8	0.5
PROPANE	0.1	0.1	0.2
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.0	0.0 *	0.2
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	0.1	0.0	0.4
NITROGEN	1.0	0.3	0.2
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1010	1016	1044
SPECIFIC GRAVITY	0.566	0.563	0.580

	INDEX 9751 SAMPLE 10630	INDEX 9752 SAMPLE 11192	INDEX 9753 SAMPLE 15136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE	LOUISE	LOUISE
WELL NAME	WILLIS MCINTYRE NO. 7	ISAAC WEAVER NO. 6	HAWES NO. 1-T
LOCATION	MORRIS & CUMMINGS SUR. A-286	SEC. 22; JMBROWNSON SUR.A797	2 MI. S OF LOUISE
OWNER	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIF.	PATRICK PETROLEUM CO.
COMPLETED	12/01/65	02/22/66	04/28/75
SAMPLED	06/24/66	10/30/67	11/01/77
FORMATION	OLIG-OWENS	OLIG-EVANS 5600	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6596	5598	6348
WELLHEAD PRESSURE,PSIG	1949	2142	2100
OPEN FLOW, MCFD	16300	6900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	95.7	94.8
ETHANE	3.7	2.6	2.8
PROPANE	1.4	0.4	1.1
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.3	0.3	0.2
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1086	1059	1073
SPECIFIC GRAVITY	0.621	0.588	0.598

	INDEX 9754 SAMPLE 15137	INDEX 9755 SAMPLE 15139	INDEX 9756 SAMPLE 15140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE	LOUISE	LOUISE
WELL NAME	HAWES NO. 1-C	HENDERSON NO. 2-C	HENDERSON NO. 2-T
LOCATION	2 MI. S OF LOUISE	T.J. WINSTON SUR. A-66	T.J. WINSTON SUR. A-66
OWNER	PATRICK PETROLEUM CO.	PATRICK PETROLEUM CO.	PATRICK PETROLEUM CO.
COMPLETED	04/24/75	04/11/75	04/11/75
SAMPLED	11/01/77	11/01/77	11/01/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5966	5914	5980
WELLHEAD PRESSURE,PSIG	1400	1500	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	95.5	91.6
ETHANE	5.4	2.6	3.5
PROPANE	2.5	0.8	1.8
N-BUTANE	0.8	0.2	0.7
ISOBUTANE	0.9	0.1	0.5
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.4	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	0.1	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1147	1056	1127
SPECIFIC GRAVITY	0.659	0.589	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9757 SAMPLE 4297	INDEX 9758 SAMPLE 12339	INDEX 9759 SAMPLE 12340
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE N	LOUISE N	LOUISE N
WELL NAME	S. G. SHRADER NO. 1	PEGGY HAWES NO. 1-T	PEGGY HAWES NO. 1-C
LOCATION	SEC. 40, WCRR CO. SUR.	THOS. KEMP SUR. A-265	THOS. KEMP SUR. A-265
OWNER	JOHNSTON & JOHNSTON	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	05/01/46	09/05/69	09/05/69
SAMPLED	05/05/47	07/30/70	07/30/70
FORMATION	OLIG-FRIO	MIOC-BERGSTROM 2750 FT.	MIOC-HAWES 2700 FT.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4158	2766	2723
WELLHEAD PRESSURE,PSIG	1443	787	1310
OPEN FLOW, MCFD	15000	11500	7800
COMPONENT, MOLE PCT			
METHANE	98.5	99.3	99.3
ETHANE	0.0	0.1	0.1
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.6	0.4	0.5
OXYGEN	0.2	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	998	1008	1008
SPECIFIC GRAVITY	0.565	0.557	0.558

	INDEX 9760 SAMPLE 12341	INDEX 9761 SAMPLE 12342	INDEX 9762 SAMPLE 4081
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE N	LOUISE N	MAGNET WITHERS
WELL NAME	C. E. BERGSTROM NO. 1-A	D. W. BECK NO. 1	COCKBURN B-2
LOCATION	ELLIS BENSON SUR. A-68	A. FRENZEL SUR. NO. 6	NOT GIVEN
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	ATLANTIC REFINING CO.
COMPLETED	09/13/69	08/27/69	12/20/43
SAMPLED	07/30/70	07/30/70	05/24/45
FORMATION	OLIG-4670 FT. SAND	OLIG-3900 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4720	3919	4212
WELLHEAD PRESSURE,PSIG	1836	1626	1850
OPEN FLOW, MCFD	12800	7100	110000
COMPONENT, MOLE PCT			
METHANE	99.4	99.3	98.6
ETHANE	TRACE	0.1	0.5
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.3	0.3	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1007	1008	1008
SPECIFIC GRAVITY	0.556	0.558	0.561

	INDEX 9763 SAMPLE 9576	INDEX 9764 SAMPLE 10147	INDEX 9765 SAMPLE 10148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	MAGNET WITHERS	MAGNET WITHERS E	MAGNET WITHERS E
WELL NAME	H. C. COCKBURN NO. 60-D	H. C. COCKBURN NO. 70	H. C. COCKBURN NO. 70
LOCATION	BLK. 110, S. CASTLEMAN SUR.	S. CASTLEMAN SUR. A-12	S. CASTLEMAN SUR. A-12
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/26/62	04/19/64	04/18/64
SAMPLED	09/30/64	09/22/65	09/22/65
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6592	6886	7082
WELLHEAD PRESSURE,PSIG	2465	2500	2567
OPEN FLOW, MCFD	260000	48000	54000
COMPONENT, MOLE PCT			
METHANE	94.3	93.0	92.8
ETHANE	3.4	4.3	3.8
PROPANE	0.6	1.2	1.3
N-BUTANE	0.2	0.2	0.4
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	0.2	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1078	1081	1106
SPECIFIC GRAVITY	0.602	0.605	0.618

	INDEX 9766 SAMPLE 10149	INDEX 9767 SAMPLE 3921	INDEX 9768 SAMPLE 11673
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	MAGNET WITHERS E	MENEFEE	MENEFEE
WELL NAME	H. C. COCKBURN NO. 70	A. G. MENEFEE NO. 2	VITERA NO. 1
LOCATION	S. CASTLEMAN SUR. A-12	6 MI. NW OF LOUISE	JOHN BRIDGES SUR. A-73
OWNER	HUMBLE OIL & REFINING CO.	SALT DOME OIL CORP.	ACCO OIL & GAS CO.
COMPLETED	04/21/64	01/29/44	05/15/67
SAMPLED	09/22/65	08/24/44	10/23/68
FORMATION	OLIG-FRIO	OLIG-FRIO U	OLIG-MENEFEE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6814	4535	4415
WELLHEAD PRESSURE,PSIG	2485	1850	1793
OPEN FLOW, MCFD	50000	50000	23500
COMPONENT, MOLE PCT			
METHANE	93.0	99.2	98.6
ETHANE	3.9	0.0	0.5
PROPANE	1.0	---	0.1
N-BUTANE	0.3	---	0.0
ISOBUTANE	0.3	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.3	---	0.0
NITROGEN	0.5	0.0	0.3
OXYGEN	0.0	0.3	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1094	1005	1011
SPECIFIC GRAVITY	0.614	0.561	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9769 SAMPLE 11674		INDEX 9770 SAMPLE 13052		INDEX 9771 SAMPLE 14408	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHARTON		WHARTON		WHARTON	
FIELD	MENEFEE		MENEFEE N		MENEFEE N	
WELL NAME	VITERA NO. 1		HOUSTON BANK & TRUST NO. 1		T. N. MENEFEE NO. 1	
LOCATION	JOHN BRIDGES SUR. A-73		SAMUEL CUMMINGS SUR. A-83		S. P. MIDDLETON LEAGUE A-269	
OWNER	ACCO OIL & GAS CO.		MACPET		WINDFOHR OIL CO.	
COMPLETED	05/15/67		10/22/70		04/28/73	
SAMPLED	10/23/68		09/29/71		07/01/75	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5073		4998		4530	
WELLHEAD PRESSURE,PSIG	1811		1560		960	
OPEN FLOW, MCFD	4100		34000		2400	
COMPONENT, MOLE PCT						
METHANE	96.3		97.6		98.3	
ETHANE	2.3		1.6		0.7	
PROPANE	0.3		0.1		0.1	
N-BUTANE	0.1		0.0		TRACE	
ISOBUTANE	0.1		TRACE		TRACE	
N-PENTANE	0.1		0.0		0.0	
ISOPENTANE	0.0		TRACE		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		TRACE	
NITROGEN	0.3		0.3		0.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.4	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1045		1025		1011	
SPECIFIC GRAVITY	0.581		0.568		0.565	

	INDEX 9772 SAMPLE 15390		INDEX 9773 SAMPLE 15397		INDEX 9774 SAMPLE 11700	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHARTON		WHARTON		WHARTON	
FIELD	PIERCE RANCH		PIERCE RANCH		SPANISH CAMP	
WELL NAME	PIERCE ESTATE NO. E-9		PIERCE ESTATE NO. E-9		HILL UNIT A NO. 1	
LOCATION	IRR SUR. 11, A-447		IRR SUR. 11, A-447		ROBERT KUYKENDALL SUR. A-40	
OWNER	TEXACO INC.		TEXACO INC.		GOODALE, BERTMAN & CO. INC.	
COMPLETED	12/07/76		07/20/77		10/05/66	
SAMPLED	09/29/78		10/04/78		12/06/68	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6150		4906		4229	
WELLHEAD PRESSURE,PSIG	2230		2045		1445	
OPEN FLOW, MCFD	24500		2900		35000	
COMPONENT, MOLE PCT						
METHANE	79.5		92.8		99.2	
ETHANE	4.1		2.1		0.2	
PROPANE	0.7		0.5		TRACE	
N-BUTANE	0.2		0.1		0.0	
ISOBUTANE	0.1		TRACE		0.0	
N-PENTANE	0.0		TRACE		0.0	
ISOPENTANE	0.1		0.1		0.0	
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.2		0.3		0.0	
NITROGEN	10.8		1.8		0.3	
OXYGEN	2.5		0.3		0.1	
ARGON	0.1		TRACE		0.2	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.5		1.8		0.0	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	925		1017		1009	
SPECIFIC GRAVITY	0.668		0.608		0.559	

	INDEX 9775 SAMPLE 13956		INDEX 9776 SAMPLE 13957		INDEX 9777 SAMPLE 14199	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHARTON		WHARTON		WHARTON	
FIELD	SPANISH CAMP S		SPANISH CAMP S		STIMMEL	
WELL NAME	M. SORREL A NO. 1		VIRGINIA BROUSE NO. 1		OUTLAR NO.1	
LOCATION	STEPHEN F. AUSTIN SUR. NO. 3		STEPHEN F. AUSTIN SUR. A-3		WILLIAM MCFARLAND SUR.	
OWNER	TEXAS OIL & GAS CORP.		TEXAS OIL & GAS CORP.		TEXAS OIL & GAS CORP.	
COMPLETED	04/15/72		06/15/72		10/24/74	
SAMPLED	03/07/74		03/07/74		10/30/74	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	4556		5206		4764	
WELLHEAD PRESSURE,PSIG	340		2005		1845	
OPEN FLOW, MCFD	230		14000		790	
COMPONENT, MOLE PCT						
METHANE	99.0		98.7		93.8	
ETHANE	0.1		0.4		2.8	
PROPANE	TRACE		TRACE		0.4	
N-BUTANE	0.0		0.0		0.1	
ISOBUTANE	0.0		0.0		0.1	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		TRACE	
NITROGEN	0.8		0.3		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.6		2.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1005		1007		1017	
SPECIFIC GRAVITY	0.561		0.569		0.599	

	INDEX 9778 SAMPLE 4807		INDEX 9779 SAMPLE 15576		INDEX 9780 SAMPLE 15577	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHARTON		WHARTON		WHARTON	
FIELD	WHARTON		WHARTON W		WHARTON W	
WELL NAME	LOUISE HUTCHINS NO. 1		RUST ESTATE NO. 3-C		BROUGHTON-STATE UNIT NO. 1	
LOCATION	J. TUMLINSON SUR.		S. F. AUSTIN LG. A-3		W. KUYKENDALL LG., A-39	
OWNER	TEXAS CO.		REALITOS ENERGY CORP.		REALITOS ENERGY CORP.	
COMPLETED	08/26/49		05/17/77		05/12/78	
SAMPLED	11/21/49		02/25/79		02/25/79	
FORMATION	OLIG-		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	225		220		220	
DEPTH, FEET	4667		5200		5700	
WELLHEAD PRESSURE,PSIG	1443		1785		1985	
OPEN FLOW, MCFD	74000		6700		3600	
COMPONENT, MOLE PCT						
METHANE	98.7		97.7		96.9	
ETHANE	0.5		1.2		2.0	
PROPANE	0.1		0.1		0.1	
N-BUTANE	0.1		TRACE		0.1	
ISOBUTANE	0.1		TRACE		0.0	
N-PENTANE	0.0		TRACE		0.0	
ISOPENTANE	0.0		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.1		0.4		0.4	
OXYGEN	0.1		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1021		1019		1029	
SPECIFIC GRAVITY	0.564		0.568		0.573	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9781 SAMPLE 3986	INDEX 9782 SAMPLE 4759	INDEX 9783 SAMPLE 4794
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	H. R. MATZKE NO. 1	E. A. WEINHEIMER NO. 1	F. E. APPLING NO. 1
LOCATION	I&GN SUR. NO. 26	NOT GIVEN	NOT GIVEN
OWNER	TEXAS CO.	R. J. CARAWAY	R. J. CARAWAY
COMPLETED	01/08/45	NOT GIVEN	06/29/49
SAMPLED	03/14/45	10/01/49	10/01/49
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5775	5203	5231
WELLHEAD PRESSURE,PSIG	2238	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	48000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	95.5	94.8
ETHANE	2.8	3.6	3.8
PROPANE	---	0.2	0.3
N-BUTANE	---	TRACE	0.1
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.0	0.2	0.2
OXYGEN	0.0	0.1	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1032	1042	1051
SPECIFIC GRAVITY	0.571	0.580	0.588

	INDEX 9784 SAMPLE 5047	INDEX 9785 SAMPLE 5048	INDEX 9786 SAMPLE 15950
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHEELER
FIELD	WITHERS N	WITHERS N	CANDICE
WELL NAME	ARMOUR NO. 2	ARMOUR NO. 3	SHELTON NO. 1
LOCATION	CHAS. HOWARD SUR.	CHAS. HOWARD SUR.	SEC. 77, BLK. A-5, H&GN SUR.
OWNER	COPETCO CORP.	COPETCO CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	12/20/51	02/20/51	08/29/79
SAMPLED	05/28/51	05/28/51	04/21/80
FORMATION	OLIG-NORMAL	OLIG-NORMAL	PENN-MORROW
GEOLOGIC PROVINCE CODE	220	220	360
DEPTH, FEET	5272	5273	12597
WELLHEAD PRESSURE,PSIG	2038	2305	3712
OPEN FLOW, MCFD	22	44	2400
COMPONENT, MOLE PCT			
METHANE	96.1	96.7	82.3
ETHANE	1.9	1.9	9.8
PROPANE	0.3	0.3	4.3
N-BUTANE	0.1	0.1	1.0
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.7	0.2	0.9
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1024	1032	1203
SPECIFIC GRAVITY	0.578	0.576	0.692

	INDEX 9787 SAMPLE 14875	INDEX 9788 SAMPLE 15287	INDEX 9789 SAMPLE 16133
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	FARRIS	FARRIS	FARRIS
WELL NAME	FARRIS-C NO. 1	BEN TROUT NO. 2	FARRIS "C" NO. 2-18
LOCATION	SEC. 18, BLK. A-4, H&GN SUR.	SEC. 17, BLK. A-4, H&GN SUR.	SEC. 18, BLK. A-4, H&GN
OWNER	PHILLIPS PETROLEUM CO.	GETTY OIL CO.	SEARCH DRILLING CO.
COMPLETED	10/28/76	03/28/78	06/12/80
SAMPLED	12/28/76	05/26/78	11/18/80
FORMATION	DEVO-HUNTON	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16167	16315	16306
WELLHEAD PRESSURE,PSIG	5370	4810	4639
OPEN FLOW, MCFD	18300	7312	57000
COMPONENT, MOLE PCT			
METHANE	95.4	95.3	95.2
ETHANE	2.3	2.2	2.3
PROPANE	0.5	0.5	0.6
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.8	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1040	1042	1045
SPECIFIC GRAVITY	0.586	0.587	0.589

	INDEX 9790 SAMPLE 9272	INDEX 9791 SAMPLE 9752	INDEX 9792 SAMPLE 9753
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	GAGEBY CREEK	GAGEBY CREEK	GAGEBY CREEK
WELL NAME	CARWILE A NO. 1	LEE C NO. 1	LEE C NO. 1
LOCATION	SEC. 99, BLK. A-5, H&GN SUR.	SEC. 80, BLK. M-1, H&GN SUR.	SEC. 80, BLK. M-1, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/03/64	10/16/64	10/17/64
SAMPLED	03/31/64	02/22/65	02/22/65
FORMATION	ORDO-SIMPSON	ORDO-SIMPSON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15676	15982	15121
WELLHEAD PRESSURE,PSIG	5278	5380	5010
OPEN FLOW, MCFD	33304	21000	41000
COMPONENT, MOLE PCT			
METHANE	96.9	97.1	94.9
ETHANE	0.7	0.5	1.2
PROPANE	0.5	0.2	0.3
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.3	0.7	1.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.1	2.0
HELIUM	0.05	0.05	0.03
HEATING VALUE*	1007	1006	1002
SPECIFIC GRAVITY	0.577	0.575	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9793 SAMPLE 10845		INDEX 9794 SAMPLE 10846		INDEX 9795 SAMPLE 14945	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	GAGEBY CREEK		GAGEBY CREEK		LOTT RANCH	
WELL NAME	DYSON A NO. 1		DYSON A NO. 1		LUTHER WILLIS NO. 1	
LOCATION	SEC. 100, BLK.A-5, H&GN SUR.		SEC. 100, BLK.A-5, H&GN SUR.		SEC. 9, CAMP COUNTY SCHOOL	
OWNER	PHILLIPS PETROLEUM CO.		PHILLIPS PETROLEUM CO.		CIG EXPLORATION, INC.	
COMPLETED	07/27/66		NOT GIVEN		09/02/76	
SAMPLED	01/23/67		01/23/67		03/16/77	
FORMATION	DEVO-HUNTON		ORDO-SIMPSON		PENN-MORROW U	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	15009		15795		15056	
WELLHEAD PRESSURE,PSIG	4990		5126		7795	
OPEN FLOW, MCFD	740000		2450		12500	
COMPONENT, MOLE PCT						
METHANE	94.8	----------	96.7	----------	96.6	----------
ETHANE	1.2		0.8		1.2	
PROPANE	0.4	----------	0.2	----------	0.1	----------
N-BUTANE	0.0		0.0		TRACE	
ISOBUTANE	0.0	----------	0.0	----------	TRACE	----------
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0	----------	0.0	----------	TRACE	----------
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0	----------	0.0	----------	TRACE	----------
NITROGEN	1.3		0.5		0.5	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.2	----------	1.8	----------	1.5	----------
HELIUM	0.03		0.04		0.02	
HEATING VALUE*	992	----------	999	----------	1003	----------
SPECIFIC GRAVITY	0.591		0.580		0.577	

	INDEX 9796 SAMPLE 15225		INDEX 9797 SAMPLE 15226		INDEX 9798 SAMPLE 13194	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	LOTT RANCH		LOTT RANCH		MILLS RANCH	
WELL NAME	LOTT NO. 1-2		LOTT NO. 1		MILDRED DAVIDSON NO. 1	
LOCATION	SEC. 2, BLK. E, E.J. CAMPBEL		SEC. 15, CAMP CO. SCHOOL LND		SEC. 36, BLK. A-7, H&GNRR SUR	
OWNER	CIG EXPLORATION, INC.		CIG EXPLORATION, INC.		CHEVRON OIL CO.	
COMPLETED	01/26/78		11/04/77		06/28/71	
SAMPLED	03/13/78		03/13/78		04/19/72	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	15072		14854		16490	
WELLHEAD PRESSURE,PSIG	6983		6933		5500	
OPEN FLOW, MCFD	8400		2900		4000	
COMPONENT, MOLE PCT						
METHANE	96.7	----------	96.1	----------	94.8	----------
ETHANE	1.9		1.0		2.7	
PROPANE	0.1	----------	0.1	----------	0.6	----------
N-BUTANE	0.0		TRACE		0.1	
ISOBUTANE	0.0	----------	0.0	----------	0.2	----------
N-PENTANE	0.0		0.1		TRACE	
ISOPENTANE	0.0	----------	0.1	----------	0.1	----------
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0	----------	TRACE	----------	0.1	----------
NITROGEN	0.4		0.8		0.5	
OXYGEN	TRACE	----------	0.1	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8	----------	1.7	----------	0.7	----------
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	998	----------	1003	----------	1044	----------
SPECIFIC GRAVITY	0.578		0.585		0.590	

	INDEX 9799 SAMPLE 13794		INDEX 9800 SAMPLE 13840		INDEX 9801 SAMPLE 15799	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	MILLS RANCH		MILLS RANCH		MILLS RANCH SE	
WELL NAME	SIDNEY FABIAN NO. 1		J.F. DARBERRY NO. 1		BRYANT NO. 1-22	
LOCATION	SEC. 45, BLK. A-7, H&GN SUR.		SEC. 1, B88&C SUR.		SEC. 22, BLK. A-7, H&GN RR	
OWNER	CHEVRON OIL CO.		CHEVRON OIL CO.		AMERICAN QUASAR PETROLEUM CO	
COMPLETED	11/--/72		05/23/73		06/21/79	
SAMPLED	11/01/73		12/21/73		10/05/79	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	21059		20419		19182	
WELLHEAD PRESSURE,PSIG	7400		7445		3745	
OPEN FLOW, MCFD	93050		380000		33000	
COMPONENT, MOLE PCT						
METHANE	96.9	----------	96.7	----------	96.9	----------
ETHANE	1.0		1.0		0.9	
PROPANE	0.2	----------	0.2	----------	0.2	----------
N-BUTANE	0.1		TRACE		0.1	
ISOBUTANE	0.1	----------	0.1	----------	TRACE	----------
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	0.1	----------	0.0	----------	TRACE	----------
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE	----------	TRACE	----------	0.1	----------
NITROGEN	0.6		0.7		0.7	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1	----------	1.1	----------	1.0	----------
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1016	----------	1006	----------	1016	----------
SPECIFIC GRAVITY	0.580		0.579		0.579	

	INDEX 9802 SAMPLE 11563		INDEX 9803 SAMPLE 11635		INDEX 9804 SAMPLE 14913	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	MOBEETIE		MOBEETIE		MOBEETIE	
WELL NAME	OPERATING UNIT R/A A NO. 1		SIMS UNIT NO. 3		V. MURRELL NO. 1	
LOCATION	SEC. 46, BLK. A-5, H&GN SUR.		SEC. 56, BLK. A-5, H&GN SUR.		SEC. 69, BLK. A-5, H&GN SUR.	
OWNER	PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.		GETTY OIL CO.	
COMPLETED	05/13/63		07/04/68		11/09/76	
SAMPLED	07/08/68		08/30/68		02/18/77	
FORMATION	PENN-DOUGLAS		PENN-MISSOURI		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6866		7832		12220	
WELLHEAD PRESSURE,PSIG	2455		2300		1742	
OPEN FLOW, MCFD	7300		12500		16374	
COMPONENT, MOLE PCT						
METHANE	88.0	----------	88.1	----------	90.2	----------
ETHANE	5.2		6.5		4.0	
PROPANE	2.3	----------	2.7	----------	1.6	----------
N-BUTANE	1.1		1.0		0.6	
ISOBUTANE	1.2	----------	0.4	----------	0.3	----------
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.2	----------	0.3	----------	0.1	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.3	----------	0.1	----------
NITROGEN	2.0		0.2		1.6	
OXYGEN	0.2	----------	0.0	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	TRACE	----------	0.0	----------
HELIUM	0.07		0.04		0.15	
HEATING VALUE*	1101	----------	1127	----------	1117	----------
SPECIFIC GRAVITY	0.642		0.671		0.630	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9805 SAMPLE 15262	INDEX 9806 SAMPLE 12420	INDEX 9807 SAMPLE 14914
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	MOBEETIE S	MOBEETIE SE	MOBEETIE W
WELL NAME	BILL WATERS NO. 1	MOBEETIE 2 SE NO.1	V. MURRELL NO. 1
LOCATION	SEC. 34, BLK A-9, H&GN SUR.	SEC. 12, BLK. A-4, H&GN SUR.	SEC. 69, BLK. A-5, H&GN SUR.
OWNER	COBRA OIL & GAS CORP.	BASIN PETROLEUM CORP.	GETTY OIL CO.
COMPLETED	11/23/77	07/24/70	11/09/76
SAMPLED	04/25/78	09/23/70	02/18/77
FORMATION	DEVO-HUNTON	DEVO-HUNTON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12030	13131	11838
WELLHEAD PRESSURE,PSIG	2500	3700	3490
OPEN FLOW, MCFD	1100	9500	2136
COMPONENT, MOLE PCT			
METHANE	92.8	93.4	92.2
ETHANE	3.9	3.2	3.3
PROPANE	1.3	1.3	1.7
N-BUTANE	0.4	0.3	0.7
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	0.6	0.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1082	1077	1090
SPECIFIC GRAVITY	0.607	0.606	0.619

	INDEX 9808 SAMPLE 9089	INDEX 9809 SAMPLE 3972	INDEX 9810 SAMPLE 5614
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	NOT GIVEN	PANHANDLE	PANHANDLE E
WELL NAME	MOBEETIE OPER. UNIT NO. 1	HICKS NO. 1	E. A. WILLIAMS NO. B-1
LOCATION	SEC. 46, BLK. A-5, H&GN SUR.	SEC. 53, BLK. 17, H&GN SUR.	SEC. 23, BLK. 17, H&GN SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXOMA NATURAL GAS CO.	PANOMA CORP.
COMPLETED	05/15/63	07/25/29	03/27/54
SAMPLED	09/16/63	12/21/44	04/30/54
FORMATION	NOT GIVEN	PENN-LIME	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6725	1840	1865
WELLHEAD PRESSURE,PSIG	2055	174	375
OPEN FLOW, MCFD	7300	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	86.1	92.7
ETHANE	6.8	9.0	3.1
PROPANE	3.1	---	1.5
N-BUTANE	0.9	---	0.4
ISOBUTANE	0.4	---	0.2
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.4	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.3	1.5	1.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	3.2	0.0
HELIUM	0.10	0.19	0.08
HEATING VALUE*	1119	1033	1068
SPECIFIC GRAVITY	0.677	0.635	0.606

	INDEX 9811 SAMPLE 6826	INDEX 9812 SAMPLE 8217	INDEX 9813 SAMPLE 8220
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	MONTGOMERY NO. 1	PAVLOVSKY NO. 2	LILLIAN & LUCILLE NO. 1
LOCATION	SEC. 60, BLK. 17, H&GN SUR.	SEC. 29, BLK. 17, H&GNRR SUR	SEC. 29, BLK. 17, H&GNRR SUR
OWNER	EL PASO NATURAL GAS CO.	CRICKET OIL CO.	CRICKET OIL CO.
COMPLETED	07/20/58	06/23/61	06/23/61
SAMPLED	--/-/58	09/23/61	09/23/61
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2001	1885	1832
WELLHEAD PRESSURE,PSIG	336	162	58
OPEN FLOW, MCFD	6	1000	175
COMPONENT, MOLE PCT			
METHANE	91.8	83.8	86.2
ETHANE	3.3	3.7	5.1
PROPANE	1.3	1.7	3.1
N-BUTANE	0.4	0.6	0.3
ISOBUTANE	0.4	0.3	0.7
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.3	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.3	8.2	3.5
OXYGEN	0.1	1.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	0.11	0.12
HEATING VALUE*	1068	1008	1119
SPECIFIC GRAVITY	0.616	0.652	0.658

	INDEX 9814 SAMPLE 8221	INDEX 9815 SAMPLE 8222	INDEX 9816 SAMPLE 8223
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	W. L. PIRTLE NO. 1	MILLIE ISAACS NO. 1	A. P. BUMPERS NO. 1
LOCATION	SEC. 33, BLK. 17, H&GNRR SUR	SEC. 28, BLK. 17, H&GNRR SUR	SEC. 34, BLK. 17, H&GNRR SUR
OWNER	CRICKET OIL CO.	CRICKET OIL CO.	CRICKET OIL CO.
COMPLETED	09/22/61	06/16/61	06/26/61
SAMPLED	09/24/61	09/23/61	09/23/61
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1848	1909	1857
WELLHEAD PRESSURE,PSIG	55	254	84
OPEN FLOW, MCFD	1000	1750	80
COMPONENT, MOLE PCT			
METHANE	87.1	83.9	89.2
ETHANE	4.4	3.8	4.1
PROPANE	2.6	2.0	2.2
N-BUTANE	1.0	0.7	0.8
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.2	7.4	2.4
OXYGEN	0.0	0.9	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.12	0.12	0.09
HEATING VALUE*	1123	1038	1109
SPECIFIC GRAVITY	0.657	0.660	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9817 SAMPLE 14264		INDEX 9818 SAMPLE 15607		INDEX 9819 SAMPLE 15609	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER		WHEELER		WHEELER	
WELL NAME	S. K. WILLIAMS NO. 1		BEEF CATTLE CO. NO. 1		MOORE NO. 1-A	
LOCATION	SEC. 2, BLK. E, T&NO SUR.		SEC. 57, BLK. A8, H&GN SUR.		SEC. 58, BLK. 410, H&GN SUR.	
OWNER	GETTY OIL CO.		NATOMAS NORTH AMERICA, INC.		NATOMAS NORTH AMERICA, INC.	
COMPLETED	09/30/74		NOT GIVEN		NOT GIVEN	
SAMPLED	01/12/75		04/26/79		04/26/79	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14480		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	4464		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	34000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	93.5	----------	92.9	----------	88.6	----------
ETHANE	3.3		3.5		3.2	
PROPANE	1.1	----------	1.1	----------	1.0	----------
N-BUTANE	0.3		0.4		0.3	
ISOBUTANE	0.2	----------	0.1	----------	0.1	----------
N-PENTANE	TRACE		0.2		0.1	
ISOPENTANE	0.1	----------	0.1	----------	0.1	----------
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1	----------	0.2	----------	0.1	----------
NITROGEN	0.6		0.6		4.4	
OXYGEN	0.0	----------	0.0	----------	1.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0	----------	TRACE	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8	----------	0.8	----------	0.8	----------
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1061	----------	1077	----------	1008	----------
SPECIFIC GRAVITY	0.609		0.618		0.622	

	INDEX 9820 SAMPLE 15610		INDEX 9821 SAMPLE 14277		INDEX 9822 SAMPLE 14811	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER		WHEELER NE		WHEELER PAN	
WELL NAME	IRONS NO. 1		J. R. REED NO. 1-31		SANDIFER A NO. 1	
LOCATION	SEC. B, BLK. A4, H&GN SUR.		SEC. 31, BLK. A-3, H&GN SUR.		SEC. 51, BLK. A-8, H&GN SUR.	
OWNER	NATOMAS NORTH AMERICA, INC.		ARKLA EXPLORATION CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	NOT GIVEN		12/20/74		08/21/76	
SAMPLED	04/26/79		02/28/75		10/19/76	
FORMATION	DEVO-HUNTON		PENN-MORROW		PENN-GRANITE WASH	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14496		16739		13932	
WELLHEAD PRESSURE,PSIG	3790		7384		3334	
OPEN FLOW, MCFD	4106		10131		8000	
COMPONENT, MOLE PCT						
METHANE	89.5	----------	96.4	----------	91.6	----------
ETHANE	3.6		0.6		4.1	
PROPANE	1.3	----------	0.1	----------	2.0	----------
N-BUTANE	0.4		TRACE		0.6	
ISOBUTANE	0.1	----------	0.1	----------	0.2	----------
N-PENTANE	0.1		TRACE		0.1	
ISOPENTANE	0.1	----------	TRACE	----------	0.2	----------
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1	----------	0.1	----------	0.1	----------
NITROGEN	3.2		0.7		0.6	
OXYGEN	0.7	----------	TRACE	----------	TRACE	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8	----------	1.5	----------	0.4	----------
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1039	----------	1003	----------	1098	----------
SPECIFIC GRAVITY	0.626		0.580		0.621	

	INDEX 9823 SAMPLE 14406		INDEX 9824 SAMPLE 13520		INDEX 9825 SAMPLE 14793	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER-PAN		WILDCAT		WILDCAT	
WELL NAME	CITY OF SHAMROCK NO. 1		HOLT NO. 1		LANCASTER NO. 1	
LOCATION	SEC. 2J, POITEVENT SUR.		SEC. 20, BLK. RE, R&E SUR.		SEC. 58, BLK. A-4, H&GN SUR.	
OWNER	GETTY OIL CO.		KERR-MCGEE CORP.		AMARILLO OIL CO.	
COMPLETED	07/11/75		07/11/72		07/27/76	
SAMPLED	06/--/75		02/--/73		09/--/76	
FORMATION	DEVO-HUNTON		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14442		18035		14009	
WELLHEAD PRESSURE,PSIG	5913		11286		9073	
OPEN FLOW, MCFD	27500		11000		24000	
COMPONENT, MOLE PCT						
METHANE	93.1	----------	90.5	----------	84.4	----------
ETHANE	3.5		0.4		8.6	
PROPANE	1.2	----------	0.1	----------	3.5	----------
N-BUTANE	0.3		0.0		0.9	
ISOBUTANE	0.2	----------	0.0	----------	0.7	----------
N-PENTANE	0.1		0.0		0.2	
ISOPENTANE	0.1	----------	0.0	----------	0.2	----------
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1	----------	0.0	----------	0.2	----------
NITROGEN	0.7		4.5		0.7	
OXYGEN	0.0	----------	1.0	----------	0.1	----------
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8	----------	3.4	----------	0.5	----------
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1067	----------	927	----------	1181	----------
SPECIFIC GRAVITY	0.609		0.615		0.677	

	INDEX 9826 SAMPLE 16076		INDEX 9827 SAMPLE 6919		INDEX 9828 SAMPLE 14101	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WILBARGER		WILLACY	
FIELD	WILDCAT		MAIN		ARROYO COLORADO	
WELL NAME	C. T. DAVIS NO. 1		MATYSEK NO. A-1		ARMENDAIZ B NO. 1	
LOCATION	SEC. 60, BLK. A7, H&GN SUR.		SEC. 9, BLK. 8		JOSE MARCISCO CABAZO GRT.	
OWNER	HUNT ENERGY CORP.		TOM B. MEDDERS		CORPUS CHRISTI MANAGEMENT CO	
COMPLETED	04/08/80		10/26/58		04/06/72	
SAMPLED	09/04/80		01/06/59		07/14/74	
FORMATION	PENN-MORROW		PENN-CANYON		MIOC-CATAHOULA	
GEOLOGIC PROVINCE CODE	360		435		220	
DEPTH, FEET	17425		3194		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	6559		290		NOT GIVEN	
OPEN FLOW, MCFD	2393		12		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	97.3	----------	62.9	----------	94.6	----------
ETHANE	0.8		9.5		1.3	
PROPANE	0.1	----------	6.3	----------	TRACE	----------
N-BUTANE	0.1		2.4		0.0	
ISOBUTANE	TRACE	----------	1.3	----------	0.0	----------
N-PENTANE	TRACE		0.6		0.0	
ISOPENTANE	0.0	----------	0.7	----------	0.0	----------
CYCLOPENTANE	TRACE		0.2		0.0	
HEXANES PLUS	0.1	----------	0.5	----------	0.0	----------
NITROGEN	1.5		14.9		3.7	
OXYGEN	0.1	----------	TRACE	----------	TRACE	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	0.1	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0	----------	0.5	----------	0.1	----------
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1011	----------	1185	----------	982	----------
SPECIFIC GRAVITY	0.576		0.827		0.575	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9829 SAMPLE 14104	INDEX 9830 SAMPLE 11232	INDEX 9831 SAMPLE 11199
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WILLACY	WILLACY	WILLACY
FIELD	ARROYO COLORADO	CHESS	LACAL
WELL NAME	ARMENDAIZ B NO. 2	CHESS TODD NO. 6	BEATTY-YTURRIA L&C CO. NO. 1
LOCATION	JOSE NARCISCO CABAZO GRT.	S. J. DE CARRICITOS GRT.A-8	SAN JUAN DECARRICITOS GR.A-8
OWNER	CORPUS CHRISTI MANAGEMENT CO	SUPERIOR OIL CO.	OCCIDENTAL PETROLEUM CO.
COMPLETED	04/13/72	10/26/66	01/30/65
SAMPLED	07/14/74	11/20/67	11/01/67
FORMATION	MIOC-CATAHOULA	OLIG-NO. 72 SAND	OLIG-FRIO D-5
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	7210	8136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2829	3249
OPEN FLOW, MCFD	NOT GIVEN	72000	13200
COMPONENT, MOLE PCT			
METHANE	94.5	91.9	92.3
ETHANE	1.3	3.8	3.4
PROPANE	0.1	1.2	1.0
N-BUTANE	0.0	0.4	0.4
ISOBUTANE	0.0	0.6	0.5
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.6	0.8
NITROGEN	3.8	1.0	1.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	983	1107	1110
SPECIFIC GRAVITY	0.579	0.625	0.627

	INDEX 9832 SAMPLE 13123	INDEX 9833 SAMPLE 12030	INDEX 9834 SAMPLE 4927
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WILLACY	WILLACY	WILSON
FIELD	PASO REAL	WILLAMAR SE	WILDCAT
WELL NAME	ARMENDAIZ B NO. 4	SAUZ RANCH NOPAL NO. 8	T. D. MANFORD NO. 1
LOCATION	SAN JUAN DE CARRICITOS GRANT	SAN JUAN DECARRICITAS GR.A-8	NOT GIVEN
OWNER	TEXAS OIL & GAS CORP.	HUMBLE OIL & REFINING CO.	HEWIT & DOUGHERTY
COMPLETED	08/31/70	09/11/68	04/25/50
SAMPLED	12/22/71	09/04/69	08/16/50
FORMATION	NOT GIVEN	OLIG-FRIO	EOCE-WILCOX L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3700	7834	4279
WELLHEAD PRESSURE,PSIG	1110	2540	1650
OPEN FLOW, MCFD	A70	27300	9200
COMPONENT, MOLE PCT			
METHANE	95.4	95.1	89.5
ETHANE	1.5	1.5	0.7
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	2.8	2.7	8.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.02	0.01	0.04
HEATING VALUE*	996	999	941
SPECIFIC GRAVITY	0.575	0.577	0.607

	INDEX 9835 SAMPLE 13630	INDEX 9836 SAMPLE 11901	INDEX 9837 SAMPLE 7086
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	APOLLO	CRITTENDON	EMPEROR
WELL NAME	UNIVERSITY 21-23 NO. 1	WOLFE UNIT NO. 1	BROWN & ALTMAN GAS UNIT NO.7
LOCATION	SEC. 23, BLK. 21, UNIVSITY S	SEC. 24, BLK. C-23, PSL SUR.	SEC. 15, BLK. B-5, PSL SUR.
OWNER	HNG OIL CO.	ATLANTIC RICHFIELD CO.	HUMBLE OIL & REFINING CO.
COMPLETED	06/15/73	01/30/68	NOT GIVEN
SAMPLED	06/18/73	05/22/69	06/04/59
FORMATION	SILU-FUSSELMAN	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16182	14500	9280
WELLHEAD PRESSURE,PSIG	6200	7834	3225
OPEN FLOW, MCFD	9A00	150000	445000
COMPONENT, MOLE PCT			
METHANE	95.5	90.7	92.0
ETHANE	2.0	5.5	3.9
PROPANE	0.3	1.6	1.3
N-BUTANE	TRACE	0.3	0.4
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	0.9	1.1	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1014	1086	1085
SPECIFIC GRAVITY	0.581	0.615	0.621

	INDEX 9838 SAMPLE 7169	INDEX 9839 SAMPLE 7170	INDEX 9840 SAMPLE 12809
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EMPEROR	EMPEROR	EMPEROR
WELL NAME	MCCABE NO. 3	MCCABE NO. 3	S. M. HALLEY NO. 10
LOCATION	SEC. 36, BLK. 5, PSL SUR.	SEC. 36, BLK. B-5, PSL SUR.	SEC. 7, BLK. A-11, PSL SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	TEXACO INC.
COMPLETED	11/22/57	11/22/57	NOT GIVEN
SAMPLED	08/11/59	08/11/59	04/30/71
FORMATION	DEVO-	ORDO-ELLENBURGER	ORDO-WADDELL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9018	11351	11032
WELLHEAD PRESSURE,PSIG	3256	3470	NOT GIVEN
OPEN FLOW, MCFD	72000	24000	230
COMPONENT, MOLE PCT			
METHANE	92.9	92.9	85.5
ETHANE	4.0	4.0	7.4
PROPANE	1.3	1.0	3.1
N-BUTANE	0.4	0.3	1.0
ISOBUTANE	TRACE	0.2	0.7
N-PENTANE	0.2	TRACE	0.6
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.8	1.0	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1043	1069	1186
SPECIFIC GRAVITY	0.608	0.602	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9841 SAMPLE 12891	INDEX 9842 SAMPLE 12892	INDEX 9843 SAMPLE 13687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EVETTS	EVETTS	EVETTS
WELL NAME	HALEY UNIT NO. 1-1	HALEY UNIT NO. 1-1	JOHN HALEY JR B NO. 1
LOCATION	SEC. 7, BLK. 27, PSL SUR.	SEC. 7, BLK. 27, PSL SUR.	SEC. 18, BLK. 27, PSL SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.
COMPLETED	05/10/70	05/10/70	05/10/72
SAMPLED	07/01/71	07/01/71	08/23/73
FORMATION	ORDO-ELLENBURGER	SILU-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	20940	17464	20429
WELLHEAD PRESSURE,PSIG	7015	6197	6715
OPEN FLOW, MCFD	35500	28500	13500
COMPONENT, MOLE PCT			
METHANE	98.3	96.4	97.7
ETHANE	0.2	1.2	0.3
PROPANE	TRACE	0.2	0.1
N-BUTANE	0.0	0.1	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.9	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	1.0	1.1	1.3
HELIUM	0.03	0.02	0.03
HEATING VALUE*	999	1007	1007
SPECIFIC GRAVITY	0.566	0.578	0.576

	INDEX 9844 SAMPLE 13690	INDEX 9845 SAMPLE 14684	INDEX 9846 SAMPLE 7168
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EVETTS	FELMONT	HALLEY
WELL NAME	JOHN HALEY JR B NO. 1	FELMONT OIL CORP. NO. 1	SEALY-SMITH B NO. 1
LOCATION	SEC. 18, BLK. 27, PSL SUR.	SEC. 19, BLK. 26, PSL SUR.	SEC. 91, BLK. A, GMMBA SUR.
OWNER	EXXON CO., U.S.A.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	05/10/72	05/26/76	08/07/57
SAMPLED	08/23/73	05/26/76	08/11/59
FORMATION	SILU-	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17908	NOT GIVEN	9850
WELLHEAD PRESSURE,PSIG	6225	4200	2460
OPEN FLOW, MCFD	90000	35000	1500
COMPONENT, MOLE PCT			
METHANE	95.9	90.6	84.9
ETHANE	1.5	5.3	7.4
PROPANE	0.2	1.8	4.2
N-BUTANE	TRACE	0.5	1.0
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	0.7	0.8	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.3	0.0	0.0
CARBON DIOXIDE	1.3	0.2	0.7
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1014	1117	1202
SPECIFIC GRAVITY	0.586	0.629	0.686

	INDEX 9847 SAMPLE 9951	INDEX 9848 SAMPLE 9952	INDEX 9849 SAMPLE 2024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	HALLEY	HALLEY	HENDRICK
WELL NAME	S. M. HALLEY NO. 167	S. M. HALLEY NO. 167	HUTCHINS NO. 1
LOCATION	SEC. 24, BLK. B-11	SEC. 24, BLK. B-11	SEC. 47, BLK. 26, PSL SUR.
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SOUTHERN CRUDE OIL PUR. CO.
COMPLETED	11/--/64	11/--/64	06/05/28
SAMPLED	07/02/65	07/02/65	06/11/30
FORMATION	DEVO-	ORDO-MONTOYA	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9503	10432	2484
WELLHEAD PRESSURE,PSIG	3000	1833	1300
OPEN FLOW, MCFD	16214	4698	40000
COMPONENT, MOLE PCT			
METHANE	84.4	84.3	85.0
ETHANE	7.3	7.2	12.8
PROPANE	2.7	3.1	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.6	0.6	---
N-PENTANE	0.5	0.4	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	0.3	0.1	---
HEXANES PLUS	1.0	0.5	---
NITROGEN	1.2	1.6	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	1.3	0.9
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1190	1160	1090
SPECIFIC GRAVITY	0.696	0.685	0.632

	INDEX 9850 SAMPLE 2025	INDEX 9851 SAMPLE 9988	INDEX 9852 SAMPLE 6494
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	HENDRICK	HENDRICK	KERMIT
WELL NAME	HENDRICK T88-R1	I. C. ROARK NO. 1	BATTERY 19-14-E BAIRD
LOCATION	SEC. 27, BLK. 26, PSL SUR.	SEC. 32, BLK 26, PSL SUR.	SEC. 19, BLK. B-3, PSL SUR.
OWNER	SOUTHERN CRUDE OIL PUR. CO.	PAN AMERICAN PETROLEUM CORP.	STANDARD OIL CO. OF TEXAS
COMPLETED	10/23/28	09/01/64	01/30/58
SAMPLED	06/11/30	07/21/65	01/29/58
FORMATION	PERM-	PENN-ATOKA	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2490	9976	8660
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3280	2850
OPEN FLOW, MCFD	50000	1710	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	91.7	87.0
ETHANE	14.5	4.1	6.0
PROPANE	---	1.9	2.7
N-BUTANE	---	0.5	0.8
ISOBUTANE	---	0.2	0.5
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.4	0.2
NITROGEN	0.8	0.5	0.9
OXYGEN	0.1	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	0.6	0.9
HELIUM	0.00	0.02	0.04
HEATING VALUE*	1097	1103	1137
SPECIFIC GRAVITY	0.649	0.626	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9853 SAMPLE 6495	INDEX 9854 SAMPLE 6496	INDEX 9855 SAMPLE 7666
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	KERMIT	KERMIT	KERMIT
WELL NAME	STATE WALTON NO. 1	KESSLER NO. 1	STATE WALTON E 30
LOCATION	SEC. 14, BLK. B-3, PSL SUR.	SEC. 14, BLK. B-3, PSL SUR.	SEC. 14, BLK. B-3, PSL SUR.
OWNER	STANDARD OIL CO. OF TEXAS	STANDARD OIL CO. OF TEXAS	SOCONY MOBIL OIL CO.
COMPLETED	10/10/57	06/14/57	08/19/60
SAMPLED	01/30/58	01/30/58	08/30/60
FORMATION	ORDO-ELLENBURGER	DEVO-	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10621	8100	8616
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2653	2760
OPEN FLOW, MCFD	NOT GIVEN	37000	75000
COMPONENT, MOLE PCT			
METHANE	78.8	85.2	81.3
ETHANE	10.2	6.5	6.8
PROPANE	4.5	2.7	2.5
N-BUTANE	2.0	1.1	0.7
ISOBUTANE	0.7	0.5	0.3
N-PENTANE	0.8	0.5	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.5	0.8	0.1
NITROGEN	1.8	1.5	6.3
OXYGEN	0.1	TRACE	1.1
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.5
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1265	1182	1062
SPECIFIC GRAVITY	0.735	0.687	0.674

	INDEX 9856 SAMPLE 12744	INDEX 9857 SAMPLE 12884	INDEX 9858 SAMPLE 12732
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	KERMIT	KERMIT	KEYSTONE
WELL NAME	J. B. WALTON NO. 209	BAIRD NO. 13-34	J. B. WALTON NO. 58-MC
LOCATION	SEC. 19, BLK. 74, PSL SUR.	SEC. 13, BLK. B-3, PSL SUR.	SEC. 1, BLK. B-3, PSL SUR.
OWNER	MOBIL OIL CORP.	CHEVRON OIL CO.	PERRY R. BASS
COMPLETED	02/14/50	05/--/58	10/16/55
SAMPLED	03/31/71	06/21/71	03/23/71
FORMATION	PERM-YATES	ORDO-JOINS	ORDO-MCKEE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2535	10300	8348
WELLHEAD PRESSURE,PSIG	300	800	NOT GIVEN
OPEN FLOW, MCFD	58	40500	874
COMPONENT, MOLE PCT			
METHANE	84.5	72.3	85.3
ETHANE	7.4	9.6	7.3
PROPANE	3.8	4.5	3.0
N-BUTANE	1.0	1.3	0.9
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.5	0.6
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	1.6	8.7	1.4
OXYGEN	0.0	1.7	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.03	0.00
HEATING VALUE*	1181	1138	1183
SPECIFIC GRAVITY	0.680	0.746	0.677

	INDEX 9859 SAMPLE 12733	INDEX 9860 SAMPLE 2021	INDEX 9861 SAMPLE 15356
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	KEYSTONE	LECK	LITTLE JOE
WELL NAME	J. B. WALTON NO. 63-D	LECK NO. 1-OIL WELL	UNIVERSITY 41-21 NO. 1
LOCATION	SEC. 5, BLK. B-2, PSL SUR.	SEC. 3, BLK. 74, PSL SUR.	SEC. 41, BLK. 21, UL SUR.
OWNER	PERRY R. BASS	SHELL OIL CO.	GETTY OIL CO.
COMPLETED	09/21/55	01/14/29	12/02/77
SAMPLED	03/23/71	06/11/30	08/31/78
FORMATION	DEVO-	PERM-YATES	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7529	2905	19758
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	1450
OPEN FLOW, MCFD	2400	NOT GIVEN	5310
COMPONENT, MOLE PCT			
METHANE	83.3	82.4	96.8
ETHANE	7.9	12.7	1.0
PROPANE	3.5	---	0.2
N-BUTANE	0.8	---	0.2
ISOBUTANE	0.3	---	TRACE
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	2.9	2.7	0.4
OXYGEN	0.1	0.4	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.6	1.9	1.0
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1140	1062	1024
SPECIFIC GRAVITY	0.676	0.650	0.582

	INDEX 9862 SAMPLE 15720	INDEX 9863 SAMPLE 11876	INDEX 9864 SAMPLE 9650
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	LITTLE JOE	LITTLE JOE S	MONAHANS
WELL NAME	UNIVERSITY 41-21 NO. 1	UNIVERSITY 37 NO. 2	SEALY-SMITH NO. 1
LOCATION	SEC 41, BLK. 21, UNIV. SUR.	SEC. 37, BLK. 20, UNIV. LAND	SEC. 45, BLK. A, GMMR&A SUR.
OWNER	GETTY OIL CO.	UNION OIL CO. OF CALIF.	TENNECO OIL CO.
COMPLETED	05/18/77	06/08/68	03/28/64
SAMPLED	08/06/79	05/14/69	11/27/64
FORMATION	ORDO-ELLENBURGER	PERM-DELAWARE	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	21000	5002	8252
WELLHEAD PRESSURE,PSIG	5249	1788	2355
OPEN FLOW, MCFD	13600	10000	1750
COMPONENT, MOLE PCT			
METHANE	97.0	81.4	48.1
ETHANE	1.0	6.3	23.7
PROPANE	0.2	3.0	15.5
N-BUTANE	0.1	0.9	5.5
ISOBUTANE	TRACE	0.4	2.1
N-PENTANE	0.1	0.4	1.3
ISOPENTANE	TRACE	0.2	0.9
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.7
NITROGEN	0.4	6.7	0.8
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	TRACE	1.1
HELIUM	0.02	0.08	TRACE
HEATING VALUE*	1018	1104	1708
SPECIFIC GRAVITY	0.578	0.683	1.020

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9865 SAMPLE 9399		INDEX 9866 SAMPLE 3664		INDEX 9867 SAMPLE 10056	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	NOT GIVEN		WHEELER		WILDCAT	
WELL NAME	T. G. HENDRICK NO. 1		W. O. BLUE ESTATE NO. 1		S. SMITH FOUNDATION 1 NO. 7A	
LOCATION	SEC. 34, BLK. 27, PSL SUR.		SEC. 15, BLK. 46, TIS, T&P		SEC. 10, BLK A, G&MM&A SUR.	
OWNER	PAN AMERICAN PETROLEUM CORP.		STANOLIND OIL & GAS CO.		STANDARD OIL CO. OF TEXAS	
COMPLETED	06/04/64		06/16/43		04/13/64	
SAMPLED	06/10/64		09/16/43		08/12/65	
FORMATION	PENN-		NOT GIVEN		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	13350		10493		8620	
WELLHEAD PRESSURE,PSIG	3147		4558		2800	
OPEN FLOW, MCFD	4250		NOT GIVEN		2850	
COMPONENT, MOLE PCT						
METHANE	88.0		18.3		82.3	
ETHANE	5.7		73.8		9.1	
PROPANE	1.8		---		4.0	
N-BUTANE	0.5		---		1.1	
ISOBUTANE	0.3		---		0.6	
N-PENTANE	0.1		---		0.4	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.2		---		0.2	
NITROGEN	2.5		6.6		1.9	
OXYGEN	TRACE		0.5		0.0	
ARGON	TRACE		---		0.0	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.7		0.8		0.2	
HELIUM	0.01		0.04		0.04	
HEATING VALUE*	1086		150A		1193	
SPECIFIC GRAVITY	0.638		0.957		0.692	

	INDEX 9868 SAMPLE 11661		INDEX 9869 SAMPLE 15053		INDEX 9870 SAMPLE 12053	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	WILDCAT		WILDCAT		WINK S	
WELL NAME	TUBB ESTATE NO. 1		UNIVERSITY "21-3" NO. 2		HUTCHINGS-SEALY NO. 1	
LOCATION	SEC. 25, BLK C-23, PSL SUR.		SEC. 3, BLK. 21, U.L. SUR.		SEC.90,BLK.F,G&M,MB&A SUR.	
OWNER	SINCLAIR OIL & GAS CO.		HNG OIL CO.		STANDARD OIL CO. OF TEXAS	
COMPLETED	NOT GIVEN		11/05/76		09/10/69	
SAMPLED	10/04/68		07/--/77		09/27/69	
FORMATION	ORDO-ELLENBURGER		PENN-ATOKA		ORDO-MONTOYA	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	21466		12719		16352	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		5751		4000	
OPEN FLOW, MCFD	27000		7850		6000	
COMPONENT, MOLE PCT						
METHANE	98.2		87.6		65.1	
ETHANE	0.2		5.1		13.5	
PROPANE	TRACE		1.7		9.3	
N-BUTANE	0.0		0.5		3.8	
ISOBUTANE	0.0		0.2		2.0	
N-PENTANE	0.0		0.1		1.3	
ISOPENTANE	0.0		0.3		0.6	
CYCLOPENTANE	0.0		0.1		0.3	
HEXANES PLUS	0.0		0.2		0.8	
NITROGEN	0.3		4.0		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.6	
CARBON DIOXIDE	1.2		0.2		1.8	
HELIUM	0.03		0.02		TRACE	
HEATING VALUE*	999		1078		1476	
SPECIFIC GRAVITY	0.568		0.640		0.889	

	INDEX 9871 SAMPLE 12054		INDEX 9872 SAMPLE 12083		INDEX 9873 SAMPLE 12592	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WISE	
FIELD	WINK S		WINK S		ALVORD	
WELL NAME	HUTCHINGS-SEALY NO. 1		UNIVERSITY 21-48 NO. 1		E. H. SMITH NO. 1	
LOCATION	SEC.90,BLK.F,G&M,MB&A SUR.		SEC. 48, BLK. 21, UNIV. SUR.		4 MI. SE ALVORD	
OWNER	STANDARD OIL CO. OF TEXAS		STANDARD OIL CO. OF TEXAS		GEORGE MITCHELL & ASSOC. INC	
COMPLETED	09/10/69		12/07/68		12/09/57	
SAMPLED	09/29/69		10/10/69		12/17/70	
FORMATION	ORDO-ELLENBURGER		DEVO-		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	430		430		420	
DEPTH, FEET	18239		15752		5745	
WELLHEAD PRESSURE,PSIG	5000		1700		200	
OPEN FLOW, MCFD	14500		2400		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	76.8		70.1		83.2	
ETHANE	11.1		9.5		8.0	
PROPANE	5.6		4.7		3.3	
N-BUTANE	1.9		2.0		0.6	
ISOBUTANE	1.3		1.3		0.2	
N-PENTANE	0.5		1.5		0.2	
ISOPENTANE	0.5		0.5		0.2	
CYCLOPENTANE	0.1		0.5		0.1	
HEXANES PLUS	0.3		2.3		0.1	
NITROGEN	1.3		7.4		3.3	
OXYGEN	0.1		TRACE		0.3	
ARGON	0.0		0.0		TRACE	
HYDROGEN	TRACE		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.1		0.4	
HELIUM	TRACE		0.01		0.08	
HEATING VALUE*	1292		1136		1125	
SPECIFIC GRAVITY	0.753		0.833		0.670	

	INDEX 9874 SAMPLE 12593		INDEX 9875 SAMPLE 5272		INDEX 9876 SAMPLE 5237	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WISE		WISE		WISE	
FIELD	ALVORD		BEND		BOONSVILLE	
WELL NAME	ALVORD TOWN SITE NO. 1		C. W. BRIDGES NO. 1		E. C. VAUGHT NO. 1	
LOCATION	1/4 MI. WEST ALVORD		BLK. 99, VAN ZANDT CSL SUR.		BRICE WOODY SUR. NO. A-1-216	
OWNER	GEORGE MITCHELL & ASSOC. INC		ACOMA OIL CO.		LONE STAR GAS CO.	
COMPLETED	12/22/62		01/29/52		01/29/52	
SAMPLED	12/17/70		10/06/52		04/04/52	
FORMATION	PENN-CADDO		PENN-BEND CONGLOMERATE		PENN-BEND CONGLOMERATE	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5460		5457		5390	
WELLHEAD PRESSURE,PSIG	100		1250		1750	
OPEN FLOW, MCFD	30		5700		2500	
COMPONENT, MOLE PCT						
METHANE	69.8		89.6		82.2	
ETHANE	13.2		6.3		9.0	
PROPANE	8.2		2.5		3.8	
N-BUTANE	2.3		1.3		0.9	
ISOBUTANE	1.1		0.8		0.4	
N-PENTANE	0.4		0.4		0.1	
ISOPENTANE	0.8		0.7		0.4	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.6		0.4		TRACE	
NITROGEN	2.7		2.4		2.5	
OXYGEN	0.1		TRACE		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.3		0.4		0.3	
HELIUM	0.15		0.10		0.09	
HEATING VALUE*	1178		1177		1158	
SPECIFIC GRAVITY	0.818		0.689		0.600	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9877 SAMPLE 6710	INDEX 9878 SAMPLE 9689	INDEX 9879 SAMPLE 9959
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	WISE
FIELD	BOONSVILLE	BOONSVILLE	BOONSVILLE
WELL NAME	CRENSHAW NO. 1	LEATH-WHORTON NO. 1	HACHTEL GAS UNIT NO. 1
LOCATION	J. B. ATROFF SUR. NO. A-13	A. VASQUEZ SUR. NO. 858	JOHN REID SUR. A-707
OWNER	KERR-MCGEE OIL IND., INC.	J. G. MAYNARD, ET AL.	LONGHORN PRODUCTION CO.
COMPLETED	10/31/57	03/20/63	12/22/63
SAMPLED	07/--/58	01/06/65	07/07/65
FORMATION	PENN-BEND CONGLOMERATE	PENN-ATOKA	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5632	6404	5908
WELLHEAD PRESSURE,PSIG	1273	1050	800
OPEN FLOW, MCFD	7400	1275	3300
COMPONENT, MOLE PCT			
METHANE	82.2	80.7	79.4
ETHANE	8.5	9.7	9.9
PROPANE	4.1	3.9	4.7
N-BUTANE	1.0	0.9	1.2
ISOBUTANE	0.6	0.8	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.1	2.6	2.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1141	1177	1216
SPECIFIC GRAVITY	0.691	0.697	0.716

	INDEX 9880 SAMPLE 10348	INDEX 9881 SAMPLE 12608	INDEX 9882 SAMPLE 13653
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	WISE
FIELD	BOONSVILLE	BOONSVILLE	GREENWOOD
WELL NAME	KAKER NO. 1	G. T. LE MAY NO. 2-F	MAY GRIFFITH NO. 1
LOCATION	SEC. 24, MATAGORDA CSL SUR.	JOHN FREDERICK SUR. A-308	WILLIAM SHERROD SUR. A-742
OWNER	BURK ROYALTY CO.	GEORGE MITCHELL & ASSOC. INC	GEORGE MITCHELL & ASSOC. INC
COMPLETED	06/10/64	NOT GIVEN	09/30/71
SAMPLED	12/27/65	12/24/70	07/19/73
FORMATION	PENN-ATOKA	PENN-4000 FT. STRAWN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	6082	3871	6606
WELLHEAD PRESSURE,PSIG	1120	260	1640
OPEN FLOW, MCFD	1000	50	2532
COMPONENT, MOLE PCT			
METHANE	80.8	78.6	79.5
ETHANE	8.1	5.2	8.9
PROPANE	4.7	5.0	5.6
N-BUTANE	1.1	1.7	1.2
ISOBUTANE	0.7	0.8	0.9
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	3.5	6.8	2.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.15	0.16	0.12
HEATING VALUE*	1173	1166	1230
SPECIFIC GRAVITY	0.697	0.728	0.721

	INDEX 9883 SAMPLE 6053	INDEX 9884 SAMPLE 12271	INDEX 9885 SAMPLE 4938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	WISE
FIELD	MEANDER	RHOME	WILDCAT
WELL NAME	T. E. DAVIS NO. 3	MABEL WALKER NO. 1	N. L. CONLEY NO. 1
LOCATION	ABS. 547, N. MACKEY SUR.	BLK. 18, SMITH CSL SUR. A743	M. SWIFT SUR. NO. 739
OWNER	AMERICAN DRILLING CORP.	GEORGE MITCHELL & ASSOC. INC	LONE STAR GAS CO.
COMPLETED	07/--/55	11/12/68	04/26/50
SAMPLED	04/15/56	06/01/70	08/02/50
FORMATION	ORDO-ELLEN	PENN-ATOKA	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5590	6220	5612
WELLHEAD PRESSURE,PSIG	1250	2096	1298
OPEN FLOW, MCFD	4545	4900	1200
COMPONENT, MOLE PCT			
METHANE	80.3	88.8	80.1
ETHANE	8.2	5.9	9.2
PROPANE	4.4	1.9	5.3
N-BUTANE	1.2	0.2	1.4
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.4	0.0	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	3.8	2.1	1.9
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.3	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.4	0.5
HELIUM	0.18	0.09	0.12
HEATING VALUE*	1186	1081	1219
SPECIFIC GRAVITY	0.705	0.626	0.711

	INDEX 9886 SAMPLE 3724	INDEX 9887 SAMPLE 3922	INDEX 9888 SAMPLE 12674
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	WOOD
FIELD	MANZIEL	MANZIEL	MANZIEL
WELL NAME	J. C. WHATLEY NO. 1	SHELL-SUN HERRING-SCOGGINS 1	S. R. REYNOLDS NO. 1
LOCATION	JOHN POLK SUR.	SAMUEL BURCH SUR.	WM. HARNHILL SUR. A-1
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	03/26/61
SAMPLED	02/--/44	08/15/44	02/11/71
FORMATION	CRET-GLEN ROSE L	CRET-VENTERS ZONE	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8455	8715	8432
WELLHEAD PRESSURE,PSIG	500	3838	850
OPEN FLOW, MCFD	NOT GIVEN	1000	1000
COMPONENT, MOLE PCT			
METHANE	66.9	71.6	83.5
ETHANE	29.8	21.3	6.1
PROPANE	---	---	2.5
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.9
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.7
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.4
NITROGEN	0.5	5.9	3.2
OXYGEN	0.3	0.0	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.5	1.2	1.4
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1212	1107	1144
SPECIFIC GRAVITY	0.730	0.696	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9889 SAMPLE 9990	INDEX 9890 SAMPLE 9991	INDEX 9891 SAMPLE 12652
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	WOOD
FIELD	QUITMAN	QUITMAN	QUITMAN
WELL NAME	DAN GRAHAM 1-L	DAN GRAHAM 1-U	EDITH RAPPE NO. 1
LOCATION	DAN ADAMS SUR. A-18	DAN ADAMS SUR. A-18	3-1/2 MI. N. QUITMAN
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	AMERADA HESS CORP.
COMPLETED	03/07/64	03/05/64	06/--/66
SAMPLED	07/18/65	07/18/65	02/01/71
FORMATION	CRET-KIRKLAND, SOUTH	CRET-GLOYD	CRET-DEAR
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8585	8585	4178
WELLHEAD PRESSURE,PSIG	1065	2215	NOT GIVEN
OPEN FLOW, MCFD	525	651	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	71.0	87.4
ETHANE	5.2	6.1	1.3
PROPANE	3.0	3.6	1.9
N-BUTANE	1.6	2.0	1.4
ISOBUTANE	1.2	1.6	2.6
N-PENTANE	0.3	0.8	0.4
ISOPENTANE	0.7	0.6	0.9
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	1.1	0.7
NITROGEN	13.6	11.6	2.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	0.8
HELIUM	0.05	0.04	0.01
HEATING VALUE*	1064	1167	1188
SPECIFIC GRAVITY	0.750	0.794	0.702

	INDEX 9892 SAMPLE 12672	INDEX 9893 SAMPLE 12673	INDEX 9894 SAMPLE 4375
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	WOOD
FIELD	QUITMAN	QUITMAN	YANTIS E
WELL NAME	A. MCGEE NO. 1	M. BLALOCK NO. 1	RIO OIL CORP. NO. 1
LOCATION	JOHN ALLEN SUR. A-20	SANTIAGO CALDERON SUR. A-98	JESSIE WALKER SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/26/61	03/24/58	08/15/47
SAMPLED	02/11/71	02/11/71	10/30/47
FORMATION	CRET-CATHEY-GLOYD	CRET-HILL	CRET-GLEN ROSE L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8305	8125	7930
WELLHEAD PRESSURE,PSIG	300	400	3713
OPEN FLOW, MCFD	400	1500	16000
COMPONENT, MOLE PCT			
METHANE	77.6	76.1	76.2
ETHANE	6.8	7.8	18.9
PROPANE	4.2	4.8	---
N-BUTANE	2.0	2.1	---
ISOBUTANE	1.7	2.1	---
N-PENTANE	0.8	0.7	---
ISOPENTANE	0.9	0.8	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	1.1	1.0	---
NITROGEN	3.2	3.1	3.5
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.5	1.4	1.1
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1278	1296	1111
SPECIFIC GRAVITY	0.777	0.786	0.675

	INDEX 9895 SAMPLE 12496	INDEX 9896 SAMPLE 4981	INDEX 9897 SAMPLE 4982
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	YOAKUM	YOAKUM
FIELD	YANTIS SW	WASSON	WASSON
WELL NAME	M. B. MCKEE G. U. NO. 1	WILLARD C NO. 3	WILLARD A NO. 1
LOCATION	OSCAR ENGLEDOW SUR.	SEC. 799; BLK. D GIBSON SUR.	SEC. 805; BLK. D GIBSON SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	GENERAL AMERICAN OIL CO.	GENERAL AMERICAN OIL CO.
COMPLETED	06/--/60	01/01/39	01/15/40
SAMPLED	10/25/70	02/07/51	02/07/51
FORMATION	JURA-SMACKOVER	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	260	430	430
DEPTH, FEET	12765	4796	4930
WELLHEAD PRESSURE,PSIG	3698	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	9100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.3	78.7	8.5
ETHANE	6.2	8.0	0.5
PROPANE	4.1	3.1	0.1
N-BUTANE	1.4	---	---
ISOBUTANE	1.5	---	---
N-PENTANE	2.5	---	---
ISOPENTANE	2.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	2.3	1.4	0.1
NITROGEN	16.4	4.0	90.6
OXYGEN	0.0	0.2	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	4.7	---	---
CARBON DIOXIDE	7.0	4.6	0.1
HELIUM	0.05	0.03	0.04
HEATING VALUE*	979	1087	102
SPECIFIC GRAVITY	0.960	0.721	0.936

	INDEX 9898 SAMPLE 4983	INDEX 9899 SAMPLE 12210	INDEX 9900 SAMPLE 4475
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOAKUM	YOUNG	YOUNG
FIELD	WASSON	DENISON S	ELIASVILLE N
WELL NAME	WILSON NO. 1	GRAHAM-HARRISON NO. 4-A	L. F. EVANS NO. 3
LOCATION	SEC. 805; BLK D GIBSON SUR.	S. DENISON SUR. A-77	T&P CO. SUR. ABST NO. 1201
OWNER	GENERAL AMERICAN OIL CO.	FULTZ OIL CO.	STAR OIL CO., INC.
COMPLETED	05/--/40	06/10/68	12/04/47
SAMPLED	02/07/51	02/21/70	04/24/48
FORMATION	PERM-SAN ANDRES	PENN-MARBLE FALLS	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	425	425
DEPTH, FEET	4955	9983	3335
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	1250
OPEN FLOW, MCFD	NOT GIVEN	10500	458
COMPONENT, MOLE PCT			
METHANE	6.9	61.9	66.5
ETHANE	1.5	16.0	23.2
PROPANE	0.2	11.7	---
N-BUTANE	---	3.4	---
ISOBUTANE	---	1.5	---
N-PENTANE	---	1.4	---
ISOPENTANE	---	0.9	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	90.1	1.4	9.5
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.9	0.0	0.4
HELIUM	0.05	0.03	0.15
HEATING VALUE*	96	1167	1089
SPECIFIC GRAVITY	0.935	0.877	0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9901 SAMPLE 4476	INDEX 9902 SAMPLE 9627	INDEX 9903 SAMPLE 9961
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	ELIASVILLE N	ELIASVILLE N	GAHAGAN
WELL NAME	L. F. EVANS NO. 2	ROBERTSON NO. 2	GAHAGAN NO. 3
LOCATION	TE&L CO. SUR. ABST NO. 1201	F. L. GREEN SUR. A-105	BLK 2711, TE&L SUR.
OWNER	STAR OIL CO., INC.	BURK ROYALTY CO.	F. D. MUELLER
COMPLETED	10/25/47	05/14/57	09/16/63
SAMPLED	04/24/48	11/11/64	07/08/65
FORMATION	NOT GIVEN	PENN-ATOKA	-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3316	4193	4605
WELLHEAD PRESSURE,PSIG	1250	450	1810
OPEN FLOW, MCFD	2530	760	9800
COMPONENT, MOLE PCT			
METHANE	67.3	79.9	74.9
ETHANE	23.5	7.4	9.9
PROPANE	---	3.4	6.9
N-BUTANE	---	0.9	2.3
ISOBUTANE	---	0.3	0.8
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.2	1.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.4
NITROGEN	8.7	6.9	3.0
OXYGEN	0.2	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.13	0.17	0.08
HEATING VALUE*	1103	1102	1300
SPECIFIC GRAVITY	0.709	0.688	0.771

	INDEX 9904 SAMPLE 2301	INDEX 9905 SAMPLE 13345	INDEX 9906 SAMPLE 2086
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	GRAHAM	NEW CASTLE E	NOT GIVEN
WELL NAME	MARY COX NO. 1	T. J. GARDNER NO. 1	W. T. DONNELL NO. 1
LOCATION	ROCK ISLAND SURVEY	SEC. 425, TE&L SUR. A-632	J. T. MULANAX SURVEY
OWNER	PANHANDLE REFINING CO.	GULF OIL CO.-U.S.	TRANSCONTINENTAL OIL CO.
COMPLETED	11/30/30	03/23/71	05/29/30
SAMPLED	03/06/31	08/01/71	07/05/30
FORMATION	PENN-CADDO	PENN-CADDO	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2329	4162	4070
WELLHEAD PRESSURE,PSIG	900	1560	1365
OPEN FLOW, MCFD	2000	7700	2000
COMPONENT, MOLE PCT			
METHANE	82.8	71.9	57.7
ETHANE	8.1	10.5	35.2
PROPANE	---	6.9	---
N-BUTANE	---	1.7	---
ISOBUTANE	---	0.7	---
N-PENTANE	---	0.4	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	8.6	6.9	6.4
OXYGEN	0.1	TRACE	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.22	0.12	0.15
HEATING VALUE*	984	1216	1215
SPECIFIC GRAVITY	0.632	0.761	0.761

	INDEX 9907 SAMPLE 4337	INDEX 9908 SAMPLE 5273	INDEX 9909 SAMPLE 4426
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	NOT GIVEN	NOT GIVEN	PADGITT
WELL NAME	BULAH MARTIN NO. 1	SHANAFELT NO. 1	J. W. BULLOCK A
LOCATION	DEWITT SUR. NO. 1412	A&M SUR. NO. A-1369	SEC. 343, TE&L SUR.
OWNER	WARREN OIL CORP.	O. P. LEONARD	SHELL OIL CO.
COMPLETED	03/01/47	NOT GIVEN	NOT GIVEN
SAMPLED	08/05/47	10/06/52	01/13/48
FORMATION	PENN-	NOT GIVEN	PENN-VIRGIL
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4212	NOT GIVEN	549
WELLHEAD PRESSURE,PSIG	1822	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.9	64.0	57.3
ETHANE	24.1	1.1	4.5
PROPANE	---	0.4	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	TRACE	---
NITROGEN	7.1	34.0	36.3
OXYGEN	0.3	TRACE	0.1
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.4
HELIUM	0.22	0.07	1.39
HEATING VALUE*	1120	686	661
SPECIFIC GRAVITY	0.708	0.709	0.725

	INDEX 9910 SAMPLE 9588	INDEX 9911 SAMPLE 4350	INDEX 9912 SAMPLE 8229
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	WHITTENBURG	YOUNG COUNTY REGULAR	YOUNG COUNTY REGULAR
WELL NAME	NO. 2	M. K. GRAHAM ESTATE D-2	J. P. LOGAN NO. 2
LOCATION	J. L. MERCER SUR. A-1873	TE&L CO. SUR. NO. 3410	SEC. 1654, TEL & CO. SUR.
OWNER	HARDING BROS. OIL & GAS CO.	ANZAC OIL CORP., ET AL.	C. V. MORGAN ET AL
COMPLETED	NOT GIVEN	02/09/47	03/27/61
SAMPLED	10/07/64	09/24/47	10/11/61
FORMATION	PENN-CONGLOMERATE	NOT GIVEN	PENN-GUNSIGHT
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3960	570	270
WELLHEAD PRESSURE,PSIG	900	200	250
OPEN FLOW, MCFD	NOT GIVEN	3000	5
COMPONENT, MOLE PCT			
METHANE	76.4	62.5	57.6
ETHANE	9.4	3.3	0.4
PROPANE	4.8	---	0.2
N-BUTANE	1.6	---	0.2
ISOBUTANE	0.7	---	0.2
N-PENTANE	0.4	---	TRACE
ISOPENTANE	0.5	---	0.1
CYCLOPENTANE	0.2	---	0.1
HEXANES PLUS	0.4	---	0.2
NITROGEN	5.1	32.9	40.2
OXYGEN	TRACE	0.5	0.0
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.17	0.73	0.65
HEATING VALUE*	1211	692	628
SPECIFIC GRAVITY	0.738	0.707	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9913 SAMPLE 8230	INDEX 9914 SAMPLE 8569	INDEX 9915 SAMPLE 12643
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	YOUNG COUNTY REGULAR	YOUNG COUNTY REGULAR	YOUNG COUNTY REGULAR
WELL NAME	J. P. LOGAN NO. 2	NO. 3	MORRISON HARBISON NO. A-2
LOCATION	SEC. 1654, TEL & CO. SUR.	SEC. 198, TEL & CO. SUR.	1 MI. E. OF GRAHAM
OWNER	C. V. MORGAN ET AL	C. V. MORGAN	T. S. BRIDGES OIL OPER. CO.
COMPLETED	03/27/61	05/25/62	01/06/71
SAMPLED	04/11/61	06/05/62	01/27/71
FORMATION	PENN-GUNSIGHT	PENN-GUNSIGHT	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	270	724	1550
WELLHEAD PRESSURE,PSIG	250	350	475
OPEN FLOW, MCFD	5	4280	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.0	61.4	76.1
ETHANE	0.3	1.2	3.0
PROPANE	0.1	0.1	2.5
N-BUTANE	0.1	TRACE	0.6
ISOBUTANE	TRACE	0.0	0.4
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	40.9	35.8	16.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.66	1.25	0.41
HEATING VALUE*	599	646	936
SPECIFIC GRAVITY	0.724	0.707	0.682

	INDEX 9916 SAMPLE 12644	INDEX 9917 SAMPLE 12580	INDEX 9918 SAMPLE 15192
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	ZAPATA	ZAPATA
FIELD	YOUNG COUNTY REGULAR	ARROYO GARZA	OYE
WELL NAME	M. C. HEROY	GARZA NO. 1	J. D. OYE NO. 1
LOCATION	2 MI. E. OF GRAHAM	OE MIRA FLORES GRANT A-27	J.V. BOREGO GRANT, A-209
OWNER	T. S. BRIDGES OIL OPER. CO.	SUN OIL CO.	GAS PRODUCING ENTERPRISES
COMPLETED	01/10/71	09/13/69	01/10/76
SAMPLED	01/27/71	12/15/70	01/06/78
FORMATION	NOT GIVEN	EOCE-QUEEN CITY	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	425	220	220
DEPTH, FEET	2000	4728	8200
WELLHEAD PRESSURE,PSIG	400	1700	3678
OPEN FLOW, MCFD	NOT GIVEN	6400	18000
COMPONENT, MOLE PCT			
METHANE	73.3	91.8	90.5
ETHANE	3.7	3.6	5.2
PROPANE	3.0	1.7	1.2
N-BUTANE	0.8	0.3	0.3
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	17.6	1.0	0.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	1.5
HELIUM	0.40	0.01	TRACE
HEATING VALUE*	957	1088	1084
SPECIFIC GRAVITY	0.705	0.623	0.630

	INDEX 9919 SAMPLE 15193	INDEX 9920 SAMPLE 16103	INDEX 9921 SAMPLE 2588
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	OYE	EL GRULLO	ESCOBAS
WELL NAME	J. D. OYE NO. 2	ANTONIO M. VELA NO. C-1	NO. 2
LOCATION	J.V. BOREGO GRANT, A-209	EL GRULLO GRT. A-37	BLK. 2, CARTA BLANCA RANCH
OWNER	GAS PRODUCING ENTERPRISES	PENNZOIL CO.	WINCH & BILLINGS
COMPLETED	04/11/76	NOT GIVEN	12/29/32
SAMPLED	01/06/78	10/18/80	01/16/33
FORMATION	CRET-NAVARRO	EOCE-WILCOX	EOCE-JACKSON
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9400	6762	1668
WELLHEAD PRESSURE,PSIG	1704	3700	645
OPEN FLOW, MCFD	1850	7900	20000
COMPONENT, MOLE PCT			
METHANE	95.6	92.8	97.5
ETHANE	2.3	3.4	0.0
PROPANE	0.3	0.8	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	0.2	0.3	0.9
OXYGEN	0.0	0.1	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.4	1.9	0.7
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1028	1049	988
SPECIFIC GRAVITY	0.586	0.612	0.570

	INDEX 9922 SAMPLE 13565	INDEX 9923 SAMPLE 1950	INDEX 9924 SAMPLE 15009
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	ESCOBAS	JENNINGS	JENNINGS N
WELL NAME	JOSE M. GUTTIERREZ NO. 1	F. G. MARTINEZ NO. 1	F. CUELLAR EST. NO. B-1
LOCATION	PEDRO BUSTAMANTE SUR. A559	SEC. 6	TCRR SUR. 243, A-161
OWNER	PENNZOIL PRODUCING CO.	MAGNOLIA PETROLEUM CO.	HUGHES & HUGHES
COMPLETED	11/08/71	08/16/29	06/16/75
SAMPLED	03/16/73	03/08/30	05/--/77
FORMATION	CRET-WILCOX	EOCE-YEGUA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9314	1921	9498
WELLHEAD PRESSURE,PSIG	5050	620	4106
OPEN FLOW, MCFD	5400	20000	2650
COMPONENT, MOLE PCT			
METHANE	88.2	98.9	90.6
ETHANE	5.1	1.0	4.4
PROPANE	1.6	---	1.4
N-BUTANE	1.2	---	0.4
ISOBUTANE	0.4	---	0.2
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.7	1.4	0.2
OXYGEN	0.2	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	3.2	0.3	2.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1060	993	1075
SPECIFIC GRAVITY	0.646	0.565	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9925 SAMPLE 13532	INDEX 9926 SAMPLE 15460	INDEX 9927 SAMPLE 13961
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	JENNINGS W	LAREDO	LOS MOGOTES
WELL NAME	JENNINGS NO. 25	C. L. MCCANN NO. 1	HAYNES ESTATE NO. 7
LOCATION	J.M. PEREDO SUR. A-73	J.V. BORREGO GNT. A-209	LOS MOGOTES GRANT A-566
OWNER	PENNZOIL PRODUCING CO.	CHEVRON U.S.A.,INC.	TEXAS OIL & GAS CORP.
COMPLETED	10/13/71	04/19/77	03/03/72
SAMPLED	02/14/73	10/26/78	02/04/74
FORMATION	EOCE-4850 FT. SAND	EOCE-WILCOX	EOCE-QUEEN CITY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4871	7898	3594
WELLHEAD PRESSURE,PSIG	1743	4637	1367
OPEN FLOW, MCFD	5100	10500	10000
COMPONENT, MOLE PCT			
METHANE	89.6	92.0	85.3
ETHANE	5.0	4.2	8.8
PROPANE	2.7	1.1	3.1
N-BUTANE	0.6	0.2	0.7
ISOBUTANE	0.6	0.2	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.1	0.2	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.4	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1130	1067	1168
SPECIFIC GRAVITY	0.642	0.613	0.663

	INDEX 9928 SAMPLE 9170	INDEX 9929 SAMPLE 15235	INDEX 9930 SAMPLE 15189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	LOS MOGOTES N	MIRANDO VALLEY N	ROLETA
WELL NAME	T. A. VERGARA NO. 2	HINNANT-FULBRIGHT "J" NO. 1	GUERRA L NO. 1
LOCATION	SEC. 628T, T. BE&TRANG SUR.	J. H. HINNANT SUR. NO. 613	R. VELA PORCIAN 26, A-102
OWNER	SKELLY OIL CO.	HUGHES & HUGHES OIL & GAS	TEXAS OIL & GAS CORP.
COMPLETED	01/11/62	05/27/77	06/18/76
SAMPLED	11/13/63	03/20/78	01/--/78
FORMATION	EOCE-WILCOX	EOCE-CLAIBORNE	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5533	5551	8146
WELLHEAD PRESSURE,PSIG	2094	2007	4600
OPEN FLOW, MCFD	4000	6200	5000
COMPONENT, MOLE PCT			
METHANE	93.3	90.6	92.3
ETHANE	3.7	4.6	4.6
PROPANE	1.2	1.7	1.1
N-BUTANE	0.5	0.4	0.2
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	TRACE	0.9	0.2
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	1.1
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1091	1090	1073
SPECIFIC GRAVITY	0.613	0.626	0.612

	INDEX 9931 SAMPLE 15439	INDEX 9932 SAMPLE 15443	INDEX 9933 SAMPLE 11193
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAVALA
FIELD	ROLETA	UREÑNO	BANDERA TANK NW
WELL NAME	GUERRA "M" NO. 1	M. M. ALEXANDER NO. B-2	R. W. NORTON NO. 14
LOCATION	5 MI. NW LOPEÑO	M. CUELLAR PORCION 1, A-127	BLK. 12, SEC. 64, I&GNA-454
OWNER	TEXAS OIL & GAS CORP.	GULF OIL EXPL. & PROD. CO.	NORTON OIL CO., INC.
COMPLETED	02/09/77	06/25/77	06/25/66
SAMPLED	10/18/78	10/17/78	10/29/67
FORMATION	EOCE-WILCOX	-LOBO	CRET-SAN MIGUEL
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8172	7853	2315
WELLHEAD PRESSURE,PSIG	1100	3170	990
OPEN FLOW, MCFD	4000	940	25000
COMPONENT, MOLE PCT			
METHANE	92.1	96.0	96.5
ETHANE	4.3	1.7	0.9
PROPANE	1.2	0.3	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.2	0.0	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.3	0.2	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.5	TRACE
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1077	1019	1025
SPECIFIC GRAVITY	0.616	0.585	0.579

	INDEX 9934 SAMPLE 10911	INDEX 9935 SAMPLE 4007	INDEX 9936 SAMPLE 3869
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAVALA	ZAVALA	ZAVALA
FIELD	BUZZARD TANK	LEONA RIVER	NOT GIVEN
WELL NAME	NORTON CHAPPAROSA RANCH NO15	NATIONAL BANK COMMERCE NO. 1	W. M. VAN CLEVE NO. 1
LOCATION	SEC. 14, SA&MG RR SUR. A593	NOT GIVEN	A. VAN CLEVE SUR. NO. 8
OWNER	NORTON OIL CO., INC.	TEXAS CO.	TEXAS CO.
COMPLETED	07/01/66	02/02/45	06/19/44
SAMPLED	04/05/67	04/22/45	09/25/44
FORMATION	CRET-SAN MIGUEL	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2452	4214	1960
WELLHEAD PRESSURE,PSIG	1140	1645	NOT GIVEN
OPEN FLOW, MCFD	4100	9800	300
COMPONENT, MOLE PCT			
METHANE	96.6	79.0	98.8
ETHANE	1.0	17.1	0.0
PROPANE	0.0	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.0	3.6	0.9
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.03	0.09	0.03
HEATING VALUE*	1009	1107	1001
SPECIFIC GRAVITY	0.574	0.655	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9937 SAMPLE 15437		INDEX 9938 SAMPLE 15436		INDEX 9939 SAMPLE 15172	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ZAVALA		ZAVALA		ZAVALA	
FIELD	PRYOR RANCH N		PRYOR RANCH S		SPINACH	
WELL NAME	IKE T. PRYOR NO. C-1		H&F PROPERTIES NO. B-1		R.J. KLEINMANN "B" NO. 1	
LOCATION	ANTONIO AGUIRRE SUR. A-1		SEC. 22, N. AGUIRRE SUR. A-3		NARCISO AGUIRRE SUR. A-3	
OWNER	HUGHES & HUGHES OIL & GAS		HUGHES & HUGHES OIL & GAS		HUGHES & HUGHES	
COMPLETED	06/24/77		04/05/77		05/30/77	
SAMPLED	10/17/78		10/17/78		12/21/77	
FORMATION	CRET-OLMOS		CRET-ELAINE		CRET-SAN MIGUEL	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2288		3480		3774	
WELLHEAD PRESSURE,PSIG	907		1410		1565	
OPEN FLOW, MCFD	3200		9800		9000	
COMPONENT, MOLE PCT						
METHANE	97.7		97.6		91.5	
ETHANE	0.1		0.8		2.7	
PROPANE	TRACE		0.4		2.5	
N-BUTANE	0.0		TRACE		0.8	
ISOBUTANE	0.0		0.0		0.4	
N-PENTANE	0.0		TRACE		0.1	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.1	
NITROGEN	2.0		0.8		1.7	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		TRACE	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	991		1019		1099	
SPECIFIC GRAVITY	0.564		0.570		0.626	

	INDEX 9940 SAMPLE 2218		INDEX 9941 SAMPLE 7821		INDEX 9942 SAMPLE 6922	
STATE	UTAH		UTAH		UTAH	
COUNTY	CARBON		CARBON		CARBON	
FIELD	FARNHAM DOME		FARNHAM DOME		GORDON CREEK UNIT	
WELL NAME	NO. 1		NO. 4		R. BRYNER NO. 2	
LOCATION	SEC. 12, T15S, R11E		SEC. 12, T15S, R11E		SEC. 25, T14S, R7E	
OWNER	CARBON DIOXIDE & CHEMICAL CO		CALIFORNIA OIL CO.		SKELLY OIL CO.	
COMPLETED	NOT GIVEN		05/--/46		12/05/56	
SAMPLED	10/21/30		01/13/61		12/31/58	
FORMATION	TRIA-		PERM-COCONINO		TRIA-SINBAD	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	3093		3133		10760	
WELLHEAD PRESSURE,PSIG	750		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	2780		NOT GIVEN		6500	
COMPONENT, MOLE PCT						
METHANE	0.0		0.4		2.4	
ETHANE	0.0		0.1		0.3	
PROPANE	---		0.3		0.0	
N-BUTANE	---		0.0		0.1	
ISOBUTANE	---		0.0		0.0	
N-PENTANE	---		0.0		0.1	
ISOPENTANE	---		0.0		0.0	
CYCLOPENTANE	---		0.0		0.1	
HEXANES PLUS	---		0.0		0.3	
NITROGEN	0.9		0.8		7.5	
OXYGEN	0.2		TRACE		0.1	
ARGON	---		TRACE		0.1	
HYDROGEN	---		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	98.9		98.3		89.3	
HELIUM	0.02		0.00		0.10	
HEATING VALUE*	0		14		56	
SPECIFIC GRAVITY	1.523		1.519		1.471	

	INDEX 9943 SAMPLE 6923		INDEX 9944 SAMPLE 1828		INDEX 9945 SAMPLE 14982	
STATE	UTAH		UTAH		UTAH	
COUNTY	CARBON		CARBON		CARBON	
FIELD	GORDON CREEK UNIT		NOT GIVEN		PETERS POINT	
WELL NAME	R. BRYNER NO. 1		GAS SEEP		PETERS POINT NO. 1	
LOCATION	SEC. 24, T14S, R7E		SEC.--, T14, R15		SEC. 6, T13S, R17E	
OWNER	SKELLY OIL CO.		G. E. LUNDY		RESERVE OIL, INC.	
COMPLETED	08/15/51		NOT GIVEN		08/12/76	
SAMPLED	12/31/58		08/04/29		04/17/77	
FORMATION	TRIA-SINBAD		NOT GIVEN		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	10877		NOT GIVEN		4622	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		500	
OPEN FLOW, MCFD	5000		NOT GIVEN		474	
COMPONENT, MOLE PCT						
METHANE	0.1		0.0		89.3	
ETHANE	0.1		0.0		6.3	
PROPANE	0.0		---		2.2	
N-BUTANE	TRACE		---		0.6	
ISOBUTANE	TRACE		---		0.3	
N-PENTANE	0.0		---		0.2	
ISOPENTANE	0.0		---		0.3	
CYCLOPENTANE	TRACE		---		TRACE	
HEXANES PLUS	0.1		---		0.1	
NITROGEN	0.0		2.8		0.5	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	99.5		97.2		0.1	
HELIUM	TRACE		0.05		0.01	
HEATING VALUE*	8		0		1131	
SPECIFIC GRAVITY	1.527		1.513		0.636	

	INDEX 9946 SAMPLE 8776		INDEX 9947 SAMPLE 14134		INDEX 9948 SAMPLE 12620	
STATE	UTAH		UTAH		UTAH	
COUNTY	CARBON		CARBON		CARBON	
FIELD	STONE CABIN		STONE CABIN		SUNNYSIDE UNIT	
WELL NAME	STONE CABIN UNIT NO. 1		STONE CABIN II UNIT 2-8-27		SUNNYSIDE UNIT NO. 1	
LOCATION	SEC. 13, T12S, R14E		SEC. 27, T12S, R15E		SEC. 17, T15S, R13E	
OWNER	SUN OIL CO.		PACIFIC TRANSMISSION SUP. CO		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	09/01/58		09/--/72		DRILL STEM TEST NO.671	
SAMPLED	11/17/62		08/21/74		11/29/70	
FORMATION	EOCE-WASATCH		NOT GIVEN		TRIA-MOENKOPI	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	4953		5004		5092	
WELLHEAD PRESSURE,PSIG	1180		1900		1549	
OPEN FLOW, MCFD	4400		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	91.0		80.8		27.6	
ETHANE	5.5		5.0		2.1	
PROPANE	1.6		1.6		1.2	
N-BUTANE	0.6		0.3		0.3	
ISOBUTANE	0.3		0.8		0.4	
N-PENTANE	0.1		0.3		0.1	
ISOPENTANE	0.2		0.7		0.1	
CYCLOPENTANE	TRACE		0.4		0.1	
HEXANES PLUS	0.1		1.2		0.2	
NITROGEN	0.4		6.8		60.1	
OXYGEN	TRACE		1.6		0.1	
ARGON	0.0		TRACE		0.4	
HYDROGEN	0.1		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.5		6.0	
HELIUM	0.01		0.01		1.22	
HEATING VALUE*	1104		1106		394	
SPECIFIC GRAVITY	0.619		0.709		0.903	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9949 SAMPLE 5560		INDEX 9950 SAMPLE 8662		INDEX 9951 SAMPLE 8696	
STATE	UTAH		UTAH		UTAH	
COUNTY	CARBON		CARBON		CARBON	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	PETERS POINT NO. 2		TEXACO SHARPLES NO. 1		GOVT. PICKRELL NO. 1	
LOCATION	SEC. 36, T12S, R16E		SEC. 11, T12S, R15E		SEC. 11, T12S, R15E	
OWNER	EL PASO NATURAL GAS CO.		TEXACO INC. & SHARPLES OIL		TEXACO INC. & SHARPLES OIL	
COMPLETED	06/30/53		DRILL STEM TEST		DRILL STEM TEST	
SAMPLED	10/27/53		09/06/62		10/02/62	
FORMATION	EOCE-WASATCH U		EOCE-WASATCH		CRET-MESAVERDE	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	2856		3790		5530	
WELLHEAD PRESSURE,PSIG	680		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	2330		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.6		91.0		94.0	
ETHANE	1.8		5.2		3.6	
PROPANE	0.3		1.4		0.6	
N-BUTANE	0.1		0.3		0.1	
ISOBUTANE	0.0		0.4		0.1	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.0		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	TRACE		0.1		TRACE	
NITROGEN	0.5		1.0		1.3	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.2		0.1	
HELIUM	0.01		0.02		0.02	
HEATING VALUE*	1026		1097		1044	
SPECIFIC GRAVITY	0.576		0.622		0.589	

	INDEX 9952 SAMPLE 8743		INDEX 9953 SAMPLE 8763		INDEX 9954 SAMPLE 9837	
STATE	UTAH		UTAH		UTAH	
COUNTY	CARBON		CARBON		CARBON	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	GOVT. PICKRELL NO. 1		GOVT. PICKRELL NO. 1		SPRINGS NO. 1	
LOCATION	SEC. 11, T12S, R15E		SEC. 11, T12S, R15E		SEC. 27, T15S, R9E	
OWNER	TEXACO INC. & SHARPLES OIL		TEXACO INC. & SHARPLES OIL		PACIFIC NATURAL GAS EXPL. CO	
COMPLETED	NOT GIVEN		NOT GIVEN		12/12/64	
SAMPLED	10/30/62		11/11/62		03/31/65	
FORMATION	CRET-MESAVERDE		CRET-MESAVERDE		PENN-MANNING CANYON	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	7173		7652		10666	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		2802	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		3440	
COMPONENT, MOLE PCT						
METHANE	75.0		83.7		86.6	
ETHANE	12.0		9.3		6.4	
PROPANE	6.5		3.4		2.0	
N-BUTANE	1.9		0.9		0.6	
ISOBUTANE	1.6		0.8		0.9	
N-PENTANE	0.5		0.3		0.3	
ISOPENTANE	0.8		0.3		0.2	
CYCLOPENTANE	0.2		0.1		0.2	
HEXANES PLUS	0.6		0.3		1.1	
NITROGEN	0.6		0.7		1.2	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.1		0.0		0.0	
HYDROGEN	0.1		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.4	
HELIUM	TRACE		TRACE		0.07	
HEATING VALUE*	1355		1205		1180	
SPECIFIC GRAVITY	0.779		0.684		0.677	

	INDEX 9955 SAMPLE 3050		INDEX 9956 SAMPLE 3053		INDEX 9957 SAMPLE 4351	
STATE	UTAH		UTAH		UTAH	
COUNTY	DAGGETT		DAGGETT		DAGGETT	
FIELD	CLAY BASIN		CLAY BASIN		CLAY BASIN	
WELL NAME	MURPHY NO. 1		STATE NO. 1		R. D. MURPHY NO. 6-W	
LOCATION	SEC. 22, T3N, R24E		SEC. 16, T3N, R24E		SEC. 22, T3N, R24W	
OWNER	MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	04/--/27		11/--/36		07/10/47	
SAMPLED	11/28/41		11/28/41		09/24/47	
FORMATION	CRET-FRONTIER		CRET-DAKOTA		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	570		570		570	
DEPTH, FEET	5373		5739		5640	
WELLHEAD PRESSURE,PSIG	1750		1710		1665	
OPEN FLOW, MCFD	3250		16000		5200	
COMPONENT, MOLE PCT						
METHANE	87.9		88.8		85.7	
ETHANE	11.2		10.1		12.2	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	0.3		0.6		1.3	
OXYGEN	0.2		0.2		0.5	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.4		0.3		0.3	
HELIUM	0.04		0.03		0.03	
HEATING VALUE*	1091		1081		1087	
SPECIFIC GRAVITY	0.616		0.611		0.626	

	INDEX 9958 SAMPLE 8793		INDEX 9959 SAMPLE 8798		INDEX 9960 SAMPLE 12106	
STATE	UTAH		UTAH		UTAH	
COUNTY	DAGGETT		DAGGETT		DAGGETT	
FIELD	CLAY BASIN		CLAY BASIN		CLAY BASIN	
WELL NAME	R. D. MURPHY NO. 1		STATELAND NO. 1		UNIT NO. 11	
LOCATION	SEC. 22, T3N, R24E		SEC. 16, T3N, R24E		SEC. 22, T3N, R24E	
OWNER	MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	04/--/27		11/--/36		DRILL STEM TEST NO. 1	
SAMPLED	11/28/62		11/28/62		11/06/69	
FORMATION	CRET-FRONTIER		CRET-DAKOTA		PENN-WEBER	
GEOLOGIC PROVINCE CODE	570		570		570	
DEPTH, FEET	5344		5740		9025	
WELLHEAD PRESSURE,PSIG	1722		518		3833	
OPEN FLOW, MCFD	3276		16375		8500	
COMPONENT, MOLE PCT						
METHANE	92.2		92.4		3.3	
ETHANE	4.4		3.9		0.5	
PROPANE	1.5		1.3		0.1	
N-BUTANE	0.4		0.4		0.2	
ISOBUTANE	0.3		0.2		TRACE	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.5		1.1		80.1	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.0		0.0		0.3	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.3		14.7	
HELIUM	0.03		0.02		0.48	
HEATING VALUE*	1097		1074		61	
SPECIFIC GRAVITY	0.614		0.609		1.039	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9961 SAMPLE 13461		INDEX 9962 SAMPLE 14946		INDEX 9963 SAMPLE 13140	
STATE	UTAH		UTAH		UTAH	
COUNTY	DUCHESNE		DUCHESNE		DUCHESNE	
FIELD	ALTAMONT		ALTAMOUNT		BLACK CEDAR	
WELL NAME	BROTHERSON NO. 1		FORTUNE UTE NO. 1-11C5		UTE TRIBAL D NO. 1	
LOCATION	SEC. 19, T2S, R4W		SEC. 11, T3S, R5W		SEC. 14, T3S, R6W	
OWNER	SHELL OIL CO.		GULF ENERGY & MINERALS-U.S.		TEXACO INC.	
COMPLETED	07/24/72		12/28/76		06/01/71	
SAMPLED	10/24/72		03/18/77		01/26/72	
FORMATION	EOCE-WASATCH		EOCE-WASATCH		EOCE-GREEN RIVER	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	10309		10278		8786	
WELLHEAD PRESSURE,PSIG	4100		3000		NOT GIVEN	
OPEN FLOW, MCFD	3500		NOT GIVEN		2587	
COMPONENT, MOLE PCT						
METHANE	71.8		76.5		68.9	
ETHANE	14.3		12.2		13.0	
PROPANE	7.8		5.9		8.7	
N-BUTANE	2.5		1.9		3.5	
ISOBUTANE	1.3		0.9		1.8	
N-PENTANE	1.0		0.6		1.3	
ISOPENTANE	0.9		0.6		1.1	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.6		0.4		1.0	
NITROGEN	0.3		0.5		TRACE	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.4	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1409		1317		1497	
SPECIFIC GRAVITY	0.611		0.757		0.864	

	INDEX 9964 SAMPLE 5834		INDEX 9965 SAMPLE 13220		INDEX 9966 SAMPLE 13582	
STATE	UTAH		UTAH		UTAH	
COUNTY	DUCHESNE		DUCHESNE		DUCHESNE	
FIELD	BLUEBELL		BLUEBELL		BLUEBELL	
WELL NAME	BLUEBELL UNIT NO. 2		HAMBLIN NO. 1		E. J. ASAY NO. 1	
LOCATION	SEC. 3, T1S, R2W		SEC. 26, T1S, R2W		SEC. 20, T1S, R1W	
OWNER	CARTER OIL CO.		GULF OIL CO. - U.S.		GAS PRODUCING ENTERPRISES	
COMPLETED	02/07/55		03/26/72		09/08/72	
SAMPLED	04/28/55		05/26/72		04/06/73	
FORMATION	EOCE-GREEN RIVER		EOCE-WASATCH		EOCE-GREEN RIVER	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	7895		13125		11814	
WELLHEAD PRESSURE,PSIG	2490		5400		NOT GIVEN	
OPEN FLOW, MCFD	5000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.0		73.7		73.3	
ETHANE	1.1		14.4		12.9	
PROPANE	0.9		7.2		4.7	
N-BUTANE	0.2		1.9		1.8	
ISOBUTANE	0.5		1.0		1.0	
N-PENTANE	0.2		0.5		0.6	
ISOPENTANE	0.0		0.4		0.8	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.3		0.5	
NITROGEN	0.6		0.1		3.2	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.4		1.0	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1057		1347		1279	
SPECIFIC GRAVITY	0.590		0.773		0.771	

	INDEX 9967 SAMPLE 8370		INDEX 9968 SAMPLE 9717		INDEX 9969 SAMPLE 9721	
STATE	UTAH		UTAH		UTAH	
COUNTY	EMERY		EMERY		EMERY	
FIELD	BOW KNOT		FEDERAL MOUNDS		FEDERAL MOUNDS	
WELL NAME	BOW KNOT NO. 14S		FEDERAL MOUNDS NO. 1		FEDERAL MOUNDS NO. 1	
LOCATION	SEC. 5, T26S, R17E		SEC. 11, T16S, R11E		SEC. 11, T16S, R11E	
OWNER	SUPERIOR OIL CO.		PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	01/17/62		02/04/65		02/08/65	
FORMATION	MISS-		MISS-		MISS-DESERET	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	6270		8276		8520	
WELLHEAD PRESSURE,PSIG	2420		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	300		17000		44	
COMPONENT, MOLE PCT						
METHANE	12.6		1.5		1.6	
ETHANE	1.5		0.1		0.1	
PROPANE	1.0		0.0		0.0	
N-BUTANE	0.4		0.0		0.0	
ISOBUTANE	0.2		0.0		0.0	
N-PENTANE	0.2		0.0		0.0	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	0.1		0.0		0.0	
HEXANES PLUS	0.3		0.0		0.0	
NITROGEN	79.1		70.2		73.0	
OXYGEN	TRACE		0.1		0.2	
ARGON	0.2		0.3		0.4	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.2		0.0		0.0	
CARBON DIOXIDE	2.7		27.5		24.2	
HELIUM	1.47		0.52		0.55	
HEATING VALUE*	200		17		18	
SPECIFIC GRAVITY	0.943		1.112		1.095	

	INDEX 9970 SAMPLE 9722		INDEX 9971 SAMPLE 7361		INDEX 9972 SAMPLE 9415	
STATE	UTAH		UTAH		UTAH	
COUNTY	EMERY		EMERY		EMERY	
FIELD	FEDERAL MOUNDS		FERRON		FERRON	
WELL NAME	FEDERAL MOUNDS NO. 1		STATE NO. 1-22		FERRON UNIT NO. 41-22	
LOCATION	SEC. 11, T16S, R11E		SEC. 22, T20S, R7E		SEC. 22, T20S, R7E	
OWNER	PAN AMERICAN PETROLEUM CORP.		ENGLISH OIL CO.		PACIFIC NAT. GAS EXPLORATION	
COMPLETED	NOT GIVEN		08/22/57		06/05/63	
SAMPLED	02/06/65		01/21/60		06/19/64	
FORMATION	MISS-DESERET		CRET-FERRON		CRET-FERRON	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	8369		628		580	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		420		398	
OPEN FLOW, MCFD	15500		4700		872	
COMPONENT, MOLE PCT						
METHANE	1.5		95.8		96.1	
ETHANE	0.1		1.3		1.2	
PROPANE	0.0		0.7		0.6	
N-BUTANE	0.0		0.2		0.2	
ISOBUTANE	0.0		0.1		0.2	
N-PENTANE	0.0		TRACE		0.1	
ISOPENTANE	0.0		0.1		0.1	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		TRACE		0.1	
NITROGEN	72.5		1.3		1.1	
OXYGEN	0.2		TRACE		0.0	
ARGON	0.4		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	26.4		0.1		0.2	
HELIUM	0.58		0.04		0.04	
HEATING VALUE*	17		1027		1038	
SPECIFIC GRAVITY	1.110		0.579		0.585	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9973 SAMPLE 9631	INDEX 9974 SAMPLE 9846	INDEX 9975 SAMPLE 10010
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FERRON UNIT	FERRON UNIT	FERRON UNIT
WELL NAME	FERRON UNIT NO. 3	FERRON UNIT NO. 3	FERRON UNIT NO. 4
LOCATION	SEC. 21, T20S, R7E	SEC. 21, T20S, R7E	SEC. 2, T20S, R7E
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	09/15/64	09/15/64	DRILL STEM TEST
SAMPLED	11/04/64	04/14/65	06/30/65
FORMATION	PERM-KAIBAB	PERM-KAIBAB	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7170	7170	7244
WELLHEAD PRESSURE,PSIG	1225	1000	NOT GIVEN
OPEN FLOW, MCFD	1107	1107	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	29.0	29.9	10.5
ETHANE	4.1	4.0	1.6
PROPANE	3.2	3.4	1.2
N-BUTANE	1.1	1.0	0.5
ISOBUTANE	0.4	0.5	0.1
N-PENTANE	0.7	0.5	0.2
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.6	0.3
NITROGEN	7.5	8.1	73.0
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.3	0.2	0.0
CARBON DIOXIDE	52.4	51.4	7.9
HELIUM	0.18	0.19	0.11
HEATING VALUE*	581	569	178
SPECIFIC GRAVITY	1.209	1.193	0.305

	INDEX 9976 SAMPLE 8728	INDEX 9977 SAMPLE 8731	INDEX 9978 SAMPLE 2677
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FLAT CANYON	FLAT CANYON	LAST CHANCE
WELL NAME	MARY D. KEARNS NO. 1	MARY D. KEARNS NO. 2	NO. 1
LOCATION	SEC. 23, T16S, R6E	SEC. 27, T16S, R6E	SEC. 18, T26S, R7E
OWNER	DELHI-TAYLOR OIL CORP.	DELHI-TAYLOR OIL CORP.	RAMSEY PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/22/62	10/02/62	09/08/34
FORMATION	CRET-FERRON	CRET-FERRON	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2724
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	410
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	21000
COMPONENT, MOLE PCT			
METHANE	83.9	91.0	79.9
ETHANE	7.6	3.5	0.9
PROPANE	4.3	2.3	---
N-BUTANE	1.2	0.6	---
ISOBUTANE	0.9	0.6	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	0.9	1.0	13.3
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	5.5
HELIUM	0.05	0.02	0.19
HEATING VALUE*	1213	1107	826
SPECIFIC GRAVITY	0.692	0.629	0.668

	INDEX 9979 SAMPLE 7388	INDEX 9980 SAMPLE 5405	INDEX 9981 SAMPLE 6222
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	TEMPLE SPRINGS	WILDCAT	WILDCAT
WELL NAME	TEMPLE SPRINGS UNIT NO. 1	PACKSADDLE NO. 1	GOVERNMENT-WHEATLEY NO. 1
LOCATION	SEC. 14, T25S, R13E	SEC. 12, T18S, R12E	SEC. 27, T16S, R12E
OWNER	TEXACO INC.	EL PASO NATURAL GAS CO.	CARTER OIL CO.
COMPLETED	01/28/60	DRILL STEM TEST	NOT GIVEN
SAMPLED	12/22/59	02/20/53	12/28/56
FORMATION	DEVO-ELBERT	PERM-KAIBAB	TRIA-SINBAD
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4670	2309	3501
WELLHEAD PRESSURE,PSIG	1770	610	925
OPEN FLOW, MCFD	2387	NOT GIVEN	2
COMPONENT, MOLE PCT			
METHANE	0.0	0.5	1.4
ETHANE	0.0	0.0	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	96.6	4.5	7.0
OXYGEN	0.1	0.1	0.1
ARGON	0.3	TRACE	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	94.7	91.2
HELIUM	2.80	0.10	0.13
HEATING VALUE*	0	5	16
SPECIFIC GRAVITY	0.948	1.496	1.474

	INDEX 9982 SAMPLE 854	INDEX 9983 SAMPLE 1161	INDEX 9984 SAMPLE 8633
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	WOODSIDE	WOODSIDE	WOODSIDE
WELL NAME	WOODSIDE	WOODSIDE NO. 1	UNIT NO. 1
LOCATION	NOT GIVEN	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E
OWNER	UTAH OIL REFINING CO.	UTAH OIL REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/19/24	09/26/25	07/18/62
FORMATION	NOT GIVEN	PERM-KAIBAB	PERM-ELEPHANT CANYON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4490
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1530
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	64
COMPONENT, MOLE PCT			
METHANE	0.0	---	27.0
ETHANE	0.0	5.7	4.0
PROPANE	---	---	1.6
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	68.1	61.0	64.9
OXYGEN	1.3	0.3	TRACE
ARGON	---	---	0.2
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	28.4	31.7	0.1
HELIUM	1.33	1.31	1.03
HEATING VALUE*	0	102	426
SPECIFIC GRAVITY	1.109	1.140	0.874

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9985 SAMPLE 8634	INDEX 9986 SAMPLE 12055	INDEX 9987 SAMPLE 12059
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	WOODSIDE	WOODSIDE	WOODSIDE DOME
WELL NAME	UNIT NO. 1	FEDERAL NO. 44-12	FEDERAL 44-12
LOCATION	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E
OWNER	HUMBLE OIL & REFINING CO.	HOLLY RESOURCES CORP.	HOLLY RESOURCES CORP.
COMPLETED	NOT GIVEN	09/27/69	09/27/69
SAMPLED	07/24/62	09/27/69	10/01/69
FORMATION	PENN-VIRGIL	PERM-KAIBAB	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8910	3341	3341
WELLHEAD PRESSURE,PSIG	1620	750	750
OPEN FLOW, MCFD	6	3000	6000
COMPONENT, MOLE PCT			
METHANE	67.0	0.2	0.2
ETHANE	6.0	0.1	0.2
PROPANE	2.0	TRACE	0.1
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	23.3	64.4	64.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	33.0	33.2
HELIUM	0.30	1.51	1.36
HEATING VALUE*	878	24	28
SPECIFIC GRAVITY	0.720	1.146	1.150

	INDEX 9988 SAMPLE 8089	INDEX 9989 SAMPLE 8091	INDEX 9990 SAMPLE 9766
STATE	UTAH	UTAH	UTAH
COUNTY	GARFIELD	GARFIELD	GRAND
FIELD	ESCALANTE	ESCALANTE	AGATE
WELL NAME	ESCALANTE NO. 2	ESCALANTE NO. 2	FEE NO. 8-1
LOCATION	SEC. 29, T32S, R3E	SEC. 29, T32S, R3E	SEC. 8, T20S, R24E
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	WILLIAM G. BUSH
COMPLETED	NOT GIVEN	NOT GIVEN	11/20/64
SAMPLED	07/19/61	07/19/61	02/22/65
FORMATION	NOT GIVEN	NOT GIVEN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	1606	2260	1670
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	680
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2800
COMPONENT, MOLE PCT			
METHANE	0.7	0.4	88.7
ETHANE	0.2	0.2	1.9
PROPANE	0.3	0.0	0.7
N-BUTANE	0.1	TRACE	0.1
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.4	5.3	8.4
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.4	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	96.1	93.1	TRACE
HELIUM	0.10	0.30	0.30
HEATING VALUE*	23	16	956
SPECIFIC GRAVITY	1.503	1.490	0.609

	INDEX 9991 SAMPLE 6360	INDEX 9992 SAMPLE 6361	INDEX 9993 SAMPLE 6851
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BAR X	BAR X	BAR X
WELL NAME	BAR-X NO. 3	BAR-X NO. 4	U.S.A. PETERSON A UNIT NO. 1
LOCATION	SEC. 12, T17S, R25E	SEC. 18, T17S, R26E	SEC. 8, T17S, R26E
OWNER	AMERICAN METAL CO.	AMERICAN METAL CO.	TENNESSEE GAS TRANSMISSION
COMPLETED	12/19/55	01/17/56	10/16/58
SAMPLED	08/14/57	08/14/57	-/-/-58
FORMATION	CRET-DAKOTA	JURA-ENTRADA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	2919	3503	3611
WELLHEAD PRESSURE,PSIG	437	1126	730
OPEN FLOW, MCFD	1475	7500	5
COMPONENT, MOLE PCT			
METHANE	91.6	49.6	83.5
ETHANE	4.1	2.1	3.6
PROPANE	1.2	0.7	0.9
N-BUTANE	0.3	0.1	0.3
ISOBUTANE	0.1	TRACE	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	1.8	28.9	9.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	8.4	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	9.6	0.3
HELIUM	0.12	0.50	0.50
HEATING VALUE*	1060	589	980
SPECIFIC GRAVITY	0.608	0.744	0.645

	INDEX 9994 SAMPLE 6876	INDEX 9995 SAMPLE 7058	INDEX 9996 SAMPLE 6421
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BAR X	BAR X	BIG FLAT
WELL NAME	BAR-X UNIT NO. 7	BAR X UNIT NO. 4	PURE BIG FLAT UNIT
LOCATION	SEC. 7, T17S, R26E	SEC. 18, T17S, R26E	SEC. 14, T26S, R19E
OWNER	AMERICAN CLIMAX PETROLEUM CO	AMERICAN CLIMAX PETROLEUM CO	PURE OIL CO.
COMPLETED	10/18/58	NOT GIVEN	NOT GIVEN
SAMPLED	11/14/58	04/29/59	10/24/57
FORMATION	-PEASE	PERM-WICHITA-ALBANY	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	3385	3550	7694
WELLHEAD PRESSURE,PSIG	720	1143	420
OPEN FLOW, MCFD	1	7500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	45.0	7.1
ETHANE	4.7	0.9	1.9
PROPANE	1.2	1.6	3.9
N-BUTANE	0.3	0.2	3.4
ISOBUTANE	0.3	0.0	1.4
N-PENTANE	TRACE	0.1	1.9
ISOPENTANE	0.2	0.0	0.8
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.1	1.5
NITROGEN	3.6	26.4	72.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.3	0.0	1.2
CARBON DIOXIDE	0.5	24.3	2.8
HELIUM	0.30	0.80	1.40
HEATING VALUE*	1069	530	581
SPECIFIC GRAVITY	0.629	0.927	1.101

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9997 SAMPLE 7049	INDEX 9998 SAMPLE 7050	INDEX 9999 SAMPLE 8378
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BIG FLAT	BIG FLAT	BIG FLAT
WELL NAME	BIG FLAT UNIT NO. 1	BIG FLAT UNIT NO. 2	BIG FLAT NO. 5
LOCATION	SEC. 14, T26S, R19E	SEC. 14, T26S, R19E	SEC. 27, T25S, R19E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	09/13/57	09/04/58	12/04/61
SAMPLED	04/29/59	04/29/59	01/23/62
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7954	7768	7202
WELLHEAD PRESSURE,PSIG	150	200	2250
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	90
COMPONENT, MOLE PCT			
METHANE	6.3	20.7	60.3
ETHANE	1.1	8.8	16.9
PROPANE	1.8	9.4	11.3
N-BUTANE	1.5	3.7	3.9
ISOBUTANE	0.8	1.9	2.0
N-PENTANE	1.0	1.1	1.0
ISOPENTANE	0.2	0.6	1.1
CYCLOPENTANE	0.2	0.3	0.2
HEXANES PLUS	1.0	1.1	0.8
NITROGEN	82.1	44.7	2.2
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.2	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	1.4	0.0
CARBON DIOXIDE	2.0	5.7	0.1
HELIUM	1.30	0.30	0.05
HEATING VALUE*	318	950	1544
SPECIFIC GRAVITY	1.015	1.092	0.915

	INDEX 10000 SAMPLE 8601	INDEX 10001 SAMPLE 8602	INDEX 10002 SAMPLE 8209
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BIG FLAT	BIG FLAT	BOOK CLIFFS
WELL NAME	UNIT NO. 5	UNIT NO. 5	BOOK CLIFFS NO. 1
LOCATION	SEC. 27, T25S, R19E	SEC. 27, T25S, R19E	SEC. 32, T18S, R22E
OWNER	PURE OIL CO.	PURE OIL CO.	GULF OIL CORP.
COMPLETED	07/07/62	DRILL STEM TEST	07/05/61
SAMPLED	07/07/62	07/04/62	09/23/61
FORMATION	MISS-	MISS-	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7400	7441	5186
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1537
OPEN FLOW, MCFD	100	4000	5300
COMPONENT, MOLE PCT			
METHANE	12.3	11.9	87.7
ETHANE	2.0	2.1	5.5
PROPANE	1.1	0.1	1.3
N-BUTANE	0.6	0.7	0.3
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	79.3	74.7	3.4
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.2	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	7.4	0.7
HELIUM	1.39	1.40	0.21
HEATING VALUE*	247	226	1070
SPECIFIC GRAVITY	0.948	0.975	0.639

	INDEX 10003 SAMPLE 8657	INDEX 10004 SAMPLE 8766	INDEX 10005 SAMPLE 9110
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BOOK CLIFFS	BOOK CLIFFS	BOOK CLIFFS
WELL NAME	NO. 3	FEDERAL SEAGULL NO. 1-18	BOOK CLIFFS NO. 3
LOCATION	SEC. 33, T18S, R22E	SEC. 18, T16S, R25E	SEC. 33, T18S, R22E
OWNER	GULF OIL CORP.	RIP C. UNDERWOOD	GULF OIL CORP.
COMPLETED	08/17/62	NOT GIVEN	08/15/62
SAMPLED	08/25/62	11/--/62	10/10/63
FORMATION	CRET-DAKOTA	CRET-CEDAR MOUNTAIN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5330	NOT GIVEN	5418
WELLHEAD PRESSURE,PSIG	1698	900	1918
OPEN FLOW, MCFD	2500	1140	2500
COMPONENT, MOLE PCT			
METHANE	88.9	86.9	89.4
ETHANE	5.7	6.7	5.5
PROPANE	1.4	2.7	1.3
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	1.0	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.0	0.2
HELIUM	0.20	0.11	0.20
HEATING VALUE*	1081	1132	1077
SPECIFIC GRAVITY	0.627	0.656	0.623

	INDEX 10006 SAMPLE 7794	INDEX 10007 SAMPLE 7798	INDEX 10008 SAMPLE 15877
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BRYSON CANYON	BRYSON CANYON	BRYSON CANYON
WELL NAME	6A	6A	FEDERAL NO. 3-15
LOCATION	SEC. 9, T17S, R24E	SEC. 9, T17S, R24E	SEC. 3, T17S, R24E
OWNER	TREND OIL CO.	TREND OIL CO.	TENNECO OIL CO.
COMPLETED	11/29/60	11/29/60	08/04/79
SAMPLED	12/01/60	12/01/60	01/09/80
FORMATION	CRET-DAKOTA	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4606	4731	4634
WELLHEAD PRESSURE,PSIG	1076	1276	920
OPEN FLOW, MCFD	1400	9400	2500
COMPONENT, MOLE PCT			
METHANE	87.1	82.4	78.5
ETHANE	3.7	3.6	5.2
PROPANE	0.6	0.7	2.1
N-BUTANE	0.1	0.2	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	5.7	9.3	12.1
OXYGEN	1.2	1.7	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.5	TRACE
HELIUM	0.10	0.70	0.13
HEATING VALUE*	983	958	1005
SPECIFIC GRAVITY	0.627	0.648	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10009 SAMPLE 9355	INDEX 10010 SAMPLE 944	INDEX 10011 SAMPLE 1176
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CANYON E	CISCO DOME	CISCO DOME
WELL NAME	E. CANYON UNIT NO. 44-12	NO. 1 CISCO	NO. 1
LOCATION	SEC. 12, T16S, R24E	SEC. 25, T20S, R21E	SEC. 14, T1-S, R21E
OWNER	TIDEWATER OIL CO.	UTAH OIL REFINING CO.	UTAH OIL REFINING CO.
COMPLETED	10/15/63	NOT GIVEN	NOT GIVEN
SAMPLED	05/15/64	11/17/24	10/19/25
FORMATION	CRET-CEDAR MOUNTAIN	JURA-MCELMO	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5717	1960	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1000	127	NOT GIVEN
OPEN FLOW, MCFD	1300	90000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.0	86.1	83.0
ETHANE	5.9	12.3	13.6
PROPANE	1.9	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.8	0.9	2.6
OXYGEN	TRACE	0.2	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.4	0.3	0.3
HELIUM	0.08	0.15	0.14
HEATING VALUE*	1107	1093	1085
SPECIFIC GRAVITY	0.641	0.622	0.638

	INDEX 10012 SAMPLE 1257	INDEX 10013 SAMPLE 6810	INDEX 10014 SAMPLE 6811
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CISCO DOME	CISCO DOME	CISCO DOME
WELL NAME	CISCO NO. 1	STATE NO. 1	UNION GOVERNMENT II-1
LOCATION	SEC. 25, T20S, R21E	SEC. 36, T20S, R21E	SEC. 24, T20S, R21E
OWNER	UTAH OIL REFINING CO.	CABEEN EXPLORATION CORP.	CABEEN EXPLORATION CORP.
COMPLETED	NOT GIVEN	07/09/55	09/03/57
SAMPLED	12/20/25	09/20/58	09/20/58
FORMATION	NOT GIVEN	CRET-DAKOTA B&JURA-MORRISION	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	1940	2108
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	763
OPEN FLOW, MCFD	NOT GIVEN	1200	5200
COMPONENT, MOLE PCT			
METHANE	86.5	92.4	89.5
ETHANE	11.3	3.6	2.1
PROPANE	---	1.2	0.1
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.5	1.3	4.0
OXYGEN	0.3	0.1	0.6
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	3.0
HELIUM	0.14	0.10	0.10
HEATING VALUE*	1079	1074	967
SPECIFIC GRAVITY	0.624	0.609	0.623

	INDEX 10015 SAMPLE 6812	INDEX 10016 SAMPLE 9322	INDEX 10017 SAMPLE 6554
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CISCO DOME	CISCO DOME	CISCO SPRINGS
WELL NAME	UNION GOVERNMENT III-1	AREA NO. 30-81	A. W. CULLEN NO. 1
LOCATION	SEC. 10, T20S, R21E	SEC. 30, T20S, R24E	SEC. 15, T20S, R23E
OWNER	CABEEN EXPLORATION CORP.	PUMPELLY-STAVA	THREE STATES NAT. GAS CO.
COMPLETED	06/05/58	02/12/64	09/08/55
SAMPLED	09/20/58	03/--/64	04/14/58
FORMATION	JURA-MORRISON	CRET-BUCKHORN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	2621	842	1565
WELLHEAD PRESSURE,PSIG	790	351	690
OPEN FLOW, MCFD	9400	700	2820
COMPONENT, MOLE PCT			
METHANE	89.9	82.1	90.3
ETHANE	4.0	2.5	2.9
PROPANE	1.2	0.8	0.7
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.5	TRACE	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	3.3	13.1	4.7
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.66	0.40
HEATING VALUE*	1063	922	1009
SPECIFIC GRAVITY	0.623	0.637	0.604

	INDEX 10018 SAMPLE 7483	INDEX 10019 SAMPLE 10960	INDEX 10020 SAMPLE 1804
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	DIAMOND RIDGE	GRAVEL PILE	HARLEY DOME
WELL NAME	DIAMOND RIDGE UNIT NO. 2	PUMPELLY-STAVA NO. 30-75	BASHOR NO. 1
LOCATION	SEC. 23, T17S, R22E	SEC. 30, T20S, R24E	SEC. 4, T19S, R25E
OWNER	SUNRAY MID CONTINENT OIL CO.	PUMPELLY-STAVA OPERATOR	H. H. BASHOR
COMPLETED	01/28/60	02/08/67	09/12/25
SAMPLED	03/24/60	NOT GIVEN	07/06/29
FORMATION	CRET-CEDAR MOUNTAIN	CRET-CEDAR MOUNTAIN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7254	644	538
WELLHEAD PRESSURE,PSIG	1475	106	25
OPEN FLOW, MCFD	2100	1330	390
COMPONENT, MOLE PCT			
METHANE	92.2	92.4	50.0
ETHANE	3.6	1.8	3.6
PROPANE	0.7	0.5	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.2	0.1	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.8	3.6	43.8
OXYGEN	0.3	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.7	0.4
HELIUM	0.10	0.28	2.25
HEATING VALUE*	1036	1001	571
SPECIFIC GRAVITY	0.603	0.597	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10021 SAMPLE 2331	INDEX 10022 SAMPLE 2333	INDEX 10023 SAMPLE 2396
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	HARLEY DOME	HARLEY DOME	HARLEY DOME
WELL NAME	NO. 2	NO. 2	NO. 2
LOCATION	SEC. 4, T19S, R25E	SEC. 4, T19S, R25E	SEC. 4, T19S, R25E
OWNER	WEIGHTMAN & FOLLGREN	WEIGHTMAN & FOLLGREN	WEIGHTMAN & FOLLGREN
COMPLETED	05/03/26	05/03/31	08/01/31
SAMPLED	05/01/31	05/18/31	08/20/31
FORMATION	JURA-MORRISON	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	564	860	860
WELLHEAD PRESSURE,PSIG	30	100	157
OPEN FLOW, MCFD	250	3000	1720
COMPONENT, MOLE PCT			
METHANE	46.9	5.5	5.1
ETHANE	2.3	2.0	2.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	48.1	84.6	84.5
OXYGEN	0.1	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.8	1.1
HELIUM	2.45	7.06	7.02
HEATING VALUE*	516	92	93
SPECIFIC GRAVITY	0.757	0.893	0.896

	INDEX 10024 SAMPLE 8651	INDEX 10025 SAMPLE 8652	INDEX 10026 SAMPLE 9047
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	LONG CANYON	LONG CANYON	LONG CANYON
WELL NAME	LONG CANYON UNIT NO. 1	LONG CANYON UNIT NO. 1	LONG CANYON NO. 2
LOCATION	SEC. 9, T26S, R20E	SEC. 9, T26S, R20E	SEC. 9, T26S, R20E
OWNER	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	08/14/62	08/11/62	07/--/63
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7706	7606	7677
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	4.7	---	2.6
ETHANE	0.8	0.8	0.8
PROPANE	0.4	0.4	0.3
N-BUTANE	0.3	0.2	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	91.1	90.6	93.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.4
HELIUM	1.48	1.44	1.30
HEATING VALUE*	95	94	70
SPECIFIC GRAVITY	0.950	0.924	0.959

	INDEX 10027 SAMPLE 6304	INDEX 10028 SAMPLE 6422	INDEX 10029 SAMPLE 6470
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 1	FEDERAL NO. 1	UTAH FED. NO. 1
LOCATION	SEC. 26, T21S, R23E	SEC. 13, T17S, R23E	SEC. 8, T17S, R23E
OWNER	CARL LOSEY	OIL INC.	SUNRAY MID-CONTINENT OIL CO.
COMPLETED	NOT GIVEN	06/08/57	11/01/57
SAMPLED	04/17/57	09/01/57	01/04/58
FORMATION	JURA-MORRISON	CRET-L	CRET-DAKOTA U
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	595	4442	5862
WELLHEAD PRESSURE,PSIG	220	1100	1500
OPEN FLOW, MCFD	150	2000	150
COMPONENT, MOLE PCT			
METHANE	92.9	90.4	92.4
ETHANE	1.4	5.4	4.6
PROPANE	0.4	1.4	2.5
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	TRACE
NITROGEN	3.8	0.9	0.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.0
HELIUM	0.26	0.10	0.04
HEATING VALUE*	1017	1101	1094
SPECIFIC GRAVITY	0.598	0.627	0.606

	INDEX 10030 SAMPLE 9812	INDEX 10031 SAMPLE 9813	INDEX 10032 SAMPLE 7892
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	NOT GIVEN	NOT GIVEN	SALT WASH
WELL NAME	U-TEX NO. 4	U-TEX NO. 5	SALT WASH NO. 1
LOCATION	SEC. 16, T20S, R24E	SEC. 10, T20S, R24E	SEC. 15, T23S, R17E
OWNER	U-TEX OIL CO.	U-TEX OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/22/65	03/22/65	03/13/61
FORMATION	JURA-MORRISON	JURA-MORRISON	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	8627
WELLHEAD PRESSURE,PSIG	775	780	300
OPEN FLOW, MCFD	3000	2900	7000
COMPONENT, MOLE PCT			
METHANE	76.7	73.4	11.0
ETHANE	2.9	1.1	3.0
PROPANE	1.8	0.4	4.2
N-BUTANE	0.3	0.1	4.6
ISOBUTANE	0.4	0.1	2.3
N-PENTANE	0.1	0.1	2.2
ISOPENTANE	0.1	TRACE	1.7
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	1.8
NITROGEN	16.7	23.2	64.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	3.1
HELIUM	0.66	1.32	1.40
HEATING VALUE*	913	795	773
SPECIFIC GRAVITY	0.671	0.665	1.130

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10033 SAMPLE 7895	INDEX 10034 SAMPLE 8515	INDEX 10035 SAMPLE 8872
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SALT WASH	SALT WASH
WELL NAME	SALT WASH NO. 1	GOVERNMENT SMOOT NO. 1	CF&I NO. 22-16
LOCATION	SEC. 15, T23S, R17E	SEC. 17, T23S, R17E	SEC. 16, T23S, R17E
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.	SHELL OIL CO.
COMPLETED	NOT GIVEN	04/24/62	03/11/63
SAMPLED	03/09/61	04/16/62	02/22/63
FORMATION	MISS-	MISS-	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8553	8732	8793
WELLHEAD PRESSURE,PSIG	3875	125	2260
OPEN FLOW, MCFD	404	154	3335
COMPONENT, MOLE PCT			
METHANE	11.8	16.1	11.8
ETHANE	1.9	5.5	1.8
PROPANE	1.7	6.4	1.8
N-BUTANE	1.1	4.1	1.1
ISOBUTANE	0.6	2.8	0.2
N-PENTANE	0.5	1.3	0.5
ISOPENTANE	0.3	1.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.8	0.4
NITROGEN	77.3	55.9	77.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	5.3	2.3
HELIUM	1.80	0.78	1.80
HEATING VALUE*	319	794	297
SPECIFIC GRAVITY	0.971	1.093	0.964

	INDEX 10036 SAMPLE 8972	INDEX 10037 SAMPLE 8974	INDEX 10038 SAMPLE 8975
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SALT WASH	SALT WASH
WELL NAME	SALT WASH NO. 1	CF&I NO. 42-16	CF&I NO. 22-16
LOCATION	SEC. 15, T23S, R17E	SEC. 16, T23S, R17E	SEC. 16, T23S, R17E
OWNER	PAN AMERICAN PETROLEUM CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/20/61	04/29/63	NOT GIVEN
SAMPLED	05/27/63	05/27/63	05/27/63
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LIME
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8422	8914	8900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	10.3	12.2	9.0
ETHANE	1.7	2.8	1.6
PROPANE	1.7	3.3	1.6
N-BUTANE	1.1	2.6	1.1
ISOBUTANE	0.4	1.1	0.3
N-PENTANE	0.5	0.9	0.4
ISOPENTANE	0.1	0.5	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.6	0.7	0.3
NITROGEN	77.4	70.4	76.8
OXYGEN	2.0	1.0	4.8
ARGON	0.3	0.3	0.4
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	2.9	2.1
HELIUM	1.50	1.30	1.20
HEATING VALUE*	290	484	258
SPECIFIC GRAVITY	0.981	1.026	0.985

	INDEX 10039 SAMPLE 15721	INDEX 10040 SAMPLE 7266	INDEX 10041 SAMPLE 7267
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SAN ARROYO	SAN ARROYO
WELL NAME	GOVERNMENT SMOOT NO. 3	SAN ARROYO GOVT. NO. 1	SAN ARROYO GOVT. NO. 3
LOCATION	SEC. 17, T23S, R17E	SEC. 26, T16S, R25E	SEC. 23, T16S, R25E
OWNER	RICHARD P. SMOOT	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	NOT GIVEN	10/01/55	01/01/56
SAMPLED	08/--/79	10/29/59	10/29/59
FORMATION	MISS-	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8643	4851	5414
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1340	1282
OPEN FLOW, MCFD	NOT GIVEN	21000	21085
COMPONENT, MOLE PCT			
METHANE	12.1	47.9	46.8
ETHANE	2.3	2.2	2.0
PROPANE	2.0	1.5	1.8
N-BUTANE	1.1	0.3	0.4
ISOBUTANE	0.7	0.2	0.1
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	75.4	26.5	24.5
OXYGEN	0.0	0.2	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.2	19.6	22.7
HELIUM	1.71	0.90	0.90
HEATING VALUE*	322	604	601
SPECIFIC GRAVITY	0.971	0.897	0.923

	INDEX 10042 SAMPLE 7681	INDEX 10043 SAMPLE 7682	INDEX 10044 SAMPLE 7683
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 5	SAN ARROYO GOVT. NO. 4	SAN ARROYO GOVT. NO. 5
LOCATION	SEC. 25, T16S, R25E	SEC. 30, T16S, R25E	SEC. 25, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	09/04/60	08/13/59	08/05/60
SAMPLED	09/12/60	09/13/60	09/12/60
FORMATION	JURA-ENTRADA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5414	4235	4053
WELLHEAD PRESSURE,PSIG	1324	941	931
OPEN FLOW, MCFD	NOT GIVEN	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	89.9	90.2
ETHANE	2.3	5.1	5.4
PROPANE	1.4	1.2	1.4
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	27.1	1.4	0.8
OXYGEN	0.1	0.2	0.1
ARGON	0.2	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	19.7	0.8	0.9
HELIUM	0.50	0.10	0.10
HEATING VALUE*	419	1059	1089
SPECIFIC GRAVITY	0.913	0.618	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10045 SAMPLE 7753	INDEX 10046 SAMPLE 7754	INDEX 10047 SAMPLE 7755
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 1	SAN ARROYO GOVT. NO. 3	SAN ARROYO GOVT. NO. 5
LOCATION	SEC. 26, T16S, R25E	SEC. 23, T16S, R25E	SEC. 25, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	10/--/55	06/--/56	09/05/60
SAMPLED	11/01/60	11/01/60	11/01/60
FORMATION	JURA-ENTRADA	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4851	5440	4792
WELLHEAD PRESSURE,PSIG	1340	1282	1324
OPEN FLOW, MCFD	21000	21085	33000
COMPONENT, MOLE PCT			
METHANE	47.5	46.8	47.2
ETHANE	3.5	2.1	2.2
PROPANE	3.2	1.3	1.5
N-BUTANE	0.6	0.4	0.4
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.5	0.4
NITROGEN	17.0	23.7	26.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	26.1	23.4	19.7
HELIUM	0.60	1.00	1.00
HEATING VALUE*	703	610	620
SPECIFIC GRAVITY	0.961	0.930	0.906

	INDEX 10048 SAMPLE 7761	INDEX 10049 SAMPLE 8278	INDEX 10050 SAMPLE 8279
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 2	NO. 6	NO. 6
LOCATION	SEC. 22, T16S, R25E	SEC. 21, T16S, R25E	SEC. 21, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	04/--/55	10/20/61	10/20/61
SAMPLED	10/31/60	11/08/61	11/08/61
FORMATION	JURA-ENTRADA	JURA-ENTRADA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6635	6490	5834
WELLHEAD PRESSURE,PSIG	1235	1249	929
OPEN FLOW, MCFD	11000	10500	5950
COMPONENT, MOLE PCT			
METHANE	45.1	51.4	78.6
ETHANE	2.4	2.3	5.1
PROPANE	1.5	1.5	1.2
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	1.2	0.2
NITROGEN	24.4	17.1	10.3
OXYGEN	TRACE	0.3	2.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	24.5	23.9	1.2
HELIUM	0.90	0.46	0.08
HEATING VALUE*	472	721	969
SPECIFIC GRAVITY	0.932	0.940	0.682

	INDEX 10051 SAMPLE 8704	INDEX 10052 SAMPLE 9821	INDEX 10053 SAMPLE 10349
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	WESTBIT NO. 2	FEDERAL 176, WELL NO. 1	SAN ARROYO UNIT NO. 30
LOCATION	SEC. 9, T16S, R25E	SEC. 29, T16S, R26E	SEC. 21, T16S, R26E
OWNER	BELCO PETROLEUM CORP.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	08/10/62	02/18/65	08/04/65
SAMPLED	10/04/62	03/18/65	12/29/65
FORMATION	CRET-DAKOTA	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6065	4050	4192
WELLHEAD PRESSURE,PSIG	863	800	530
OPEN FLOW, MCFD	3800	2500	935
COMPONENT, MOLE PCT			
METHANE	89.7	91.9	92.7
ETHANE	5.0	4.4	3.6
PROPANE	1.2	1.2	1.0
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.5	0.8	0.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.9	1.0
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1076	1064	1058
SPECIFIC GRAVITY	0.629	0.610	0.608

	INDEX 10054 SAMPLE 9390	INDEX 10055 SAMPLE 7067	INDEX 10056 SAMPLE 7069
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SEGUNDO CANYON	WESTWATER	WESTWATER
WELL NAME	SEGUNDO CANYON UNIT NO. 2	FEDERAL NO. E-2	FEDERAL NO. E-2
LOCATION	SEC. 33, T16S, R21E	SEC. 7, T17S, R24E	SEC. 7, T17S, R24E
OWNER	PACIFIC NAT. GAS EXPLORATION	OIL INC.	OIL INC.
COMPLETED	05/27/63	12/--/58	NOT GIVEN
SAMPLED	06/06/64	04/22/59	04/22/59
FORMATION	CRET-CEDAR MOUNTAIN	JURA-ENTRADA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9832	5114	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2102	1625	1370
OPEN FLOW, MCFD	1556	17500	10250
COMPONENT, MOLE PCT			
METHANE	96.6	68.2	77.9
ETHANE	1.4	2.8	4.3
PROPANE	0.3	0.6	1.6
N-BUTANE	TRACE	0.2	0.9
ISOBUTANE	TRACE	0.2	0.9
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	TRACE	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.6	24.9	11.6
OXYGEN	TRACE	0.0	0.8
ARGON	TRACE	0.2	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	2.0	0.5
HELIUM	0.04	0.60	0.20
HEATING VALUE*	1017	780	1027
SPECIFIC GRAVITY	0.576	0.706	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10057 SAMPLE 7594	INDEX 10058 SAMPLE 7595	INDEX 10059 SAMPLE 8896
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WESTWATER
WELL NAME	NO. C-7	NO. E-3	WESTWATER D2
LOCATION	SEC. 7, T17S, R24E	SEC. 17, T17S, R24E	SEC. 18, T17S, R24E
OWNER	OIL INC.	OIL INC.	OIL INC.
COMPLETED	NOT GIVEN	07/--/59	04/09/61
SAMPLED	07/07/60	07/07/60	03/02/63
FORMATION	CRET-CASTLEGATE	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	1066	5540	4216
WELLHEAD PRESSURE,PSIG	210	1080	1040
OPEN FLOW, MCFD	700	17700	1124
COMPONENT, MOLE PCT			
METHANE	84.9	93.4	91.1
ETHANE	7.6	3.3	5.2
PROPANE	3.8	0.7	1.3
N-BUTANE	1.3	0.3	0.4
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.1	0.5	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.5
HELIUM	0.02	0.10	0.08
HEATING VALUE*	1147	1073	1089
SPECIFIC GRAVITY	0.679	0.610	0.618

	INDEX 10060 SAMPLE 8897	INDEX 10061 SAMPLE 11834	INDEX 10062 SAMPLE 6455
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WILDCAT
WELL NAME	WESTWATER E4	HORSEPOINT UNIT NO. M-6	FED. NO. 18-C-2
LOCATION	SEC. 14, T17S, R23E	SEC. 32, T16S, R24E	SEC. 18, T17S, R24E
OWNER	OIL INC.	OIL INC., ET AL.	OIL INC., ET AL.
COMPLETED	05/27/62	01/10/64	11/06/57
SAMPLED	03/21/63	04/24/69	12/07/57
FORMATION	JURA-ENTRADA	CRET-DAKOTA	CRET-CASTLEGATE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6346	6128	764
WELLHEAD PRESSURE,PSIG	1214	1026	193
OPEN FLOW, MCFD	4124	8137	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	94.0	82.6
ETHANE	1.9	3.1	6.7
PROPANE	0.5	0.5	2.2
N-BUTANE	0.1	0.2	0.5
ISOBUTANE	0.0	TRACE	0.4
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	18.0	0.5	5.1
OXYGEN	0.2	0.0	1.1
ARGON	0.1	TRACE	0.1
HYDROGEN	2.4	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.2	0.8
HELIUM	0.62	0.06	0.02
HEATING VALUE*	819	1041	1063
SPECIFIC GRAVITY	0.642	0.597	0.667

	INDEX 10063 SAMPLE 7914	INDEX 10064 SAMPLE 8023	INDEX 10065 SAMPLE 8340
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SALT WASH NO. 1	HARLEY GOVERNMENT NO. 1	FEDERAL SEA GULL NO. 1
LOCATION	SEC. 15, T23S, R17E	SEC. 30, T18S, R25E	SEC. 13, T16S, R24E
OWNER	PAN AMERICAN PETROLEUM CORP.	BELCO PETROLEUM CO.	RIP C. UNDERWOOD
COMPLETED	NOT GIVEN	03/21/60	12/18/61
SAMPLED	03/24/61	06/16/61	12/16/61
FORMATION	MISS-	CRET-DAKOTA	CRET-CEDAR MOUNTAIN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8678	930	5886
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	900
OPEN FLOW, MCFD	NOT GIVEN	891	20000
COMPONENT, MOLE PCT			
METHANE	17.2	84.2	84.6
ETHANE	5.5	0.7	8.0
PROPANE	5.4	0.1	2.9
N-BUTANE	3.6	0.1	0.6
ISOBUTANE	1.9	0.1	0.5
N-PENTANE	1.3	0.0	0.1
ISOPENTANE	1.1	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	1.0	TRACE	0.1
NITROGEN	60.5	11.4	1.7
OXYGEN	TRACE	2.5	TRACE
ARGON	0.3	0.1	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.5	0.0	0.0
CARBON DIOXIDE	1.5	0.5	1.0
HELIUM	0.90	0.20	0.14
HEATING VALUE*	756	877	1135
SPECIFIC GRAVITY	1.055	0.627	0.666

	INDEX 10066 SAMPLE 8603	INDEX 10067 SAMPLE 8815	INDEX 10068 SAMPLE 9916
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HORSE POINT 1-X	A. LANDSDALE NO. 3	SEGUNDO CANYON NO. 23-4
LOCATION	SEC. 14, T16S, R23E	SEC. 3, T21S, R23E	SEC. 4, T17S, R21E
OWNER	TIDEWATER OIL CO.	A. LANDSDALE CO.	PACIFIC NATURAL GAS EXPL. CO
COMPLETED	07/04/62	10/07/62	09/25/63
SAMPLED	07/03/62	12/21/62	06/03/65
FORMATION	CRET-DAKOTA	JURA-MORRISON	CRET-CEDAR MOUNTAIN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8112	1332	9754
WELLHEAD PRESSURE,PSIG	999	345	1650
OPEN FLOW, MCFD	2169	NOT GIVEN	878
COMPONENT, MOLE PCT			
METHANE	56.1	91.6	89.5
ETHANE	2.3	1.1	6.1
PROPANE	1.2	0.4	1.6
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	13.0	5.8	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	2.1	TRACE	TRACE
HYDROGEN	26.3	0.1	0.0
HYDROGEN SULFIDE**	2.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	1.3
HELIUM	0.07	0.92	0.03
HEATING VALUE*	744	972	1083
SPECIFIC GRAVITY	0.515	0.591	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10069 SAMPLE 2090	INDEX 10070 SAMPLE 2358	INDEX 10071 SAMPLE 2498
STATE	UTAH	UTAH	UTAH
COUNTY	JUAB	SALT LAKE	SALT LAKE
FIELD	NOT GIVEN	SALT LAKE BASIN	SALT LAKE VALLEY
WELL NAME	NOT GIVEN	NO. 1	NEBEKER NO. 2
LOCATION	GAS SAMPLE FROM HOT SPRING	SEC. 21, T1N, R1W	SEC. 21, T1N, R1W
OWNER	BAKER HOT SPRINGS	WESTERN PETROLEUM DRLG CO.	HENRY NEBEKER
COMPLETED	NOT GIVEN	DRILL STEM TEST	01/01/21
SAMPLED	07/12/30	06/26/31	05/13/32
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	625	630	630
DEPTH, FEET	NOT GIVEN	746	535
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	0.0	82.9	90.4
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	88.3	16.4	8.4
OXYGEN	3.5	0.6	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	8.3	0.0	1.1
HELIUM	0.15	0.08	0.02
HEATING VALUE*	0	840	916
SPECIFIC GRAVITY	1.020	0.625	0.600

	INDEX 10072 SAMPLE 6065	INDEX 10073 SAMPLE 6066	INDEX 10074 SAMPLE 6067
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	ANETH
WELL NAME	NAVAJO E-1	NAVAJO C-1	NAVAJO D-1
LOCATION	SEC. 15, T40S, R24E	SEC. 23, T40S, R24E	SEC. 22, T40S, R24E
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	05/07/56	02/17/56	04/27/56
SAMPLED	05/26/56	05/26/56	05/26/56
FORMATION	PENN-HERMOSA	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5630	5828	5846
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.7	60.6	55.3
ETHANE	20.8	20.1	24.7
PROPANE	11.8	11.3	14.2
N-BUTANE	3.6	3.5	3.2
ISOBUTANE	1.3	1.3	1.2
N-PENTANE	0.6	0.6	0.4
ISOPENTANE	0.9	0.9	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	0.6	1.0	0.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1541	1512	1577
SPECIFIC GRAVITY	0.896	0.884	0.912

	INDEX 10075 SAMPLE 6217	INDEX 10076 SAMPLE 6246	INDEX 10077 SAMPLE 6357
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	ANETH
WELL NAME	FEDERAL ARROWHEAD NO. 1	NAVAJO E NO. 3	HICKMAN-FEDERAL NO. 1
LOCATION	SEC. 14, T40S, R23E	SEC. 9, T40S, R24E	SEC. 1, T40S, R23E
OWNER	THREE STATES NATURAL GAS CO.	TEXAS CO.	CARTER OIL CO.
COMPLETED	11/19/56	11/25/56	05/11/57
SAMPLED	12/13/56	02/07/57	08/09/57
FORMATION	PENN-PARADOX	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5650	5468	6130
WELLHEAD PRESSURE,PSIG	910	NOT GIVEN	225
OPEN FLOW, MCFD	515	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.2	70.6	63.8
ETHANE	24.0	4.2	16.4
PROPANE	6.7	6.6	9.9
N-BUTANE	2.9	1.1	4.2
ISOBUTANE	2.7	0.5	1.9
N-PENTANE	0.5	0.1	1.1
ISOPENTANE	1.4	TRACE	0.7
CYCLOPENTANE	0.3	TRACE	0.3
HEXANES PLUS	0.3	0.1	0.7
NITROGEN	3.0	13.7	0.7
OXYGEN	TRACE	0.2	0.1
ARGON	0.7	0.0	0.0
HYDROGEN	0.2	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	2.6	0.1
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1460	1026	1527
SPECIFIC GRAVITY	0.913	0.752	0.889

	INDEX 10078 SAMPLE 6471	INDEX 10079 SAMPLE 8069	INDEX 10080 SAMPLE 1180
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	ANTICLINE E
WELL NAME	A. W. RICE NO. 2	NORTH DESERT CREEK 43-14	CANYON NO. 1
LOCATION	SEC. 23, T40S, R23E	SEC. 14, T41S, R23E	SEC. 28, T14N, R19S
OWNER	THREE STATES NATURAL GAS CO.	SHELL OIL CO.	UTAH SOUTHERN OIL CO.
COMPLETED	12/11/57	04/16/61	DRILL STEM TEST
SAMPLED	01/08/58	07/07/61	11/07/25
FORMATION	PENN-PARADOX	PENN-HERMOSA	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5650	5310	NOT GIVEN
WELLHEAD PRESSURE,PSIG	695	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	436	228	40000
COMPONENT, MOLE PCT			
METHANE	62.9	65.5	---
ETHANE	19.4	16.6	---
PROPANE	10.6	8.8	---
N-BUTANE	3.3	3.0	---
ISOBUTANE	1.5	1.6	---
N-PENTANE	0.6	0.9	---
ISOPENTANE	0.8	0.6	---
CYCLOPENTANE	0.1	0.3	---
HEXANES PLUS	0.4	0.7	---
NITROGEN	0.1	1.6	2.7
OXYGEN	TRACE	0.1	---
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	97.3
HELIUM	0.02	0.10	0.07
HEATING VALUE*	1506	1456	0
SPECIFIC GRAVITY	0.870	0.853	1.514

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10081 SAMPLE 8068		INDEX 10082 SAMPLE 8273		INDEX 10083 SAMPLE 8274
STATE	UTAH		UTAH		UTAH
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN
FIELD	BIG INDIAN		BIG INDIAN		BIG INDIAN
WELL NAME	BIG INDIAN USA NO. 1		BIG INDIAN U.S.A. NO. 1		NO. 1
LOCATION	SEC. 33, T29S, R24E		SEC. 33, T29S, R24E		SEC. 33, T29S, R24E
OWNER	PURE OIL CO.		PURE OIL CO.		PURE OIL CO.
COMPLETED	NOT GIVEN		NOT GIVEN		08/--/61
SAMPLED	07/10/61		11/10/61		11/11/61
FORMATION	MISS-		MISS-		MISS-
GEOLOGIC PROVINCE CODE	585		585		585
DEPTH, FEET	9856		9800		9800
WELLHEAD PRESSURE,PSIG	NOT GIVEN		2157		2157
OPEN FLOW, MCFD	NOT GIVEN		44000		44000
COMPONENT, MOLE PCT					
METHANE	56.7	----------	49.1	----------	56.1
ETHANE	6.9		13.3		6.5
PROPANE	2.0	----------	4.6	----------	1.9
N-BUTANE	0.6		1.2		0.6
ISOBUTANE	0.6	----------	0.8	----------	0.6
N-PENTANE	0.3		0.3		0.2
ISOPENTANE	0.1	----------	0.3	----------	0.1
CYCLOPENTANE	TRACE		TRACE		TRACE
HEXANES PLUS	0.3	----------	0.2	----------	0.3
NITROGEN	15.8		4.9		16.7
OXYGEN	TRACE	----------	0.1	----------	TRACE
ARGON	TRACE		TRACE		0.1
HYDROGEN	0.0	----------	TRACE	----------	0.0
HYDROGEN SULFIDE**	0.0		0.7		0.4
CARBON DIOXIDE	15.8	----------	23.5	----------	15.7
HELIUM	0.80		0.05		0.72
HEATING VALUE*	823	----------	986	----------	805
SPECIFIC GRAVITY	0.857		0.976		0.859

	INDEX 10084 SAMPLE 8770		INDEX 10085 SAMPLE 9345		INDEX 10086 SAMPLE 6101
STATE	UTAH		UTAH		UTAH
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN
FIELD	BIG INDIAN		BIG INDIAN		BLUFF
WELL NAME	BIG INDIAN NO. 3		BIG INDIAN NO. 4		BLUFF UNIT NO. 3
LOCATION	SEC. 10, T30S, R25E		SEC. 14, T30S, R25E		SEC. 4, T40S, R23E
OWNER	PURE OIL CO.		PURE OIL CO.		SHELL OIL CO.
COMPLETED	DRILL STEM TEST NO. 6		02/05/64		NOT GIVEN
SAMPLED	11/29/62		05/11/64		06/27/56
FORMATION	PENN-HERMOSA		PENN-HERMOSA		PENN-HERMOSA U
GEOLOGIC PROVINCE CODE	585		585		585
DEPTH, FEET	9617		3552		5454
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1050		6
OPEN FLOW, MCFD	266		NOT GIVEN		NOT GIVEN
COMPONENT, MOLE PCT					
METHANE	77.2	----------	80.8	----------	75.1
ETHANE	8.9		8.8		13.9
PROPANE	2.8	----------	3.7	----------	4.7
N-BUTANE	0.9		1.1		1.5
ISOBUTANE	0.5	----------	0.8	----------	0.7
N-PENTANE	0.3		0.2		0.3
ISOPENTANE	0.2	----------	0.2	----------	0.6
CYCLOPENTANE	TRACE		TRACE		0.3
HEXANES PLUS	0.2	----------	0.2	----------	0.5
NITROGEN	8.6		3.3		1.9
OXYGEN	TRACE	----------	TRACE	----------	TRACE
ARGON	TRACE		TRACE		0.0
HYDROGEN	0.1	----------	0.0	----------	0.2
HYDROGEN SULFIDE**	0.0		0.0		0.0
CARBON DIOXIDE	0.1	----------	0.8	----------	0.3
HELIUM	0.07		0.03		0.03
HEATING VALUE*	1093	----------	1164	----------	1282
SPECIFIC GRAVITY	0.697		0.697		0.749

	INDEX 10087 SAMPLE 6118		INDEX 10088 SAMPLE 6120		INDEX 10089 SAMPLE 6515
STATE	UTAH		UTAH		UTAH
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN
FIELD	BLUFF		BLUFF		BLUFF
WELL NAME	BLUFF UNIT NO. 3		BLUFF UNIT NO. 3		BLUFF BENCH UNIT NO. 4
LOCATION	SEC. 4, T40S, R23E		SEC. 4, T40S, R23E		SEC. 20, T40S, R22E
OWNER	SHELL OIL CO.		SHELL OIL CO.		CARTER OIL CO.
COMPLETED	NOT GIVEN		NOT GIVEN		09/14/57
SAMPLED	07/14/56		07/16/56		03/05/58
FORMATION	CEDAR MOUNTAIN		DEVO-OURAY		PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585		585		585
DEPTH, FEET	6914		5940		5366
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		150
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN
COMPONENT, MOLE PCT					
METHANE	1.3	----------	1.2	----------	60.5
ETHANE	0.4		0.4		17.0
PROPANE	0.0	----------	0.0	----------	9.8
N-BUTANE	0.1		0.2		4.5
ISOBUTANE	0.1	----------	0.0	----------	1.8
N-PENTANE	0.1		0.1		1.7
ISOPENTANE	0.0	----------	0.1	----------	1.8
CYCLOPENTANE	0.1		TRACE		0.5
HEXANES PLUS	0.2	----------	0.2	----------	1.7
NITROGEN	11.3		10.8		0.1
OXYGEN	TRACE	----------	TRACE	----------	TRACE
ARGON	0.1		0.1		0.0
HYDROGEN	TRACE	----------	TRACE	----------	0.0
HYDROGEN SULFIDE**	0.0		0.0		0.0
CARBON DIOXIDE	85.7	----------	86.6	----------	0.4
HELIUM	0.42		0.40		0.02
HEATING VALUE*	45	----------	45	----------	1640
SPECIFIC GRAVITY	1.448		1.456		0.954

	INDEX 10090 SAMPLE 5077		INDEX 10091 SAMPLE 1841		INDEX 10092 SAMPLE 4390
STATE	UTAH		UTAH		UTAH
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN
FIELD	[illegible] UNIT		BOUNDARY BUTTE		BOUNDARY BUTTE
WELL NAME	BLUFF UNIT NO. 1		BOUNDARY BUTTE NO. --		ENGLISH NO. 1
LOCATION	NOT GIVEN		SEC. 22, T43S, R22E		SEC. 22, T43S, R22E
OWNER	SHELL OIL CO.		CONTINENTAL OIL CO.		WESTERN NATURAL GAS CO.
COMPLETED	NOT GIVEN		DRILL STEM TEST		NOT GIVEN
SAMPLED	09/05/51		08/14/29		01/21/48
FORMATION	NOT GIVEN		PENN-PARADOX		PENN-PARADOX
GEOLOGIC PROVINCE CODE	585		585		585
DEPTH, FEET	7527		4560		4625
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN
OPEN FLOW, MCFD	6000		15000		NOT GIVEN
COMPONENT, MOLE PCT					
METHANE	1.7	----------	41.5	----------	64.2
ETHANE	0.1		25.2		15.2
PROPANE	0.2	----------	---	----------	---
N-BUTANE	0.1		---		---
ISOBUTANE	TRACE	----------	---	----------	---
N-PENTANE	TRACE		---		---
ISOPENTANE	0.0	----------	---	----------	---
CYCLOPENTANE	0.0		---		---
HEXANES PLUS	0.0	----------	---	----------	---
NITROGEN	0.9		29.1		19.9
OXYGEN	0.1	----------	2.9	----------	0.2
ARGON	TRACE		---		---
HYDROGEN	TRACE	----------	---	----------	---
HYDROGEN SULFIDE**	---		---		---
CARBON DIOXIDE	96.9	----------	5.6	----------	0.1
HELIUM	0.23		1.79		0.29
HEATING VALUE*	21	----------	1.2	----------	923
SPECIFIC GRAVITY	1.497		0.827		0.779

* GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** [illegible] OF H2S DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10093 SAMPLE 4446	INDEX 10094 SAMPLE 4600	INDEX 10095 SAMPLE 6080
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	NOT GIVEN	NAVAJO NO. 1	ENGLISH NO. 7
LOCATION	NOT GIVEN	SEC. 25, T43S, R22E	SEC. 16, T43S, R22E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/25/48	10/28/48	05/29/56
FORMATION	NOT GIVEN	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5250	4985	4597
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.4	30.4	66.1
ETHANE	13.2	14.4	4.6
PROPANE	---	---	2.7
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	45.6	43.8	17.4
OXYGEN	0.6	0.3	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	9.4	9.7	6.1
HELIUM	1.41	1.42	0.66
HEATING VALUE*	524	566	920
SPECIFIC GRAVITY	0.889	0.897	0.779

	INDEX 10096 SAMPLE 6138	INDEX 10097 SAMPLE 6364	INDEX 10098 SAMPLE 6562
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	ENGLISH NO. 7	NAVAJO TRIBAL NO. 3	ENGLISH NO. 10
LOCATION	SEC. 16, T43S, R22E	SEC. 15, T43S, R22E	SEC. 21, T43S, R22E
OWNER	SAN JACINTO PETROLEUM CORP.	SINCLAIR OIL & GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	06/08/56	04/23/57	03/05/58
SAMPLED	08/28/56	08/18/57	04/25/58
FORMATION	PENN-PARADOX U	PENN-PARADOX	PENN-PARADOX C
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4329	4338	4648
WELLHEAD PRESSURE, PSIG	400	NOT GIVEN	1209
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	66.6	67.4	66.2
ETHANE	5.7	5.4	4.5
PROPANE	2.2	1.0	2.3
N-BUTANE	1.1	0.5	0.7
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.4	0.5	0.2
NITROGEN	16.0	16.0	19.0
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.0	7.1	5.5
HELIUM	0.60	0.58	0.80
HEATING VALUE*	942	893	876
SPECIFIC GRAVITY	0.778	0.764	0.760

	INDEX 10099 SAMPLE 9655	INDEX 10100 SAMPLE 9656	INDEX 10101 SAMPLE 9657
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	ENGLISH NO. 9	ENGLISH NO. 10	NAVAJO NO. 1
LOCATION	SEC. 16, T43S, R22E	SEC. 21, T43S, R22E	SEC. 25, T43S, R22E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	11/12/64	11/12/64	NOT GIVEN
SAMPLED	11/12/64	11/12/64	11/12/64
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4142	4684	4370
WELLHEAD PRESSURE, PSIG	1186	807	900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	66.6	69.9
ETHANE	5.0	4.5	4.2
PROPANE	2.7	2.5	2.6
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	17.2	19.3	16.6
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	4.9	4.5
HELIUM	0.70	0.80	0.90
HEATING VALUE*	938	865	891
SPECIFIC GRAVITY	0.726	0.746	0.730

	INDEX 10102 SAMPLE 9659	INDEX 10103 SAMPLE 9660	INDEX 10104 SAMPLE 6052
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE E
WELL NAME	ENGLISH NO. 11	ENGLISH NO. 1	EAST BOUNDRY BUTTE NO. 3
LOCATION	SEC. 26, T43S, R22E	SEC. 22, T43S, R22E	SEC. 25, T43S, R23E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	11/12/64	NOT GIVEN
SAMPLED	11/12/64	11/12/64	04/19/56
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	965	300	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.8	68.1	77.3
ETHANE	4.8	5.4	4.8
PROPANE	2.7	2.6	2.4
N-BUTANE	0.9	0.9	0.6
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	19.1	19.4	9.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	1.8	4.0
HELIUM	0.82	0.70	0.43
HEATING VALUE*	904	904	992
SPECIFIC GRAVITY	0.740	0.735	0.706

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10105 SAMPLE 6057		INDEX 10106 SAMPLE 5780		INDEX 10107 SAMPLE 5782	
STATE	UTAH		UTAH		UTAH	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	BOUNDARY BUTTE E		BOUNDARY BUTTE N		BOUNDARY BUTTE N	
WELL NAME	NO. 1		BOUNDARY BUTTE N NO. 1		NO. 1	
LOCATION	SEC. 25, T43S, R23E		SEC. 33, T42S, R22E		SEC. 33, T42S, R22E	
OWNER	SHELL OIL CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	04/22/56		02/16/55		02/24/55	
FORMATION	PENN-HERMOSA		PENN-HERMOSA		PENN-HERMOSA	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	5091		4662		3770	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		1740	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		100	
COMPONENT, MOLE PCT						
METHANE	87.4	----------	52.5	----------	64.2	----------
ETHANE	2.4		4.2		8.6	
PROPANE	1.4	----------	6.7	----------	5.1	----------
N-BUTANE	0.5		2.3		1.4	
ISOBUTANE	0.3	----------	1.0	----------	0.7	----------
N-PENTANE	0.2		0.6		0.2	
ISOPENTANE	0.2	----------	0.7	----------	0.4	----------
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.2	----------	0.4	----------	0.2	----------
NITROGEN	2.9		7.6		17.6	
OXYGEN	TRACE	----------	0.1	----------	TRACE	----------
ARGON	0.3		TRACE		TRACE	
HYDROGEN	0.1	----------	0.1	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.8	----------	19.3	----------	0.0	----------
HELIUM	0.49		0.23		1.16	
HEATING VALUE*	1023	----------	1048	----------	1048	----------
SPECIFIC GRAVITY	0.657		0.968		0.764	

	INDEX 10108 SAMPLE 5788		INDEX 10109 SAMPLE 6063		INDEX 10110 SAMPLE 6064	
STATE	UTAH		UTAH		UTAH	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	BOUNDARY BUTTE N		BOUNDARY BUTTE N		BOUNDARY BUTTE N	
WELL NAME	BOUNDARY BUTTE N NO. 1		NO. 43-2A		NO. 43-4B	
LOCATION	SEC. 33, T42S, R22E		SEC. 28, T42S, R22E		SEC. 28, T42S, R22E	
OWNER	SHELL OIL CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	DRILL STEM TEST		03/31/56		03/31/56	
SAMPLED	03/06/55		02/22/56		02/13/56	
FORMATION	DEVO-OURAY		PENN-HERMOSA		PENN-HERMOSA	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	5807		5588		4681	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	7.5	----------	71.8	----------	60.9	----------
ETHANE	0.4		13.4		4.5	
PROPANE	0.5	----------	6.1	----------	2.4	----------
N-BUTANE	0.1		1.3		0.8	
ISOBUTANE	0.0	----------	0.4	----------	0.3	----------
N-PENTANE	0.1		0.2		0.3	
ISOPENTANE	0.0	----------	0.3	----------	0.0	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.2	----------	0.2	----------
NITROGEN	31.9		5.7		14.7	
OXYGEN	0.6	----------	0.4	----------	0.1	----------
ARGON	0.2		TRACE		0.1	
HYDROGEN	0.0	----------	TRACE	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	56.8	----------	0.0	----------	14.9	----------
HELIUM	1.58		0.13		0.58	
HEATING VALUE*	118	----------	1218	----------	824	----------
SPECIFIC GRAVITY	1.255		0.749		0.834	

	INDEX 10111 SAMPLE 6403		INDEX 10112 SAMPLE 6239		INDEX 10113 SAMPLE 6865	
STATE	UTAH		UTAH		UTAH	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	CAHONE MESA		CHINLE WASH		CHINLE WASH	
WELL NAME	NAVAJO NO. 1		OHIO-NAVAJO NO. 1		OHIO-NAVAJO NO. 4	
LOCATION	SEC. 21, T40S, R25E		SEC. 9, T43S, R21E		SEC. 4, T43S, R21E	
OWNER	CONTINENTAL OIL CO.		U.S. SMELT., REF. & MINING		OHIO OIL CO.	
COMPLETED	04/24/57		NOT GIVEN		07/22/58	
SAMPLED	09/15/57		01/20/57		11/06/58	
FORMATION	PENN-PARADOX		PENN-PARADOX		PENN-PARADOX	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	5930		4917		4870	
WELLHEAD PRESSURE,PSIG	650		1397		1400	
OPEN FLOW, MCFD	234		85000		8255	
COMPONENT, MOLE PCT						
METHANE	53.6	----------	69.7	----------	69.7	----------
ETHANE	20.9		5.8		5.6	
PROPANE	12.1	----------	2.6	----------	2.4	----------
N-BUTANE	5.6		0.8		0.6	
ISOBUTANE	2.2	----------	0.4	----------	0.6	----------
N-PENTANE	1.4		0.2		0.1	
ISOPENTANE	1.4	----------	0.1	----------	0.2	----------
CYCLOPENTANE	0.4		0.1		0.1	
HEXANES PLUS	1.0	----------	0.2	----------	0.2	----------
NITROGEN	0.6		18.4		18.3	
OXYGEN	TRACE	----------	0.0	----------	0.1	----------
ARGON	0.0		TRACE		0.1	
HYDROGEN	0.1	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7	----------	1.0	----------	1.3	----------
HELIUM	0.03		0.73		0.80	
HEATING VALUE*	1641	----------	945	----------	936	----------
SPECIFIC GRAVITY	0.993		0.723		0.724	

	INDEX 10114 SAMPLE 6866		INDEX 10115 SAMPLE 5991		INDEX 10116 SAMPLE 5641	
STATE	UTAH		UTAH		UTAH	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	CHINLE WASH		COALBED CANYON		DESERT CREEK	
WELL NAME	OHIO-NAVAJO NO. 5		COALBED CANYON UNIT NO. 2		DESERT CREEK NO. 1	
LOCATION	SEC. 4, T43S, R21E		SEC. 20, T35S, R26E		SEC. 2, T42S, R23E	
OWNER	OHIO OIL CO.		GULF OIL CORP.		SHELL OIL CO.	
COMPLETED	07/22/58		NOT GIVEN		NOT GIVEN	
SAMPLED	11/04/58		12/08/55		06/19/54	
FORMATION	PENN-PARADOX		MISS-LEADVILLE		DEVO-OURAY	
GEOLOGIC PROVINCE CODE	585		585		585	
DEPTH, FEET	5410		NOT GIVEN		5855	
WELLHEAD PRESSURE,PSIG	1400		NOT GIVEN		1035	
OPEN FLOW, MCFD	10470		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	69.7	----------	7.4	----------	6.3	----------
ETHANE	5.5		0.7		0.4	
PROPANE	2.2	----------	0.0	----------	0.8	----------
N-BUTANE	0.6		0.1		0.1	
ISOBUTANE	0.5	----------	0.1	----------	0.0	----------
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.5	----------	TRACE	----------	0.0	----------
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1	----------	0.1	----------	0.1	----------
NITROGEN	18.5		24.2		13.1	
OXYGEN	TRACE	----------	4.5	----------	TRACE	----------
ARGON	0.1		0.3		0.1	
HYDROGEN	0.1	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE**	0.1		TRACE		0.0	
CARBON DIOXIDE	1.3	----------	62.5	----------	77.5	----------
HELIUM	0.30		0.10		1.37	
HEATING VALUE*	1319	----------	104	----------	105	----------
SPECIFIC GRAVITY	0.722		1.299		1.374	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10117 SAMPLE 5685	INDEX 10118 SAMPLE 5798	INDEX 10119 SAMPLE 6279
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	DESERT CREEK	DESERT CREEK	DESERT CREEK NW
WELL NAME	DESERT CREEK NO. 2	O. C. 26-36	NAVAJO NO. 2
LOCATION	SEC. 35, T41S, R23E	SEC. 36, T41S, R23E	SEC. 1, T41S, R22E
OWNER	SHELL OIL CO.	SHELL OIL CO.	GULF OIL CORP.
COMPLETED	NOT GIVEN	04/30/55	01/29/57
SAMPLED	09/08/54	03/23/55	04/06/57
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5145	5444	5833
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.1	63.1	58.2
ETHANE	17.9	19.4	21.9
PROPANE	8.5	9.0	10.8
N-BUTANE	2.3	2.4	3.1
ISOBUTANE	1.2	1.3	1.6
N-PENTANE	0.5	0.5	0.4
ISOPENTANE	0.7	0.6	0.8
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.6	0.5	0.2
NITROGEN	2.7	2.7	0.6
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	2.1
HELIUM	0.06	0.03	0.01
HEATING VALUE*	1412	1425	1487
SPECIFIC GRAVITY	0.836	0.846	0.894

	INDEX 10120 SAMPLE 6187	INDEX 10121 SAMPLE 6591	INDEX 10122 SAMPLE 7260
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	GOTHIC AREA	GOTHIC MESA	LISBON
WELL NAME	NAVAJO-GOTHIC NO. 2	NO. 30-1	NW LISBON U.S.A. NO. 1
LOCATION	SEC. 36, T40S, R21E	SEC. 7, T41S, R21E	SEC. 10, T30S, R24E
OWNER	CARTER OIL CO.	CARTER OIL CO.	PURE OIL CO.
COMPLETED	11/12/56	05/09/58	NOT GIVEN
SAMPLED	11/06/56	05/03/58	10/20/59
FORMATION	MISS-MADISON	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6706	6952	7539
WELLHEAD PRESSURE, PSIG	2	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.0	1.5	41.2
ETHANE	0.2	0.1	8.3
PROPANE	0.0	TRACE	3.2
N-BUTANE	0.1	0.1	1.3
ISOBUTANE	0.0	0.0	1.2
N-PENTANE	0.6	0.0	0.4
ISOPENTANE	0.0	0.0	1.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	TRACE	0.7
NITROGEN	3.9	21.3	17.2
OXYGEN	0.1	2.7	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	93.4	73.2	23.0
HELIUM	0.38	0.90	1.00
HEATING VALUE*	52	20	875
SPECIFIC GRAVITY	1.499	1.371	1.022

	INDEX 10123 SAMPLE 7262	INDEX 10124 SAMPLE 7265	INDEX 10125 SAMPLE 7275
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1
LOCATION	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/26/59	10/30/59	11/07/59
FORMATION	MISS-	MISS-	DEVO-OURAY
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7589	7829	7996
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	10000	300
COMPONENT, MOLE PCT			
METHANE	42.3	42.1	42.4
ETHANE	7.8	7.9	8.3
PROPANE	3.5	6.4	3.6
N-BUTANE	1.5	1.7	1.6
ISOBUTANE	0.9	0.4	1.1
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	1.1	0.7	1.1
CYCLOPENTANE	0.2	0.1	0.3
HEXANES PLUS	0.6	0.4	0.8
NITROGEN	17.7	15.9	17.7
OXYGEN	0.1	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.1	0.2	0.0
CARBON DIOXIDE	22.9	22.5	21.6
HELIUM	1.10	1.00	1.00
HEATING VALUE*	435	674	880
SPECIFIC GRAVITY	1.002	1.002	1.007

	INDEX 10126 SAMPLE 7280	INDEX 10127 SAMPLE 7286	INDEX 10128 SAMPLE 7461
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1	NW LISBON NO. B-1
LOCATION	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E	SEC. 14, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	11/12/59	11/19/59	03/27/60
FORMATION	DEVO-ELBERT	DEVO-MCCRACKEN	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8176	8261	8309
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	305
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4339
COMPONENT, MOLE PCT			
METHANE	54.9	58.5	42.8
ETHANE	11.4	13.3	7.5
PROPANE	2.0	8.0	6.0
N-BUTANE	2.1	2.3	1.4
ISOBUTANE	2.0	1.6	0.3
N-PENTANE	0.1	0.4	0.4
ISOPENTANE	1.9	1.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.6	0.3
NITROGEN	22.0	12.9	16.5
OXYGEN	0.5	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.3	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	2.0	0.7	23.5
HELIUM	0.40	0.20	1.00
HEATING VALUE*	1047	1269	822
SPECIFIC GRAVITY	0.847	0.863	0.990

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10129 SAMPLE 7462	INDEX 10130 SAMPLE 7485	INDEX 10131 SAMPLE 7487
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON NO. B-1	NW LISBON NO. B-1	NW LISBON NO. 2
LOCATION	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	03/28/60	03/31/60	04/08/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8160	8339	8536
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	5
OPEN FLOW, MCFD	270	5000	897
COMPONENT, MOLE PCT			
METHANE	38.0	43.6	37.7
ETHANE	12.2	7.6	7.2
PROPANE	5.9	5.7	13.2
N-BUTANE	2.9	1.2	1.6
ISOBUTANE	2.0	0.4	0.0
N-PENTANE	0.6	0.4	0.5
ISOPENTANE	1.5	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.6	0.2	0.3
NITROGEN	9.9	17.2	15.9
OXYGEN	0.1	0.1	1.4
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.2	TRACE	0.0
CARBON DIOXIDE	25.5	22.3	21.1
HELIUM	0.30	1.00	0.90
HEATING VALUE*	1039	812	948
SPECIFIC GRAVITY	1.091	0.972	1.040

	INDEX 10132 SAMPLE 7515	INDEX 10133 SAMPLE 7530	INDEX 10134 SAMPLE 7531
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	LISBON VALLEY NO. 1-C	NW LISBON NO. 2	NW LISBON NO. 2
LOCATION	SEC. 9, T30S, R24E	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E
OWNER	ELLIOTT PRODUCTION CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/19/60	04/21/60	04/23/60
FORMATION	MISS-	DEVO-MCCRACKEN	DEVO-MCCRACKEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8408	8885	8947
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5	5
OPEN FLOW, MCFD	NOT GIVEN	66	4
COMPONENT, MOLE PCT			
METHANE	36.1	64.7	60.8
ETHANE	10.7	13.6	16.6
PROPANE	10.2	7.9	9.2
N-BUTANE	2.5	2.2	3.2
ISOBUTANE	0.4	0.9	1.9
N-PENTANE	0.9	0.6	0.9
ISOPENTANE	0.0	0.3	0.7
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.7	0.5	0.7
NITROGEN	6.7	4.8	4.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	31.3	4.2	1.3
HELIUM	0.30	0.10	0.10
HEATING VALUE*	1002	1280	1436
SPECIFIC GRAVITY	1.123	0.842	0.885

	INDEX 10135 SAMPLE 7574	INDEX 10136 SAMPLE 7575	INDEX 10137 SAMPLE 7614
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON B NO. 1	NW LISBON B NO. 1	NW LISBON NO. 3
LOCATION	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E	SEC. 9, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	05/15/60	05/15/60	NOT GIVEN
SAMPLED	06/04/60	06/04/60	05/14/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8192	8192	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1805	1805	NOT GIVEN
OPEN FLOW, MCFD	33000	33000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	22.6	39.4	40.1
ETHANE	20.3	7.7	8.5
PROPANE	12.4	3.7	5.2
N-BUTANE	4.3	1.0	1.8
ISOBUTANE	2.9	0.6	0.3
N-PENTANE	0.6	0.2	0.4
ISOPENTANE	1.0	0.1	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.3	20.9	15.5
OXYGEN	0.4	1.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.6	TRACE	0.0
CARBON DIOXIDE	32.2	24.0	26.7
HELIUM	0.03	0.90	1.00
HEATING VALUE*	1240	705	804
SPECIFIC GRAVITY	1.256	0.987	1.020

	INDEX 10138 SAMPLE 7620	INDEX 10139 SAMPLE 7698	INDEX 10140 SAMPLE 7747
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON C-2	PURCO LISBON FED. NO. 1-12	LISBON FEDERAL NO. 1-12
LOCATION	SEC. 3, T30S, R24E	SEC. 12, T30S, R24E	SEC. 12, T30S, R24E
OWNER	PURE OIL CO.	PURCO PETROLEUM CORP.	PURCO PETROLEUM CORP.
COMPLETED	NOT GIVEN	09/28/60	09/28/60
SAMPLED	07/22/60	09/28/60	10/27/60
FORMATION	-SALT SECTION	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5900	9434	8550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	600	600
OPEN FLOW, MCFD	NOT GIVEN	2600	3394
COMPONENT, MOLE PCT			
METHANE	63.7	34.5	37.8
ETHANE	19.6	11.6	11.4
PROPANE	10.5	9.8	9.3
N-BUTANE	2.8	4.2	2.1
ISOBUTANE	0.2	1.8	0.6
N-PENTANE	0.6	1.6	0.6
ISOPENTANE	0.5	1.1	0.0
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.3	1.3	0.0
NITROGEN	0.9	6.9	7.6
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.2	26.6	29.0
HELIUM	TRACE	0.30	0.40
HEATING VALUE*	1346	1207	997
SPECIFIC GRAVITY	0.848	1.177	1.094

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10141 SAMPLE 7783	INDEX 10142 SAMPLE 7784	INDEX 10143 SAMPLE 7847
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	BELCO NO. 2	LISBON-FEDERAL NO. 1-12	NO. 1-C
LOCATION	SEC. 16, T30S, R24E	SEC. 12, T30S, R24E	SEC. 9, T30S, R24E
OWNER	BELCO PETROLEUM CO.	PUBCO PETROLEUM CO.	ELLIOTT PRODUCTION CO.
COMPLETED	10/11/60	09/28/60	06/14/60
SAMPLED	11/22/60	11/22/60	02/08/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8548	8434	8640
WELLHEAD PRESSURE,PSIG	1072	NOT GIVEN	140
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.3	9.1	30.4
ETHANE	11.5	18.9	11.0
PROPANE	8.0	25.5	5.7
N-BUTANE	2.4	13.2	4.9
ISOBUTANE	0.9	6.7	3.1
N-PENTANE	0.5	2.8	2.0
ISOPENTANE	0.2	2.7	1.7
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	1.2	1.5
NITROGEN	8.4	0.0	9.1
OXYGEN	TRACE	0.8	0.2
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	1.0	0.2
CARBON DIOXIDE	30.2	17.7	29.6
HELIUM	0.40	TRACE	0.30
HEATING VALUE*	943	2071	1170
SPECIFIC GRAVITY	1.087	1.527	1.230

	INDEX 10144 SAMPLE 7848	INDEX 10145 SAMPLE 7849	INDEX 10146 SAMPLE 7850
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	STATE NO. 2	ARNOLD 21-15	NO. C-1
LOCATION	SEC. 16, T30S, R24E	SEC. 15, T30S, R24E	SEC. 4, T30S, R24E
OWNER	BELCO PETROLEUM CORP.	CALIFORNIA OIL CO.	PURE OIL CO.
COMPLETED	10/11/60	NOT GIVEN	06/07/60
SAMPLED	02/08/61	02/08/61	02/08/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8221	8098	8296
WELLHEAD PRESSURE,PSIG	950	NOT GIVEN	1800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.1	33.5	41.6
ETHANE	7.9	11.5	10.4
PROPANE	3.1	6.0	2.4
N-BUTANE	0.7	4.9	0.8
ISOBUTANE	0.4	2.8	0.9
N-PENTANE	0.2	1.7	0.2
ISOPENTANE	TRACE	1.3	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	1.1	0.3
NITROGEN	13.7	9.8	13.9
OXYGEN	0.1	0.2	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.3	0.1
CARBON DIOXIDE	29.9	26.3	28.3
HELIUM	0.60	0.40	0.60
HEATING VALUE*	710	1153	768
SPECIFIC GRAVITY	0.995	1.177	1.008

	INDEX 10147 SAMPLE 7851	INDEX 10148 SAMPLE 7852	INDEX 10149 SAMPLE 7854
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	STATE NO. 2	NO. 1-C	NO. 1-12
LOCATION	SEC. 16, T30S, R24E	SEC. 9, T30S, R24E	SEC. 12, T30S, R24E
OWNER	BELCO PETROLEUM CORP.	ELLIOTT PRODUCTION CO.	PUBCO PETROLEUM CORP.
COMPLETED	10/11/60	06/14/60	09/28/60
SAMPLED	02/08/61	02/08/61	02/08/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8221	8640	8434
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.9	31.1	37.4
ETHANE	11.3	11.6	12.0
PROPANE	4.9	5.3	6.1
N-BUTANE	1.7	3.9	2.7
ISOBUTANE	1.2	2.6	1.9
N-PENTANE	0.4	1.1	0.8
ISOPENTANE	0.3	1.1	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.9	0.4
NITROGEN	9.6	9.3	9.5
OXYGEN	0.1	0.2	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.3	0.3
CARBON DIOXIDE	32.9	31.9	27.9
HELIUM	0.40	0.40	0.40
HEATING VALUE*	846	1029	974
SPECIFIC GRAVITY	1.085	1.183	1.089

	INDEX 10150 SAMPLE 7855	INDEX 10151 SAMPLE 7947	INDEX 10152 SAMPLE 7954
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	ARNOLD 21-15	NO. C-3	N.W. E-1
LOCATION	SEC. 15, T30S, R24E	SEC. 3, T30S, R24E	SEC. 15, T30S, R24E
OWNER	CALIFORNIA OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	03/07/61	04/01/61
SAMPLED	02/08/61	04/27/61	05/06/61
FORMATION	DEVO-OURAY	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8605	8000	8571
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1800	1150
OPEN FLOW, MCFD	NOT GIVEN	33250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.4	43.6	43.1
ETHANE	13.1	7.9	9.4
PROPANE	4.3	3.7	3.3
N-BUTANE	3.0	1.2	1.1
ISOBUTANE	2.4	0.6	0.8
N-PENTANE	0.6	0.4	0.3
ISOPENTANE	0.8	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.0	16.7	13.5
OXYGEN	TRACE	0.2	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.3	TRACE
CARBON DIOXIDE	26.7	23.9	27.5
HELIUM	0.30	1.10	0.50
HEATING VALUE*	972	777	786
SPECIFIC GRAVITY	1.099	0.976	1.001

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10153 SAMPLE 7968	INDEX 10154 SAMPLE 7977	INDEX 10155 SAMPLE 7980
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON NO. A-1	NW LISBON NO. C-1	NW LISBON NO. C-1
LOCATION	SEC. 14, T30S, R24E	SEC. 4, T30S, R24E	SEC. 4, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	05/--/60	06/21/60	06/21/60
SAMPLED	05/00/61	05/17/61	05/17/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8198	8738	8738
WELLHEAD PRESSURE,PSIG	1775	1650	1650
OPEN FLOW, MCFD	33000	33000	33000
COMPONENT, MOLE PCT			
METHANE	1.8	5.0	41.3
ETHANE	11.9	26.7	7.9
PROPANE	63.7	23.0	3.4
N-BUTANE	18.9	7.9	0.9
ISOBUTANE	11.1	4.9	0.5
N-PENTANE	3.2	1.7	0.2
ISOPENTANE	2.8	1.6	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	1.1	1.0	0.1
NITROGEN	0.9	0.0	15.7
OXYGEN	0.9	1.1	0.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	1.3	1.7	0.6
CARBON DIOXIDE	2.2	24.9	27.7
HELIUM	0.01	0.01	1.00
HEATING VALUE*	2695	1769	717
SPECIFIC GRAVITY	1.690	1.461	0.994

	INDEX 10156 SAMPLE 7996	INDEX 10157 SAMPLE 8043	INDEX 10158 SAMPLE 8072
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW B-2	NO. A 1	U. S. A. A-1
LOCATION	SEC. 14, T30S, R24E	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	01/03/60	01/04/60
SAMPLED	05/20/61	06/24/61	07/13/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7390
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	12150	12150
COMPONENT, MOLE PCT			
METHANE	34.0	42.0	33.2
ETHANE	14.0	8.0	14.0
PROPANE	7.5	5.5	9.6
N-BUTANE	2.7	1.2	2.1
ISOBUTANE	1.7	0.3	0.7
N-PENTANE	0.7	0.3	0.5
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	7.6	15.2	2.9
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.2	1.0
CARBON DIOXIDE	30.6	25.8	35.6
HELIUM	0.20	1.10	0.10
HEATING VALUE*	1001	785	962
SPECIFIC GRAVITY	1.124	0.995	1.141

	INDEX 10159 SAMPLE 8073	INDEX 10160 SAMPLE 8270	INDEX 10161 SAMPLE 8271
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LITTLE VALLEY	LITTLE VALLEY
WELL NAME	U. S. A. A-1	LISBON FED. NO. 2-21-F	LISBON-FED. NO. 2-21-F
LOCATION	SEC. 10, T30S, R24E	SEC. 21, T30S, R25E	SEC. 21, T30S, R25E
OWNER	PURE OIL CO.	PUBCO PETROLEUM CORP.	PUBCO PETROLEUM CORP.
COMPLETED	01/--/60	11/15/61	11/15/61
SAMPLED	07/13/61	11/15/61	10/30/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7590	9313	9269
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12150	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	40.6	63.0	65.8
ETHANE	8.0	5.2	5.1
PROPANE	5.1	1.2	1.7
N-BUTANE	1.3	0.5	0.5
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	15.8	10.1	9.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.2	1.0	0.2
CARBON DIOXIDE	26.2	17.1	15.5
HELIUM	1.10	0.69	0.68
HEATING VALUE*	781	830	852
SPECIFIC GRAVITY	1.009	0.831	0.808

	INDEX 10162 SAMPLE 6409	INDEX 10163 SAMPLE 6600	INDEX 10164 SAMPLE 9803
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MCELMO	MCELMO CREEK	MCELMO MESA
WELL NAME	NAVAJO TRACT 114-3	NAVAJO NO. C-4	NAVAJO AC NO. 7
LOCATION	SEC. 17, T41S, R25E	SEC. 6, T41S, R25E	SEC. 4, T41S, R26E
OWNER	CARTER OIL CO.	SUPERIOR OIL CO.	TEXACO INC.
COMPLETED	09/07/57	01/01/58	03/01/65
SAMPLED	09/27/57	05/20/58	03/10/65
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-ISMAY
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5225	9470	5569
WELLHEAD PRESSURE,PSIG	700	610	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	175	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.2	62.4	60.4
ETHANE	21.6	13.6	19.2
PROPANE	12.0	10.7	10.5
N-BUTANE	3.4	3.1	3.4
ISOBUTANE	1.8	1.7	1.8
N-PENTANE	0.8	0.9	0.8
ISOPENTANE	0.8	0.9	0.7
CYCLOPENTANE	0.2	0.2	0.3
HEXANES PLUS	0.4	0.5	0.4
NITROGEN	0.3	0.2	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.12	0.12	0.01
HEATING VALUE*	1076	1016	1023
SPECIFIC GRAVITY	0.911	0.877	0.897

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10165 SAMPLE 9804	INDEX 10166 SAMPLE 10525	INDEX 10167 SAMPLE 6050
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MCELMO MESA	MCELMO MESA	NOT GIVEN
WELL NAME	NAVAJO AC NO. 7	AC NO. 8	NAVAJO A-1
LOCATION	SEC. 4, T41S, R26E	SEC. 4, T41S, R26E	SEC. 14, T40S, R24E
OWNER	TEXACO INC.	TEXACO INC.	SUPERIOR OIL CO.
COMPLETED	03/01/65	NOT GIVEN	NOT GIVEN
SAMPLED	03/10/65	04/05/66	04/07/56
FORMATION	PENN-ISMAY	PENN-ISMAY	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5569	5798	5805
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.5	68.5	59.5
ETHANE	19.0	17.2	19.6
PROPANE	10.7	8.4	11.6
N-BUTANE	3.5	2.0	3.7
ISOBUTANE	1.7	1.2	1.6
N-PENTANE	0.8	0.3	0.8
ISOPENTANE	0.8	0.3	1.0
CYCLOPENTANE	0.3	TRACE	0.2
HEXANES PLUS	0.8	0.2	0.6
NITROGEN	1.8	1.6	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1527	1364	1549
SPECIFIC GRAVITY	0.899	0.798	0.907

	INDEX 10168 SAMPLE 6877	INDEX 10169 SAMPLE 8531	INDEX 10170 SAMPLE 8789
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	DEADMAN CANYON NO. 1	NAV. O NO. 30	BIG INDIAN NO. 3
LOCATION	SEC. 20, T37S, R24E	SEC. 20, T40S, R24E	SEC. 10, T30S, R26E
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.	PURE OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	DRILL STEM TEST NO. 8
SAMPLED	11/30/58	04/26/62	11/30/62
FORMATION	MISS-LEADVILLE & MADISON	NOT GIVEN	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7980	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	0.4	0.6	81.4
ETHANE	0.2	0.2	7.8
PROPANE	0.0	0.7	3.1
N-BUTANE	0.1	0.1	1.0
ISOBUTANE	0.1	0.0	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.0	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.8	23.0	5.0
OXYGEN	0.4	4.8	TRACE
ARGON	TRACE	0.2	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	93.6	69.9	0.1
HELIUM	0.20	0.15	0.04
HEATING VALUE*	20	46	1140
SPECIFIC GRAVITY	1.494	1.374	0.688

	INDEX 10171 SAMPLE 6701	INDEX 10172 SAMPLE 7068	INDEX 10173 SAMPLE 6883
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATHERFORD	ROLLING MESA	TOHONADLA
WELL NAME	NORTH DESERT CREEK NO. 13-13	GOVT. FEHR-LYON NO. 1	TOHONADLA LEASE
LOCATION	SEC. 13, T41S, R23E	SEC. 33, T40S, R21E	SEC. 35, T41S, R21E
OWNER	SHELL OIL CO.	CARTER OIL CO.	SHELL OIL CO.
COMPLETED	04/18/58	05/12/59	NOT GIVEN
SAMPLED	06/20/58	05/12/59	12/01/58
FORMATION	PENN-PARADOX	MISS-	PENN-HERMOSA U
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5343	6150	5200
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	900	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.7	4.5	60.3
ETHANE	19.8	0.6	21.8
PROPANE	11.7	4.8	9.1
N-BUTANE	3.4	0.1	2.6
ISOBUTANE	1.7	0.0	1.7
N-PENTANE	0.6	0.3	0.3
ISOPENTANE	0.8	0.0	0.8
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.3	0.3
NITROGEN	0.2	18.3	2.6
OXYGEN	TRACE	0.8	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	69.2	0.2
HELIUM	0.02	0.90	0.10
HEATING VALUE*	1538	212	1449
SPECIFIC GRAVITY	0.890	1.371	0.861

	INDEX 10174 SAMPLE 5852	INDEX 10175 SAMPLE 6448	INDEX 10176 SAMPLE 5598
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WHITE MESA	WHITE MESA	WILDCAT
WELL NAME	WHITE MESA NO. 1	NAVAJO NO. E-1	STATE NO. 1
LOCATION	SEC. 6, T43S, R24E	SEC. 23, T41S, R24E	SEC. 32, T29S, R23E
OWNER	SHELL OIL CO.	SUPERIOR OIL CO.	THREE STATES NATURAL GAS CO.
COMPLETED	NOT GIVEN	03/--/57	NOT GIVEN
SAMPLED	05/25/55	11/26/57	03/01/54
FORMATION	PENN-HERMOSA	PENN-PARADOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6065	5445	6014
WELLHEAD PRESSURE,PSIG	NOT GIVEN	530	180
OPEN FLOW, MCFD	NOT GIVEN	270	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	55.3	72.4
ETHANE	7.7	24.1	14.8
PROPANE	4.5	13.7	6.2
N-BUTANE	1.5	3.3	2.1
ISOBUTANE	0.6	1.7	1.0
N-PENTANE	0.6	0.6	0.7
ISOPENTANE	0.1	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.4	0.5
NITROGEN	4.0	0.0	1.6
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.3	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	0.53	0.01	0.02
HEATING VALUE*	1173	1591	1340
SPECIFIC GRAVITY	0.711	0.923	0.781

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10177 SAMPLE 5982	INDEX 10178 SAMPLE 6028	INDEX 10179 SAMPLE 6051
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	COALBED CANYON UNIT NO. 1	NAVAJO C NO. 1	NAVAJO 1-A
LOCATION	SEC. 15, T35S, R25E	SEC. 23, T40S, R24E	SEC. 14, T40S, R24E
OWNER	GULF OIL CORP.	TEXAS CO.	SUPERIOR OIL CO.
COMPLETED	08/15/55	02/17/56	NOT GIVEN
SAMPLED	12/05/55	02/18/56	04/05/56
FORMATION	PENN-PARADOX	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5762	5800	5694
WELLHEAD PRESSURE,PSIG	1496	525	2135
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	68
COMPONENT, MOLE PCT			
METHANE	76.5	59.8	58.6
ETHANE	11.7	20.0	20.2
PROPANE	4.7	12.0	11.2
N-BUTANE	2.0	3.6	3.7
ISOBUTANE	1.6	1.4	1.4
N-PENTANE	1.0	0.6	0.9
ISOPENTANE	0.6	1.0	0.9
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	1.0	0.4	0.7
NITROGEN	0.6	0.8	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1397	1541	1544
SPECIFIC GRAVITY	0.772	0.898	0.906

	INDEX 10180 SAMPLE 6147	INDEX 10181 SAMPLE 6248	INDEX 10182 SAMPLE 6249
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	RECAPTURE CREEK UNIT NO. 1	ANIDO CREEK NO. 1	ANIDO CREEK NO. 1
LOCATION	SEC. 21, T40S, R23E	SEC. 33, T43S, R25E	SEC. 33, T43S, R25E
OWNER	SHELL OIL CO.	CARTER OIL CO.	CARTER OIL CO.
COMPLETED	09/26/56	NOT GIVEN	NOT GIVEN
SAMPLED	09/17/56	02/13/57	02/06/57
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5333	5956	5500
WELLHEAD PRESSURE,PSIG	680	NOT GIVEN	5
OPEN FLOW, MCFD	800	NOT GIVEN	15
COMPONENT, MOLE PCT			
METHANE	24.2	88.0	65.0
ETHANE	29.3	3.9	18.8
PROPANE	26.3	2.4	9.7
N-BUTANE	11.7	0.9	2.7
ISOBUTANE	4.3	0.5	1.3
N-PENTANE	3.0	0.3	0.5
ISOPENTANE	2.8	0.2	0.4
CYCLOPENTANE	0.5	0.1	0.1
HEXANES PLUS	1.6	0.3	0.2
NITROGEN	0.5	2.5	1.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.6	0.1
HELIUM	0.01	0.32	0.08
HEATING VALUE*	2276	1111	1434
SPECIFIC GRAVITY	1.355	0.653	0.834

	INDEX 10183 SAMPLE 6632	INDEX 10184 SAMPLE 6971	INDEX 10185 SAMPLE 7873
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO TRACT 40, NO. 1	U. S. LIME RIDGE NO. 1	PIPELINE SAMPLE
LOCATION	SEC. 9, T41S, R22E	SEC. 28, T40S, R20E	SEC. 19, T29S, R24E
OWNER	CARTER OIL CO.	KINGWOOD OIL CO.	PURE OIL CO.
COMPLETED	NOT GIVEN	12/18/58	NOT GIVEN
SAMPLED	06/09/58	02/14/59	12/12/60
FORMATION	PENN-PARADOX	PENN-HERMOSA U	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5620	1088	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	9	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.1	49.1	81.7
ETHANE	19.1	11.9	7.0
PROPANE	10.5	0.6	2.6
N-BUTANE	4.1	0.1	0.6
ISOBUTANE	2.1	0.0	0.3
N-PENTANE	1.5	0.1	0.1
ISOPENTANE	1.1	0.0	0.1
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	1.3	TRACE	0.1
NITROGEN	0.6	13.3	7.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.2	TRACE
HYDROGEN	0.0	2.2	0.1
HYDROGEN SULFIDE**	0.0	3.9	0.0
CARBON DIOXIDE	0.1	17.9	TRACE
HELIUM	0.02	0.70	TRACE
HEATING VALUE*	1419	741	1065
SPECIFIC GRAVITY	0.943	0.865	0.665

	INDEX 10186 SAMPLE 8346	INDEX 10187 SAMPLE 8411	INDEX 10188 SAMPLE 8413
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LISBON FEDERAL NO. 2-21-F	U.S.A. NO. 1	SPILLER CANYON NO. 1
LOCATION	SEC. 21, T30S, R25E	SEC. 6, T27S, R20E	SEC. 16, T36S, R25E
OWNER	PUBCO PETROLEUM CORP.	SOUTHERN NATURAL GAS CO.	PURE OIL CO.
COMPLETED	11/27/61	02/15/62	NOT GIVEN
SAMPLED	12/09/61	02/15/62	02/23/62
FORMATION	MISS-	PENN-	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9270	5808	6010
WELLHEAD PRESSURE,PSIG	2400	2525	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.3	60.7	76.8
ETHANE	5.1	19.5	7.5
PROPANE	2.1	12.0	2.8
N-BUTANE	1.5	2.3	1.2
ISOBUTANE	1.3	1.6	0.8
N-PENTANE	1.2	0.7	0.5
ISOPENTANE	1.2	0.3	0.5
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	1.3	0.3	0.1
NITROGEN	9.9	1.4	14.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.2	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	16.5	0.1	0.1
HELIUM	0.51	0.06	0.10
HEATING VALUE*	878	1107	1006
SPECIFIC GRAVITY	0.842	0.879	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** SEE TEXT FOR DISCUSSION OF H2S SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10189 SAMPLE 8775	INDEX 10190 SAMPLE 8817	INDEX 10191 SAMPLE 8938
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BIG INDIAN NO. 3	NO. 3	U.S.A. B NO. 1
LOCATION	SEC. 10, T30S, R25E	SEC. 3, T27S, R21E	SEC. 9, T35S, R25E
OWNER	PURE OIL CO.	HUMBLE OIL & REFINING CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	DRILL STEM TEST NO. 5	01/15/63	DRILL STEM TEST
SAMPLED	11/20/62	12/25/62	04/18/63
FORMATION	PENN-HERMOSA	PENN-PARADOX	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4222	4860	7034
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	53	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.1	74.0	5.2
ETHANE	21.0	12.1	0.4
PROPANE	10.9	4.8	0.3
N-BUTANE	2.9	1.3	TRACE
ISOBUTANE	1.7	0.6	TRACE
N-PENTANE	0.5	0.3	0.0
ISOPENTANE	0.6	0.4	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	2.6	5.1	4.9
OXYGEN	TRACE	0.8	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	88.6
HELIUM	0.01	0.03	0.40
HEATING VALUE*	1479	1199	73
SPECIFIC GRAVITY	0.879	0.740	1.446

	INDEX 10192 SAMPLE 9088	INDEX 10193 SAMPLE 9199	INDEX 10194 SAMPLE 11612
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LITTLE VALLEY NO. 2	BIG INDIAN NO. 4	NAVAJO MACMULLEN NO. 1
LOCATION	NOT GIVEN	SEC. 14, T30S, R25E	SEC. 15, T42S, R26E
OWNER	PACIFIC NAT. GAS EXPLORATION	PURE OIL CO.	WESTERN HYDROCARBONS CORP.
COMPLETED	DRILL STEM TEST	NOT GIVEN	DRILL STEM TEST NO. 1
SAMPLED	09/23/63	12/08/63	08/01/68
FORMATION	-CLASTIC BEDS	PENN-HERMOSA	PENN-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4526	NOT GIVEN	5890
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.4	83.5	62.2
ETHANE	16.6	8.1	18.4
PROPANE	9.1	2.4	10.7
N-BUTANE	3.6	0.9	3.0
ISOBUTANE	3.1	0.1	1.5
N-PENTANE	1.5	0.1	1.0
ISOPENTANE	1.3	0.4	0.4
CYCLOPENTANE	0.5	TRACE	0.4
HEXANES PLUS	2.4	0.1	0.9
NITROGEN	0.4	4.1	1.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1643	1114	1510
SPECIFIC GRAVITY	0.954	0.665	0.883

	INDEX 10195 SAMPLE 11613	INDEX 10196 SAMPLE 12170	INDEX 10197 SAMPLE 12940
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO MACMULLEN NO. 1	FEDERAL NO. 1-22	KIMBARK OPERATING CO. NO. 1
LOCATION	SEC. 15, T42S, R26E	SEC. 22, T37S, R23E	SEC. 22, T38S, R20E
OWNER	WESTERN HYDROCARBONS CORP.	BUTTES GAS & OIL CO.	KIMBARK OPERATING CO.
COMPLETED	DRILL STEM TEST NO. 2	DRILL STEM TEST NO. 1	NOT GIVEN
SAMPLED	08/04/68	01/06/70	07/26/71
FORMATION	PENN-	PENN-DESERT CREEK	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5886	6379	2050
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	64.4	53.8
ETHANE	19.0	15.1	11.1
PROPANE	11.2	9.7	4.1
N-BUTANE	4.2	3.2	0.8
ISOBUTANE	1.5	1.9	0.3
N-PENTANE	1.2	1.3	0.3
ISOPENTANE	1.1	0.9	0.0
CYCLOPENTANE	0.4	0.3	0.1
HEXANES PLUS	1.0	1.3	0.2
NITROGEN	1.7	1.9	27.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.09	0.01	1.34
HEATING VALUE*	1581	1519	914
SPECIFIC GRAVITY	0.931	0.891	0.793

	INDEX 10198 SAMPLE 12941	INDEX 10199 SAMPLE 6035	INDEX 10200 SAMPLE 8727
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SANPETE	SANPETE
FIELD	WILDCAT	JOES VALLEY	JOES VALLEY
WELL NAME	KIMBARK OPERATING CO. NO. 1	JOES VALLEY UNIT NO. 1-X	JOES VALLEY UNIT NO. 1-X
LOCATION	SEC. 22, T38S, R20E	SEC. 17, T15S, R6E	SEC. 17, T15S, R6E
OWNER	KIMBARK OPERATING CO.	THREE STATES NATURAL GAS CO.	DELHI-TAYLOR OIL CORP.
COMPLETED	DRILL STEM TEST	11/14/55	NOT GIVEN
SAMPLED	07/26/71	02/26/56	10/22/62
FORMATION	PENN-PARADOX	CRET-FERRON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	630	630
DEPTH, FEET	2050	7090	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1368	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.9	97.9	86.0
ETHANE	11.1	0.2	4.6
PROPANE	4.2	0.0	2.9
N-BUTANE	0.7	0.0	0.9
ISOBUTANE	0.4	0.0	1.0
N-PENTANE	0.2	0.0	0.3
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	27.4	0.9	3.1
OXYGEN	0.0	TRACE	0.5
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.1
HELIUM	1.34	0.02	0.03
HEATING VALUE*	908	996	1129
SPECIFIC GRAVITY	0.790	0.563	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10201 SAMPLE 8732	INDEX 10202 SAMPLE 8384	INDEX 10203 SAMPLE 8386
STATE	UTAH	UTAH	UTAH
COUNTY	SANPETE	SEVIER	SEVIER
FIELD	JOES VALLEY	EMERY UNIT	EMERY UNIT
WELL NAME	JOES VALLEY UNIT NO. 3	EMERY UNIT NO. 1	EMERY UNIT NO. 1
LOCATION	SEC. 20, T15S, R6E	SEC. 34, T22S, R5E	SEC. 34, T22S, R5E
OWNER	DELHI-TAYLOR OIL CORP.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	02/16/62	02/16/62
SAMPLED	10/22/62	01/24/62	02/--/62
FORMATION	CRET-FERRON	PERM-	PERM-COCONINO
GEOLOGIC PROVINCE CODE	630	630	630
DEPTH, FEET	NOT GIVEN	8985	8730
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	1.4	3.0
ETHANE	4.6	0.2	0.5
PROPANE	3.1	TRACE	0.5
N-BUTANE	0.9	TRACE	0.1
ISOBUTANE	0.9	0.0	0.0
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	1.1	5.4	3.3
OXYGEN	TRACE	0.6	0.1
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	92.2	91.7
HELIUM	0.02	0.14	0.69
HEATING VALUE*	1159	18	65
SPECIFIC GRAVITY	0.659	1.480	1.473

	INDEX 10204 SAMPLE 8390	INDEX 10205 SAMPLE 16078	INDEX 10206 SAMPLE 15587
STATE	UTAH	UTAH	UTAH
COUNTY	SEVIER	SUMMIT	SUMMIT
FIELD	EMERY UNIT	ANSCHUTZ E	ANSCHUTZ RANCH
WELL NAME	EMERY UNIT NO. 1	BOUNTIFUL LIVESTOCK NO. 1	ANSCHUTZ RANCH NO. 3-1
LOCATION	SEC. 34, T22S, R5E	SEC. 16, T4N, R8E	SEC. 3, T3N, R7E
OWNER	SKELLY OIL CO.	AMOCO PRODUCTION CO.	ANSCHUTZ CORP.
COMPLETED	02/16/62	03/27/80	03/15/79
SAMPLED	02/04/62	09/16/80	03/15/79
FORMATION	MISS-	JURA-NUGGET	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	630	570	570
DEPTH, FEET	9639	13350	6672
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2950	1300
OPEN FLOW, MCFD	NOT GIVEN	5000	1003
COMPONENT, MOLE PCT			
METHANE	1.6	77.4	79.6
ETHANE	0.1	13.0	7.1
PROPANE	0.1	5.1	2.8
N-BUTANE	TRACE	1.0	1.0
ISOBUTANE	0.0	0.8	0.8
N-PENTANE	0.0	0.2	0.4
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.4
NITROGEN	2.1	1.7	7.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	95.7	0.4	0.1
HELIUM	0.08	0.02	0.09
HEATING VALUE*	21	1232	1130
SPECIFIC GRAVITY	1.496	0.718	0.705

	INDEX 10207 SAMPLE 15089	INDEX 10208 SAMPLE 2205	INDEX 10209 SAMPLE 2206
STATE	UTAH	UTAH	UTAH
COUNTY	SUMMIT	UINTAH	UINTAH
FIELD	PINEVIEW	ASHLEY VALLEY	ASHLEY VALLEY
WELL NAME	UNION PACIFIC RR NO. 3-2	NO. 1	NO. 5
LOCATION	SEC. 3, T2N, R7E	SEC. 23, T5S, R22E	SEC. 23, T5S, R22E
OWNER	AMERICAN QUASAR PETROLEUM CO	VALLEY FUEL SUPPLY CO.	VALLEY FUEL SUPPLY CO.
COMPLETED	02/11/77	04/13/25	03/23/28
SAMPLED	08/30/77	10/09/30	10/09/30
FORMATION	JURA-TWIN CREEK	JURA-MORRISON	JURA-MORRISON
GEOLOGIC PROVINCE CODE	570	575	575
DEPTH, FEET	9455	1655	1655
WELLHEAD PRESSURE,PSIG	850	400	400
OPEN FLOW, MCFD	NOT GIVEN	11000	11000
COMPONENT, MOLE PCT			
METHANE	16.7	97.9	99.4
ETHANE	26.9	0.0	0.0
PROPANE	34.6	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	16.2	---	---
N-PENTANE	4.3	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.9	---	---
NITROGEN	0.3	0.5	0.3
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	1.4	0.2
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	2151	992	1007
SPECIFIC GRAVITY	1.388	0.570	0.558

	INDEX 10210 SAMPLE 9397	INDEX 10211 SAMPLE 9247	INDEX 10212 SAMPLE 16061
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	BENO	BONANZA	BOOK CLIFF
WELL NAME	PAN AM STATE NO. 1	NO. 1	MAIN CANYON NO. 14-16
LOCATION	SEC. 32, T6S, R23E	SEC. 27, T9S, R24E	SEC. 16, T15S, R23E
OWNER	H. D. MCLISH, ET AL.	PACIFIC NAT. GAS EXPLORATION	COSEKA RESOURCES (U.S.A.)
COMPLETED	01/03/64	10/15/63	NOT GIVEN
SAMPLED	06/13/64	02/26/64	08/27/80
FORMATION	EOCE-UINTA	EOCE-WASATCH	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3170	4917	6600
WELLHEAD PRESSURE,PSIG	1320	1683	600
OPEN FLOW, MCFD	1710	NOT GIVEN	756
COMPONENT, MOLE PCT			
METHANE	96.8	90.6	63.0
ETHANE	0.6	4.5	4.8
PROPANE	0.8	1.7	1.2
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	2.5	0.8	28.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.0	0.8
HELIUM	0.01	0.02	0.01
HEATING VALUE*	983	1082	708
SPECIFIC GRAVITY	0.573	0.632	0.729

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10213 SAMPLE 15995	INDEX 10214 SAMPLE 5869	INDEX 10215 SAMPLE 8309
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	CHAPITA	CHAPITA WELLS	FENCE CANYON
WELL NAME	CHAPITA UNIT 4525	CHAPITA WELLS UNIT NO. 2	UNIT NO. 2
LOCATION	SEC. 25, T 9S, R22E	SEC. 28, T9S, R23E	SEC. 26, T15S, R22E
OWNER	BELCO PETROLEUM CORP.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	01/22/80	02/28/55	09/13/61
SAMPLED	06/26/80	06/26/55	11/11/61
FORMATION	EOCE-WASATCH	EOCE-WASATCH	JURA-MORRISON
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5893	5052	8378
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1795	1180
OPEN FLOW, MCFD	2250	2564	600
COMPONENT, MOLE PCT			
METHANE	91.2	92.6	92.8
ETHANE	5.2	3.6	3.9
PROPANE	1.7	1.2	0.6
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.4	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	0.3	0.6	0.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	1.1
HELIUM	0.01	0.02	0.08
HEATING VALUE*	1103	1108	1045
SPECIFIC GRAVITY	0.619	0.622	0.602

	INDEX 10216 SAMPLE 8310	INDEX 10217 SAMPLE 8311	INDEX 10218 SAMPLE 7432
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	FENCE CANYON	FENCE CANYON	GUSHER
WELL NAME	UNIT NO. 1	UNIT NO. 2	NO. 44X-35
LOCATION	SEC. 36, T15S, R22E	SEC. 26, T15S, R22E	SEC. 35, T5S, R19E
OWNER	TEXACO INC.	TEXACO INC.	GUSHER FIELD CO.
COMPLETED	04/23/60	09/13/61	03/30/60
SAMPLED	11/11/61	11/11/61	03/09/60
FORMATION	CRET-DAKOTA	CRET-DAKOTA	EOCE-GREEN RIVER U
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	8544	8236	6010
WELLHEAD PRESSURE,PSIG	1687	1180	NOT GIVEN
OPEN FLOW, MCFD	4250	1175	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	92.7	74.7
ETHANE	2.4	4.1	0.5
PROPANE	0.4	0.9	0.3
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.7	0.4	19.1
OXYGEN	TRACE	TRACE	4.6
ARGON	0.0	0.0	0.2
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.1	0.3
HELIUM	0.05	0.05	0.01
HEATING VALUE*	1024	1067	777
SPECIFIC GRAVITY	0.585	0.610	0.669

	INDEX 10219 SAMPLE 9822	INDEX 10220 SAMPLE 12218	INDEX 10221 SAMPLE 12219
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	HORSESHOE BEND	HORSESHOE BEND	HORSESHOE BEND
WELL NAME	HORSESHOE BEND FEDERAL NO. 3	ROWE FEDERAL NO. 2	SHORT FEDERAL NO. 1
LOCATION	SEC. 27, T6S, R21E	SEC. 2, T6S, R21E	SEC. 4, T7S, R21E
OWNER	CALIFORNIA OIL CO.	KENNETH D. LUFF	KENNETH D. LUFF
COMPLETED	01/29/65	11/--/69	12/--/70
SAMPLED	03/25/65	03/10/70	03/10/70
FORMATION	EOCE-UINTA	EOCE-UINTA	EOCE-UINTA
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3513	3200	3200
WELLHEAD PRESSURE,PSIG	1200	860	720
OPEN FLOW, MCFD	NOT GIVEN	500000	80000
COMPONENT, MOLE PCT			
METHANE	98.1	98.3	96.3
ETHANE	0.6	0.5	0.6
PROPANE	0.2	0.1	0.2
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.7	0.8	2.1
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1017	1008	1005
SPECIFIC GRAVITY	0.566	0.561	0.573

	INDEX 10222 SAMPLE 7911	INDEX 10223 SAMPLE 8771	INDEX 10224 SAMPLE 8772
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	ISLAND	ISLAND	ISLAND
WELL NAME	UNIT NO. 1	UNIT NO. 2	UNIT NO. 5
LOCATION	SEC. 7, T10S, R20E	SEC. 14, T10S, R18E	SEC. 13, T10S, R18E
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	01/05/61	05/13/61	12/23/61
SAMPLED	03/13/61	10/19/62	10/19/62
FORMATION	EOCE-WASATCH	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5487	7078	5602
WELLHEAD PRESSURE,PSIG	2125	825	925
OPEN FLOW, MCFD	23000	1600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.4	91.6	89.8
ETHANE	3.5	4.7	5.2
PROPANE	0.6	1.4	1.6
N-BUTANE	0.0	0.4	0.5
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.1	0.7	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	0.02	0.04
HEATING VALUE*	1051	1098	1102
SPECIFIC GRAVITY	0.582	0.618	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10225 SAMPLE 15836	INDEX 10226 SAMPLE 13405	INDEX 10227 SAMPLE 13406
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	ISLAND	NATURAL BUTTE	NATURAL BUTTE
WELL NAME	ISLAND UNIT NO. 9	NATURAL BUTTE NO. 13	NATURAL BUTTE NO. 9
LOCATION	SEC. 11, T10S, R19E	SEC. 30, T9S, R22E	SEC. 19, T9S, R22E
OWNER	WEXPRO CO.	GAS PRODUCING ENTERPRISES	GAS PRODUCING ENTERPRISES
COMPLETED	08/06/79	07/27/72	05/22/72
SAMPLED	11/1/79	09/28/72	09/28/72
FORMATION	EOCE-WASATCH	CRET-MESAVERDE&EOCE-WASATCH	CRET-MESAVERDE&EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	6088	5000	5000
WELLHEAD PRESSURE,PSIG	2300	2200	2000
OPEN FLOW, MCFD	5297	1000	750
COMPONENT, MOLE PCT			
METHANE	89.0	81.8	80.0
ETHANE	7.1	3.3	4.5
PROPANE	2.0	1.0	1.9
N-BUTANE	0.4	0.2	0.4
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.1	10.3	9.9
OXYGEN	0.0	2.6	2.2
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1134	940	981
SPECIFIC GRAVITY	0.639	0.651	0.669

	INDEX 10228 SAMPLE 15315	INDEX 10229 SAMPLE 16069	INDEX 10230 SAMPLE 7689
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	NOT GIVEN
FIELD	NATURAL BUTTES	NATURAL BUTTES	UINTAH UNIT NO. 2
WELL NAME	FLAT MESA NO. 1	NBU-36Y	SEC. 35, T10S, R20E
LOCATION	SEC. 7, T10S, R23E	SEC. 35, T9S, R21E	DEKALB AGRICULTURAL ASSN.
OWNER	ENSERCH EXPLORATION, INC.	INTEGRITY OIL & GAS CO.	05/17/60
COMPLETED	05/31/78	03/18/80	09/19/60
SAMPLED	07/12/78	09/18/80	EOCE-WASATCH
FORMATION	CRET-MESAVERDE	EOCE-WASATCH	575
GEOLOGIC PROVINCE CODE	575	575	5038
DEPTH, FEET	6954	5538	2110
WELLHEAD PRESSURE,PSIG	2150	2300	2500
OPEN FLOW, MCFD	2200	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	93.5	92.5	94.8
ETHANE	3.6	4.3	3.2
PROPANE	1.1	1.2	0.7
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.3	0.4	0.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1084	1090	1067
SPECIFIC GRAVITY	0.605	0.608	0.593

	INDEX 10231 SAMPLE 8338	INDEX 10232 SAMPLE 15593	INDEX 10233 SAMPLE 5033
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	NOT GIVEN	OURAY	RED WASH
WELL NAME	CHAPITA WELLS UNIT NO. 25	CONOCO MOUNTAIN LION NO. 2	RED WASH UNIT NO. 1
LOCATION	SEC. 1, T9S, R22E	SEC. 34, T8S, R21E	SEC. 26, T7S, R23S
OWNER	BELCO PETROLEUM CORP.	CONTINENTAL OIL CO.	CALIFORNIA CO.
COMPLETED	NOT GIVEN	12/29/78	02/02/51
SAMPLED	NOT GIVEN	03/27/79	04/03/51
FORMATION	EOCE-GREEN RIVER	EOCE-WASATCH	EOCE-GREEN RIVER BASAL
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3022	5954	5183
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	1912
OPEN FLOW, MCFD	NOT GIVEN	1350	435
COMPONENT, MOLE PCT			
METHANE	97.8	92.9	92.0
ETHANE	0.3	4.0	2.1
PROPANE	0.1	1.3	2.1
N-BUTANE	0.1	0.3	0.6
ISOBUTANE	0.1	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.5	0.3	0.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	1.3
HELIUM	0.05	0.01	0.01
HEATING VALUE*	1033	1098	1096
SPECIFIC GRAVITY	0.577	0.615	0.636

	INDEX 10234 SAMPLE 6107	INDEX 10235 SAMPLE 7363	INDEX 10236 SAMPLE 7710
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	RED WASH	RED WASH	RED WASH
WELL NAME	RED WASH NO. 42	NO. 32-21B	RED WASH UNIT NO. 32-27C
LOCATION	SEC. 29, T7S, R24E	SEC. 21, T7S, R23E	SEC. 27, T7S, R24E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	01/25/56	09/05/59	06/23/60
SAMPLED	07/16/56	01/22/60	10/04/60
FORMATION	EOCE-GREEN RIVER BASAL	EOCE-GREEN RIVER	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	4248	5084	4987
WELLHEAD PRESSURE,PSIG	1482	200	1500
OPEN FLOW, MCFD	1400	114	1686
COMPONENT, MOLE PCT			
METHANE	97.6	94.6	97.6
ETHANE	0.3	0.6	0.9
PROPANE	1.7	0.3	0.2
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.0	2.0	0.6
OXYGEN	0.0	0.3	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	1.4	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1060	1006	1026
SPECIFIC GRAVITY	0.578	0.597	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10237 SAMPLE 8308	INDEX 10238 SAMPLE 10572	INDEX 10239 SAMPLE 10878
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	RED WASH	RED WASH	RED WASH
WELL NAME	F. S. PRINCE NO. 1	UNIT NO. 208; 32-22C	UNIT NO. 212
LOCATION	SEC. 10, T7S, R24E	SEC. 22, T7S, R24E	SEC. 8, T8S, R24E
OWNER	TEXACO INC.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	07/02/60	08/31/65	06/01/66
SAMPLED	11/13/61	05/16/66	02/23/67
FORMATION	EOCE-GREEN RIVER	EOCE-GREEN RIVER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5322	5010	9159
WELLHEAD PRESSURE,PSIG	1475	1485	4320
OPEN FLOW, MCFD	8490	10500	1250
COMPONENT, MOLE PCT			
METHANE	99.3	98.1	90.5
ETHANE	0.1	0.8	4.5
PROPANE	0.1	0.0	2.0
N-BUTANE	TRACE	0.0	0.4
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.5	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	1.2
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1010	1008	1103
SPECIFIC GRAVITY	0.560	0.567	0.638

	INDEX 10240 SAMPLE 8680	INDEX 10241 SAMPLE 14272	INDEX 10242 SAMPLE 6808
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	ROCK HOUSE	SEEP RIDGE	SOUTHMAN CANYON
WELL NAME	RAINBOW UNIT NO. 2A	TEXACO-SKYLINE GOV'T AF NO.	SOUTHMAN CANYON UNIT NO. 4
LOCATION	SEC. 18, T11S, R23E	SEC. 27, T13S, R21E	SEC. 29, T10S, R24E
OWNER	SHAMROCK OIL & GAS CORP.	TEXACO INC.	EL PASO NATURAL GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	08/25/58
SAMPLED	09/25/62	02/15/75	09/10/58
FORMATION	EOCE-WASATCH	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	2982	9670	5944
WELLHEAD PRESSURE,PSIG	1428	3000	2850
OPEN FLOW, MCFD	5000	3000	4
COMPONENT, MOLE PCT			
METHANE	94.6	95.4	85.6
ETHANE	3.2	2.3	5.6
PROPANE	0.5	0.4	4.2
N-BUTANE	0.1	TRACE	1.3
ISOBUTANE	0.2	0.1	0.7
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	1.0	0.3	0.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	1.7
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1048	1040	1179
SPECIFIC GRAVITY	0.588	0.592	0.687

	INDEX 10243 SAMPLE 6469	INDEX 10244 SAMPLE 6484	INDEX 10245 SAMPLE 7339
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	UTE TRAIL	UTE TRAIL	UTE TRAIL
WELL NAME	11X-21H	88X-2G	UTE TRAIL UNIT NO. 2
LOCATION	SEC. 21, T10S, R22E	SEC. 2, T10S, R21E	SEC. 20, T9S, R20E
OWNER	HAVENSTRITE OIL CO.	HAVENSTRITE OIL CO.	DEKALB-SUN
COMPLETED	10/06/57	11/08/57	10/07/57
SAMPLED	01/05/58	01/23/58	01/12/60
FORMATION	EOCE-WASATCH	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5052	5366	6075
WELLHEAD PRESSURE,PSIG	2200	2100	2725
OPEN FLOW, MCFD	5130	2196	301
COMPONENT, MOLE PCT			
METHANE	94.4	95.2	89.4
ETHANE	3.6	3.3	6.5
PROPANE	1.0	0.6	2.0
N-BUTANE	0.3	0.2	0.4
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.1	0.2	TRACE
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1073	1058	1133
SPECIFIC GRAVITY	0.595	0.586	0.635

	INDEX 10246 SAMPLE 6480	INDEX 10247 SAMPLE 6535	INDEX 10248 SAMPLE 7305
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	WALKER HOLLOW	WALKER HOLLOW	WALKER HOLLOW
WELL NAME	WALKER HOLLOW NO. 3	WALKER HOLLOW NO. 6	W. H. UNIT NO. 9
LOCATION	SEC. 31, T1S, R23E	SEC. 7, T7S, R24E	SEC. 8, T7S, R24E
OWNER	BRACK DRILLING CO.	CARTER OIL CO.	CARTER OIL CO.
COMPLETED	12/22/57	03/04/58	09/08/59
SAMPLED	01/15/58	03/24/58	12/08/59
FORMATION	EOCE-UINTA	EOCE-GREEN RIVER	EOCE-GREEN RIVER D
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	2628	5594	5428
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.9	99.1	88.9
ETHANE	0.7	0.1	6.1
PROPANE	0.1	0.1	1.7
N-BUTANE	0.1	0.1	0.4
ISOBUTANE	0.1	TRACE	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.0	0.2	TRACE
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1019	1022	1127
SPECIFIC GRAVITY	0.568	0.562	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10249 SAMPLE 7167		INDEX 10250 SAMPLE 7744		INDEX 10251 SAMPLE 9851	
STATE	UTAH		UTAH		UTAH	
COUNTY	UINTAH		UINTAH		UINTAH	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	UTE TRAIL UNIT NO. 1		ROCK HOUSE NO. 1		GOVERNMENT 1-1	
LOCATION	SEC. 8, T10S, R22E		SEC. 10		SEC. 1, T12S, R21E	
OWNER	DEKALB AGRICULTURAL ASSOC.		SHAMROCK OIL & GAS CORP.		SHAMROCK OIL & GAS CORP.	
COMPLETED	09/21/59		10/23/60		07/12/62	
SAMPLED	08/12/59		10/23/60		04/20/65	
FORMATION	EOCE-WASATCH		CRET-MESAVERDE &EOCE-WASATCH		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	5241		4144		5680	
WELLHEAD PRESSURE,PSIG	2125		1990		1950	
OPEN FLOW, MCFD	2500		900		1260	
COMPONENT, MOLE PCT						
METHANE	93.5		92.2		94.9	
ETHANE	3.9		4.5		2.2	
PROPANE	1.0		1.6		0.5	
N-BUTANE	0.3		0.4		0.2	
ISOBUTANE	TRACE		0.5		TRACE	
N-PENTANE	0.5		0.1		0.2	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.3		0.2		1.3	
OXYGEN	0.0		0.0		0.3	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.01		TRACE		0.02	
HEATING VALUE*	1093		1105		1038	
SPECIFIC GRAVITY	0.609		0.616		0.589	

	INDEX 10252 SAMPLE 9914		INDEX 10253 SAMPLE 2587		INDEX 10254 SAMPLE 10044	
STATE	UTAH		UTAH		VIRGINIA	
COUNTY	UINTAH		WASHINGTON		BUCHANAN	
FIELD	WILDCAT		VIRGIN		BIG SANDY	
WELL NAME	EVACUATION CREEK NO. 23-2-1		NO. 1		8672	
LOCATION	SEC. 2, T12S, R25E		SEC. 31, T41S, R11W		CARTER COORDINATES 24-L-89	
OWNER	PACIFIC NATURAL GAS EXPL. CO		BARR & CO.		UNITED FUEL GAS CO.	
COMPLETED	08/06/64		NOT GIVEN		12/31/64	
SAMPLED	05/30/65		01/23/33		08/03/65	
FORMATION	CRET-CEDAR MOUNTAIN		NOT GIVEN		MISS-RAVENCLIFF	
GEOLOGIC PROVINCE CODE	575		625		160	
DEPTH, FEET	8059		452		1611	
WELLHEAD PRESSURE,PSIG	2363		NOT GIVEN		360	
OPEN FLOW, MCFD	723		NOT GIVEN		328	
COMPONENT, MOLE PCT						
METHANE	90.2		0.0		88.8	
ETHANE	5.3		0.0		3.8	
PROPANE	1.7		---		1.7	
N-BUTANE	0.3		---		0.6	
ISOBUTANE	0.3		---		0.4	
N-PENTANE	0.1		---		0.1	
ISOPENTANE	0.2		---		0.2	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.2		---		0.2	
NITROGEN	0.6		11.3		3.8	
OXYGEN	0.0		1.7		0.0	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.0		86.8		TRACE	
HELIUM	0.04		0.17		0.37	
HEATING VALUE*	1100		0		1069	
SPECIFIC GRAVITY	0.632		1.455		0.630	

	INDEX 10255 SAMPLE 12552		INDEX 10256 SAMPLE 3699		INDEX 10257 SAMPLE 9995	
STATE	VIRGINIA		VIRGINIA		VIRGINIA	
COUNTY	BUCHANAN		BUCHANAN		DICKENSON	
FIELD	HAYSI		NOT GIVEN		NORA	
WELL NAME	LYNN CAMP COAL CORP. NO.9590		NOT GIVEN		NO. 137	
LOCATION	ROCK LICK DISTRICT		NOT GIVEN		ERVINTON DISTRICT	
OWNER	UNITED FUEL GAS CO.		J. R. WADE		CLINCHFIELD COAL CO.	
COMPLETED	07/02/70		08/27/43		08/14/52	
SAMPLED	11/21/70		10/28/43		07/09/65	
FORMATION	MISS-BEREA		NOT GIVEN		MISS-RAVENCLIFF	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3694		NOT GIVEN		2414	
WELLHEAD PRESSURE,PSIG	840		NOT GIVEN		490	
OPEN FLOW, MCFD	2144		NOT GIVEN		60	
COMPONENT, MOLE PCT						
METHANE	97.5		95.8		92.6	
ETHANE	1.7		0.0		3.5	
PROPANE	0.2		---		0.5	
N-BUTANE	0.0		---		0.3	
ISOBUTANE	0.0		---		0.2	
N-PENTANE	0.0		---		0.1	
ISOPENTANE	0.0		---		TRACE	
CYCLOPENTANE	0.0		---		TRACE	
HEXANES PLUS	0.0		---		0.2	
NITROGEN	0.4		3.9		2.3	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		---		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE		0.2		0.0	
HELIUM	0.05		0.00		0.24	
HEATING VALUE*	1024		970		1045	
SPECIFIC GRAVITY	0.565		0.573		0.599	

	INDEX 10258 SAMPLE 9996		INDEX 10259 SAMPLE 10111		INDEX 10260 SAMPLE 10112	
STATE	VIRGINIA		VIRGINIA		VIRGINIA	
COUNTY	DICKENSON		DICKENSON		DICKENSON	
FIELD	NORA		NORA		NORA	
WELL NAME	NO. 141		CLINCHFIELD COAL CO. NO. 101		E. A. SMITH NO. 208	
LOCATION	ERVINTON DISTRICT		NORA		NOT GIVEN	
OWNER	CLINCHFIELD COAL CO.		CLINCHFIELD COAL CO.		CLINCHFIELD COAL CO.	
COMPLETED	04/30/53		03/28/49		09/04/58	
SAMPLED	07/09/65		09/07/65		09/07/65	
FORMATION	MISS-MAYTON		MISS-BIG LIME		DEVO-	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3088		3365		3990	
WELLHEAD PRESSURE,PSIG	922		NOT GIVEN		820	
OPEN FLOW, MCFD	1000		NOT GIVEN		103	
COMPONENT, MOLE PCT						
METHANE	93.1		95.9		95.8	
ETHANE	4.1		2.6		3.2	
PROPANE	1.9		0.5		0.5	
N-BUTANE	0.3		0.1		0.0	
ISOBUTANE	0.1		0.1		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.1		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.1		0.0	
NITROGEN	0.2		0.5		0.4	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		TRACE	
HELIUM	0.11		0.06		0.04	
HEATING VALUE*	1047		1047		1041	
SPECIFIC GRAVITY	0.601		0.581		0.576	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10261 SAMPLE 9997	INDEX 10262 SAMPLE 9998	INDEX 10263 SAMPLE 10000
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	DICKENSON	DICKENSON	DICKENSON
FIELD	OPEN FORK	OPEN FORK	OPEN FORK
WELL NAME	NO. 142	NO. 151	NO. 164
LOCATION	ERVINTON DISTRICT	ERVINTON DISTRICT	ERVINTON DISTRICT
OWNER	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.
COMPLETED	07/13/53	06/27/56	09/07/54
SAMPLED	07/09/65	07/09/65	09/10/65
FORMATION	MISS-BEREA	PENN-SALT SAND	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4917	1125	3056
WELLHEAD PRESSURE,PSIG	730	420	970
OPEN FLOW, MCFD	1600	200	696
COMPONENT, MOLE PCT			
METHANE	97.1	95.2	93.4
ETHANE	2.0	3.7	4.1
PROPANE	0.4	0.3	0.9
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.7	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.05	0.02	0.20
HEATING VALUE*	1030	1037	1066
SPECIFIC GRAVITY	0.569	0.580	0.597

	INDEX 10264 SAMPLE 10001	INDEX 10265 SAMPLE 933	INDEX 10266 SAMPLE 2890
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	DICKENSON	MATHEWS	ROCKINGHAM
FIELD	OPEN FORK	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 178	PHILLIPS	C. M. SOUDER NO. 1
LOCATION	ERVINTON DISTRICT	NOT GIVEN	CRAB RUN ANTICLINE
OWNER	CLINCHFIELD COAL CO.	MRS. PHILLIPS	NOT GIVEN
COMPLETED	06/27/56	NOT GIVEN	NOT GIVEN
SAMPLED	07/09/65	NOT GIVEN	07/13/41
FORMATION	MISS-BEREA	NOT GIVEN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	120	160
DEPTH, FEET	5750	90	3000
WELLHEAD PRESSURE,PSIG	740	70	NOT GIVEN
OPEN FLOW, MCFD	603	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	66.9	97.1
ETHANE	1.5	0.4	1.3
PROPANE	0.2	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.0	30.9	1.0
OXYGEN	0.0	0.2	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	1.4	0.3
HELIUM	0.06	0.00	0.13
HEATING VALUE*	1017	685	1007
SPECIFIC GRAVITY	0.567	0.698	0.569

	INDEX 10267 SAMPLE 9949	INDEX 10268 SAMPLE 9950	INDEX 10269 SAMPLE 10197
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	ROCKINGHAM	ROCKINGHAM	TAZEWELL
FIELD	NOT GIVEN	NOT GIVEN	WAR
WELL NAME	8418	6775	NO. 9342
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	08/18/56	03/31/52	12/28/64
SAMPLED	06/30/65	06/30/65	10/04/65
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2973	3563	5549
WELLHEAD PRESSURE,PSIG	1225	1300	925
OPEN FLOW, MCFD	1078	286	12703
COMPONENT, MOLE PCT			
METHANE	98.5	98.4	97.5
ETHANE	0.3	0.2	1.4
PROPANE	0.0	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.1	1.2	0.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.10	0.11	0.16
HEATING VALUE*	1003	1001	1015
SPECIFIC GRAVITY	0.560	0.561	0.566

	INDEX 10270 SAMPLE 9999	INDEX 10271 SAMPLE 10002	INDEX 10272 SAMPLE 2231
STATE	VIRGINIA	VIRGINIA	WASHINGTON
COUNTY	WISE	WISE	BENTON
FIELD	STONEGA	STONEGA	BENTON COUNTY
WELL NAME	NO. 160	NO. 185	NO. 2
LOCATION	RICHMOND DISTRICT	RICHMOND DISTRICT	SEC. 21, T11N, R26E
OWNER	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.	WALLA WALLA O.G. & P.L. CO.
COMPLETED	08/28/54	06/05/56	NOT GIVEN
SAMPLED	07/19/65	07/19/65	10/11/30
FORMATION	DEVO-	MISS-GREENBRIER	MIOC-
GEOLOGIC PROVINCE CODE	160	160	605
DEPTH, FEET	4291	3435	700
WELLHEAD PRESSURE,PSIG	700	1000	2
OPEN FLOW, MCFD	80	980	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.7	84.1	93.0
ETHANE	8.4	8.5	0.0
PROPANE	2.6	3.5	---
N-BUTANE	0.7	0.8	---
ISOBUTANE	0.1	0.4	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.7	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.5	1.8	5.9
OXYGEN	TRACE	0.2	0.7
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.3
HELIUM	0.10	0.15	0.00
HEATING VALUE*	1148	1154	942
SPECIFIC GRAVITY	0.655	0.665	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10273 SAMPLE 2233	INDEX 10274 SAMPLE 2533	INDEX 10275 SAMPLE 2534
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	BENTON	CLALLAM	CLALLAM
FIELD	BENTON COUNTY	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 6	OLYMPIC NO. 1	WASHINGTON
LOCATION	SEC. 29, T11N, R26E	SEC. 9, T28N, R13W	NOT GIVEN
OWNER	WALLA WALLA G.& E. & P.L. CO.	MORDELO L. VINCENT	MORDELO L. VINCENT
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/30	08/09/32	08/08/32
FORMATION	MIOC-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	605	710	710
DEPTH, FEET	700	2980	1935
WELLHEAD PRESSURE,PSIG	2	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.6	94.7	78.5
ETHANE	0.0	4.6	11.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.8	0.1	9.0
OXYGEN	0.3	0.6	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.00	0.00	0.00
HEATING VALUE*	958	1042	1001
SPECIFIC GRAVITY	0.574	0.581	0.654

	INDEX 10276 SAMPLE 2540	INDEX 10277 SAMPLE 7052	INDEX 10278 SAMPLE 2617
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	GRAYS HARBOR	GRAYS HARBOR	LEWIS
FIELD	NOT GIVEN	OCEAN CITY	NOT GIVEN
WELL NAME	WAGONER NO. 1	SAMPSON JOHNS NO. 1	GAS SEEPAGE
LOCATION	SEC. 5, T15N, R7W	SEC. 15, T18N, R12W	NEAR MORTON, WASH.
OWNER	R. E. HENDERSON	SUNSHINE MINING CO.	NOT GIVEN
COMPLETED	07/04/32	01/30/59	NOT GIVEN
SAMPLED	08/26/32	04/28/59	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	710	710	710
DEPTH, FEET	1505	3600	NOT GIVEN
WELLHEAD PRESSURE,PSIG	150	2600	NOT GIVEN
OPEN FLOW, MCFD	500	1480	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.6	92.3	5.9
ETHANE	0.6	3.8	2.2
PROPANE	---	1.1	---
N-BUTANE	---	0.5	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.4	---
NITROGEN	2.2	0.6	88.8
OXYGEN	0.3	TRACE	2.0
ARGON	---	TRACE	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.1	1.1
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	989	1108	99
SPECIFIC GRAVITY	0.571	0.622	0.954

	INDEX 10279 SAMPLE 2352	INDEX 10280 SAMPLE 2679	INDEX 10281 SAMPLE 2680
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	WHATCOM	WHATCOM	WHATCOM
FIELD	ANDERSON CREEK	BELLINGHAM	BELLINGHAM
WELL NAME	JENSON FARM NO. 1	WHATCOM NO. 1	LINGBLOOM NO. 4
LOCATION	SEC. 19, T38, R4E	SEC. 27, T39N, R3E	SEC. 28, T39N, R3E
OWNER	P. H. GROTE & C. A. MCDONALD	WHATCOM NATURAL GAS CO.	WHATCOM NATURAL GAS CO.
COMPLETED	NOT GIVEN	04/--/34	03/--/34
SAMPLED	05/24/31	09/12/34	09/12/34
FORMATION	TERT-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	700	700	700
DEPTH, FEET	130	172	166
WELLHEAD PRESSURE,PSIG	NOT GIVEN	50	52
OPEN FLOW, MCFD	NOT GIVEN	7180	1000
COMPONENT, MOLE PCT			
METHANE	0.0	58.2	51.5
ETHANE	0.0	1.6	1.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	99.6	39.6	44.7
OXYGEN	0.1	0.4	1.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.00	0.06	0.06
HEATING VALUE*	0	618	550
SPECIFIC GRAVITY	0.969	0.729	0.759

	INDEX 10282 SAMPLE 1036	INDEX 10283 SAMPLE 6251	INDEX 10284 SAMPLE 10421
STATE	WASHINGTON	WASHINGTON	WEST VIRGINIA
COUNTY	WHATCOM	YAKIMA	BARBOUR
FIELD	NOT GIVEN	NOT GIVEN	ARDEN
WELL NAME	SEEP	SIMCO NO. 1	C. M. BOWMAR
LOCATION	SEC. 32, T40, R1E	SEC. 24, T11N, R123W	PHILIPPI DISTRICT
OWNER	R. G. SELINE	B. J. ALLPHIN, R. J. BOWMAN	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	NOT GIVEN	07/--/56	11/10/65
SAMPLED	09/21/25	02/17/57	02/24/66
FORMATION	-GREEN SHALE	NOT GIVEN	DEVO-GORDON
GEOLOGIC PROVINCE CODE	700	605	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2044
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3536
COMPONENT, MOLE PCT			
METHANE	57.8	0.6	92.7
ETHANE	---	0.1	4.1
PROPANE	---	0.2	1.1
N-BUTANE	---	TRACE	0.3
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	TRACE
NITROGEN	41.8	0.0	1.1
OXYGEN	0.3	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	98.8	0.0
HELIUM	0.25	TRACE	0.10
HEATING VALUE*	581	25	1175
SPECIFIC GRAVITY	0.734	1.524	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10285 SAMPLE 9175	INDEX 10286 SAMPLE 10903	INDEX 10287 SAMPLE 9479
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BARBOUR	BARBOUR	BARBOUR
FIELD	BERRYBERG	BRIDGEPORT	ELK CREEK
WELL NAME	BERNARD WOLFE NO. 584	BERNICE REEDER NO. 10841	N. H. PAUGH NO. 6967
LOCATION	PLEASANTS DISTRICT	ELK DISTRICT	ELK DISTRICT
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.
COMPLETED	11/25/59	07/26/66	11/20/26
SAMPLED	11/20/63	03/14/67	07/16/64
FORMATION	DEVO-RILEY	DEVO-GANTZ	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4160	1970	4197
WELLHEAD PRESSURE,PSIG	1485	700	490
OPEN FLOW, MCFD	NOT GIVEN	5497	200
COMPONENT, MOLE PCT			
METHANE	90.4	90.4	90.9
ETHANE	5.9	4.5	5.8
PROPANE	1.4	1.4	1.4
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.0	2.1	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.22	0.06
HEATING VALUE*	1095	1088	1100
SPECIFIC GRAVITY	0.619	0.619	0.617

	INDEX 10288 SAMPLE 9481	INDEX 10289 SAMPLE 9482	INDEX 10290 SAMPLE 10210
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BARBOUR	BARBOUR	BARBOUR
FIELD	NOT GIVEN	NOT GIVEN	UNION DISTRICT
WELL NAME	JAMES E. SAYERS NO. 10399	VERA D. NUTTER NO. 10419	NO. 10705
LOCATION	PLEASANT DISTRICT	ELK DISTRICT	CARTER COORDINATES 3-EE-113
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	05/21/62	11/23/62	06/02/65
SAMPLED	07/15/64	07/15/64	10/14/65
FORMATION	DEVO-BENSON	DEVO-RILEY	DEVO-BENSON & RILEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4448	4118	3886
WELLHEAD PRESSURE,PSIG	1600	1080	1490
OPEN FLOW, MCFD	44	348	7272
COMPONENT, MOLE PCT			
METHANE	90.8	89.4	93.6
ETHANE	5.4	6.4	4.1
PROPANE	1.3	1.8	0.7
N-BUTANE	0.4	0.5	0.2
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.2	1.0	0.9
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.03	0.03
HEATING VALUE*	1088	1113	1059
SPECIFIC GRAVITY	0.618	0.630	0.595

	INDEX 10291 SAMPLE 14769	INDEX 10292 SAMPLE 2584	INDEX 10293 SAMPLE 9541
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	BALD KNOB	COAL RIVER	CORREY-JEFFREY
WELL NAME	NO. 11920A	FEDERAL NO. 58	NO. 8865
LOCATION	POND FORK	NOT GIVEN	WASHINGTON DISTRICT
OWNER	CONSOLIDATED GAS SUPPLY CORP	PURE OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	09/25/75	11/05/38	12/28/44
SAMPLED	09/17/76	01/13/53	08/12/64
FORMATION	MISS-WEIR & MAXIMUM	MISS-WEIR	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3344	2133	2150
WELLHEAD PRESSURE,PSIG	615	325	99
OPEN FLOW, MCFD	5938	3500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	73.0	74.9
ETHANE	6.1	26.0	11.6
PROPANE	1.2	---	6.5
N-BUTANE	0.2	---	2.1
ISOBUTANE	0.2	---	0.7
N-PENTANE	0.0	---	0.5
ISOPENTANE	0.1	---	0.5
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	0.4	0.3	2.6
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.03	0.04	0.10
HEATING VALUE*	1091	1205	1292
SPECIFIC GRAVITY	0.608	0.689	0.759

	INDEX 10294 SAMPLE 9436	INDEX 10295 SAMPLE 9446	INDEX 10296 SAMPLE 9544
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	HARNSHAW-BULL CREEK	HARNSHAW-BULL CREEK	HOPKINS FORK-JARROLDS VALLEY
WELL NAME	BULL CREEK NO. 15	BULL CREEK NO. 14	NO. 10213
LOCATION	PEYTONA DISTRICT	PEYTONA DISTRICT	SHERMAN DISTRICT
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	HOPE NATURAL GAS CO.
COMPLETED	05/02/62	07/31/63	11/05/59
SAMPLED	07/02/64	07/02/64	08/12/64
FORMATION	SILU-NEWBURG	MISS-BIG INJUN	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5201	1558	2660
WELLHEAD PRESSURE,PSIG	2000	302	258
OPEN FLOW, MCFD	400	973	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.0	81.1	94.0
ETHANE	2.9	11.2	3.6
PROPANE	0.8	4.0	0.7
N-BUTANE	0.4	1.0	0.3
ISOBUTANE	0.2	0.6	0.2
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.6	1.2	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.10	0.06	0.09
HEATING VALUE*	1013	1212	1061
SPECIFIC GRAVITY	0.623	0.694	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10297 SAMPLE 9547		INDEX 10298 SAMPLE 9438		INDEX 10299 SAMPLE 9447	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BOONE		BOONE		BOONE	
FIELD	HOPKINS FORK-JARROLDS VALLEY		JULIAN-MADISON		JULIAN-MADISON	
WELL NAME	NO. 10239		LITTLE COAL LAND NO. 2		LITTLE COAL LAND CO. NO. 27	
LOCATION	SHERMAN DISTRICT		WASHINGTON DISTRICT		SCOTT DISTRICT	
OWNER	HOPE NATURAL GAS CO.		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	02/03/60		02/09/26		04/05/44	
SAMPLED	08/12/60		07/01/64		07/01/64	
FORMATION	MISS-MAXTON		MISS-BEREA		DEVO-SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1449		2095		3857	
WELLHEAD PRESSURE,PSIG	296		275		485	
OPEN FLOW, MCFD	1212		32		255	
COMPONENT, MOLE PCT						
METHANE	96.7		81.0		78.0	
ETHANE	2.0		10.2		14.2	
PROPANE	0.3		3.9		4.6	
N-BUTANE	0.0		0.8		1.0	
ISOBUTANE	0.0		0.7		0.3	
N-PENTANE	0.0		0.1		0.2	
ISOPENTANE	0.0		0.2		0.3	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.2		0.1	
NITROGEN	0.9		2.7		1.1	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.12		0.10		0.03	
HEATING VALUE*	1023		1178		1234	
SPECIFIC GRAVITY	0.571		0.689		0.708	

	INDEX 10300 SAMPLE 4463		INDEX 10301 SAMPLE 10103		INDEX 10302 SAMPLE 9437	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BOONE		BOONE		BOONE	
FIELD	KANAWHA		NOT GIVEN		PEYTONA-EMMONS	
WELL NAME	NO. 5812		Y & O NO. 10-136		LENNIG NO. 1	
LOCATION	NOT GIVEN		NOT GIVEN		PEYTONA DISTRICT	
OWNER	UNITED FUEL GAS CO.		PEAKE PETROLEUM CO.		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	08/09/47		11/11/65		08/17/25	
SAMPLED	03/29/48		08/30/65		07/02/64	
FORMATION	NOT GIVEN		MISS-MAXTON,BIG LIME & WEIR		MISS-BEREA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3395		2248		1900	
WELLHEAD PRESSURE,PSIG	776		626		215	
OPEN FLOW, MCFD	811		700		149	
COMPONENT, MOLE PCT						
METHANE	89.8		95.7		75.3	
ETHANE	9.6		2.3		11.9	
PROPANE	---		0.5		5.4	
N-BUTANE	---		0.1		1.8	
ISOBUTANE	---		0.1		1.1	
N-PENTANE	---		0.1		0.6	
ISOPENTANE	---		TRACE		0.9	
CYCLOPENTANE	---		TRACE		0.1	
HEXANES PLUS	---		0.1		0.7	
NITROGEN	0.1		0.9		1.9	
OXYGEN	0.2		0.0		TRACE	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.3		TRACE		0.1	
HELIUM	0.04		0.11		0.07	
HEATING VALUE*	1082		1040		1318	
SPECIFIC GRAVITY	0.606		0.581		0.767	

	INDEX 10303 SAMPLE 9441		INDEX 10304 SAMPLE 9457		INDEX 10305 SAMPLE 9488	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BOONE		BOONE		BOONE	
FIELD	PEYTONA-EMMONS		PEYTONA-EMMONS		SHONK LAND CO.	
WELL NAME	LENNIG NO. 6		LENNIG NO. 6		NO. 10 SERIAL NO. 1290	
LOCATION	PEYTONA DISTRICT		PEYTONA DISTRICT		SHERMAN DISTRICT	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT		CABOT CORP.	
COMPLETED	01/12/61		01/12/61		12/29/48	
SAMPLED	07/02/64		07/02/64		07/20/64	
FORMATION	MISS-BIG LIME		DEVO-SHALE		MISS-WEIR	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1433		3275		2535	
WELLHEAD PRESSURE,PSIG	79		110		335	
OPEN FLOW, MCFD	74		10		127	
COMPONENT, MOLE PCT						
METHANE	75.5		81.7		91.8	
ETHANE	12.6		11.4		5.6	
PROPANE	5.8		3.8		1.1	
N-BUTANE	1.8		0.8		0.5	
ISOBUTANE	1.0		0.4		0.2	
N-PENTANE	0.6		0.1		0.2	
ISOPENTANE	0.8		0.2		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.5		0.1		0.2	
NITROGEN	1.5		1.2		0.4	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.06		0.05		0.04	
HEATING VALUE*	1308		1189		1094	
SPECIFIC GRAVITY	0.757		0.680		0.612	

	INDEX 10306 SAMPLE 10743		INDEX 10307 SAMPLE 9230		INDEX 10308 SAMPLE 9231	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BOONE		BRAXTON		BRAXTON	
FIELD	SHONK LAND CO.		COPEN		COPEN	
WELL NAME	SHONK LAND NO. 23 S NO. 1577		MCLAUGHLIN		MCCONKEY	
LOCATION	CARTER COORDINATES 10-S-96		SALT LICK DISTRICT		SALT LICK DISTRICT	
OWNER	CABOT CORP.		WAVERLY OIL WORKS CO.		WAVERLY OIL WORKS CO.	
COMPLETED	05/07/66		02/20/61		11/25/60	
SAMPLED	10/04/66		01/24/64		01/24/64	
FORMATION	MISS-MAXTON & WEIR		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2030		1965		2044	
WELLHEAD PRESSURE,PSIG	650		590		360	
OPEN FLOW, MCFD	10370		300		200	
COMPONENT, MOLE PCT						
METHANE	95.2		86.9		86.4	
ETHANE	1.7		8.9		8.9	
PROPANE	0.5		2.3		2.4	
N-BUTANE	0.0		0.7		0.5	
ISOBUTANE	0.0		0.3		0.3	
N-PENTANE	0.0		0.2		0.1	
ISOPENTANE	0.0		0.1		0.2	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.1	
NITROGEN	2.2		1.2		0.9	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.1		0.1	
HELIUM	0.19		0.10		0.10	
HEATING VALUE*	1008		1192		1142	
SPECIFIC GRAVITY	0.576		0.650		0.647	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10309 SAMPLE 10008	INDEX 10310 SAMPLE 9348	INDEX 10311 SAMPLE 9450
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BRAXTON	BRAXTON	BRAXTON
FIELD	COPEN	ELMIRA-SERVIA	HEATERS
WELL NAME	BROSSIUS NO. 1	FOX NO. 1	R. D. DENNISON NO. 4175
LOCATION	SALT LICK DISTRICT	BIRCH DISTRICT	SALT LICK DISTRICT
OWNER	MACDONALD SPIDEL	DEVONIAN GAS & OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	10/11/63	01/16/63	10/03/47
SAMPLED	07/22/65	05/07/64	07/16/64
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1771	1978	2277
WELLHEAD PRESSURE,PSIG	650	490	NOT GIVEN
OPEN FLOW, MCFD	8000	200	39000
COMPONENT, MOLE PCT			
METHANE	85.1	78.0	82.4
ETHANE	8.5	13.4	10.3
PROPANE	2.3	5.1	3.3
N-BUTANE	0.7	1.7	1.0
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.1	0.5	0.4
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	2.1	0.0	1.1
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.11	0.04	0.07
HEATING VALUE*	1138	1290	1208
SPECIFIC GRAVITY	0.658	0.729	0.691

	INDEX 10312 SAMPLE 14697	INDEX 10313 SAMPLE 11967	INDEX 10314 SAMPLE 9209
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BRAXTON	BRAXTON	BRAXTON
FIELD	LITTLE BIRCH	NOT GIVEN	ROSEDALE
WELL NAME	JACKSON NO. 1	ELLYSON LEASE NO. 1	NO. 8135
LOCATION	NOT GIVEN	OTTER DISTRICT	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	WHITE SHIELD O&G CORP.	PHILADELPHIA OIL CO.
COMPLETED	12/10/75	12/26/68	12/01/60
SAMPLED	06/04/76	NOT GIVEN	12/20/63
FORMATION	MISS-SQUAW	MISS-BIG INJUN	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1893	2050	2186
WELLHEAD PRESSURE,PSIG	580	375	150
OPEN FLOW, MCFD	NOT GIVEN	2650	125
COMPONENT, MOLE PCT			
METHANE	91.9	84.1	77.5
ETHANE	5.4	9.0	12.2
PROPANE	1.2	3.1	5.3
N-BUTANE	0.2	0.6	1.3
ISOBUTANE	0.2	0.5	0.9
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	0.6	1.8	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.06	0.09	0.10
HEATING VALUE*	1077	1150	1260
SPECIFIC GRAVITY	0.603	0.660	0.717

	INDEX 10315 SAMPLE 9325	INDEX 10316 SAMPLE 9317	INDEX 10317 SAMPLE 9498
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	CABELL	CABELL	CALHOUN
FIELD	COMMERCIAL DIV.	TWO MILE DIVISION	ANNAMORIAH
WELL NAME	R. SCHAUB NO. C22	NO. M 32	NO. 10491
LOCATION	MCCOMAS DISTRICT	GRANT DISTRICT	SHERIDAN DISTRICT
OWNER	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	07/10/29	12/11/38	11/14/63
SAMPLED	04/23/64	04/22/64	07/15/64
FORMATION	DEVO-BROWN SHALE	MISS-BEREA	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2770	2069	1900
WELLHEAD PRESSURE,PSIG	450	123	270
OPEN FLOW, MCFD	1070	240	70
COMPONENT, MOLE PCT			
METHANE	74.7	80.8	80.3
ETHANE	14.3	10.7	11.8
PROPANE	7.5	5.0	4.2
N-BUTANE	1.8	1.2	0.9
ISOBUTANE	0.3	0.1	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.5	1.5	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.05	0.07	0.08
HEATING VALUE*	1309	1201	1208
SPECIFIC GRAVITY	0.747	0.690	0.695

	INDEX 10318 SAMPLE 9347	INDEX 10319 SAMPLE 12048	INDEX 10320 SAMPLE 8097
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	BEE CREEK	CALHOUN DISTRICT	MILO
WELL NAME	HARDMAN NO. 3	HUNTER M. BENNETT NO. 11149	W. W. BAILEY
LOCATION	CENTER DISTRICT	SHERMAN DISTRICT	NOT GIVEN
OWNER	CABOT CORP.	CONSOLIDATED GAS SUPPLY CORP	JAMES DRILLING CO.
COMPLETED	--/--/04	05/25/69	07/19/61
SAMPLED	05/08/64	09/23/69	07/27/61
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1700	2261	2124
WELLHEAD PRESSURE,PSIG	175	514	508
OPEN FLOW, MCFD	63	3663	1039
COMPONENT, MOLE PCT			
METHANE	78.9	75.7	81.8
ETHANE	11.6	12.8	10.8
PROPANE	5.0	6.4	3.9
N-BUTANE	1.7	1.4	0.9
ISOBUTANE	0.4	0.8	0.6
N-PENTANE	0.5	0.4	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.1	1.6	1.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.09	0.07	0.10
HEATING VALUE*	1261	1286	1196
SPECIFIC GRAVITY	0.723	0.744	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10321 SAMPLE 8096		INDEX 10322 SAMPLE 9504		INDEX 10323 SAMPLE 14796	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CALHOUN		CALHOUN		CALHOUN	
FIELD	MINNORA		MINNORA		MINNORA	
WELL NAME	AGNES HAYES		PRICE JARVIS NO. 3303		DENVER BRANNON NO. 11909	
LOCATION	WASHINGTON TERR.		WASHINGTON DISTRICT		OTTER QUADRANGLE	
OWNER	JAMES DRILLING CO.		HOPE NATURAL GAS CO.		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	03/09/61		03/--/14		08/08/75	
SAMPLED	07/27/61		07/14/64		09/--/76	
FORMATION	DEVO-U		PENN-SALT SAND 2ND		DEVO-	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	8125		1272		2924	
WELLHEAD PRESSURE,PSIG	450		77		630	
OPEN FLOW, MCFD	3500		12		2207	
COMPONENT, MOLE PCT						
METHANE	74.8		83.1		65.4	
ETHANE	13.4		7.1		17.0	
PROPANE	4.0		3.1		9.6	
N-BUTANE	1.8		1.0		3.3	
ISOBUTANE	1.1		0.9		1.4	
N-PENTANE	0.4		0.4		0.8	
ISOPENTANE	0.3		0.2		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2		0.5		0.4	
NITROGEN	1.7		3.3		1.2	
OXYGEN	0.3		0.0		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.2		TRACE	
HELIUM	0.10		0.12		0.04	
HEATING VALUE*	1291		1071		1467	
SPECIFIC GRAVITY	0.752		0.690		0.855	

	INDEX 10324 SAMPLE 9505		INDEX 10325 SAMPLE 8495		INDEX 10326 SAMPLE 9229	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CALHOUN		CLAY		CLAY	
FIELD	ORMA		ELK RIVER		NORTHERN DIVISION	
WELL NAME	PRUDENCE JARVIS NO. 10380		NELSON NO. 1		NO. 1007	
LOCATION	WASHINGTON DISTRICT		NOT GIVEN		UNION DISTRICT	
OWNER	HOPE NATURAL GAS CO.		MERCHANTS PETROLEUM CO.		UNITED FUEL GAS CO.	
COMPLETED	04/28/62		11/20/61		--/--/17	
SAMPLED	07/14/64		04/03/62		01/21/64	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2040		2098		1413	
WELLHEAD PRESSURE,PSIG	140		490		510	
OPEN FLOW, MCFD	73		250		4500	
COMPONENT, MOLE PCT						
METHANE	79.0		88.0		59.0	
ETHANE	11.4		7.7		20.8	
PROPANE	4.9		2.1		11.6	
N-BUTANE	1.3		0.5		4.0	
ISOBUTANE	0.7		0.4		1.5	
N-PENTANE	0.4		0.1		1.1	
ISOPENTANE	0.1		0.1		0.7	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.4		0.1		0.9	
NITROGEN	1.6		0.9		0.0	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.1		0.2	
HELIUM	0.08		0.04		0.03	
HEATING VALUE*	1245		1128		1587	
SPECIFIC GRAVITY	0.718		0.637		0.920	

	INDEX 10327 SAMPLE 9661		INDEX 10328 SAMPLE 11766		INDEX 10329 SAMPLE 10069	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CLAY		CLAY		DODDRIDGE	
FIELD	NOT GIVEN		NOT GIVEN		BIG FLINT	
WELL NAME	NO. 7851		NETTIE STARCHER NO. 1		CLINTON DOAK NO. 3	
LOCATION	BUFFALO DISTRICT		OTTER DISTRICT		GRANT DISTRICT	
OWNER	EQUITABLE GAS CO.		RAY BROTHERS DRILLING CO.		PRIOR OIL CO.	
COMPLETED	08/11/42		12/02/67		02/13/65	
SAMPLED	12/09/64		02/21/69		07/31/65	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2126		1714		1960	
WELLHEAD PRESSURE,PSIG	131		600		525	
OPEN FLOW, MCFD	39		730		100	
COMPONENT, MOLE PCT						
METHANE	87.8		82.8		77.7	
ETHANE	8.1		10.5		6.7	
PROPANE	2.2		3.4		4.4	
N-BUTANE	0.6		0.7		1.9	
ISOBUTANE	0.3		0.3		1.0	
N-PENTANE	0.1		0.2		0.6	
ISOPENTANE	0.1		0.2		0.9	
CYCLOPENTANE	TRACE		TRACE		0.2	
HEXANES PLUS	0.2		0.1		0.8	
NITROGEN	0.4		1.4		5.6	
OXYGEN	TRACE		0.1		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.04		0.08		0.12	
HEATING VALUE*	1141		1171		1232	
SPECIFIC GRAVITY	0.641		0.674		0.752	

	INDEX 10330 SAMPLE 9530		INDEX 10331 SAMPLE 8099		INDEX 10332 SAMPLE 9516	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	DODDRIDGE		DODDRIDGE		DODDRIDGE	
FIELD	BRUSHY FORK		CENTRAL STATION		CENTRAL STATION	
WELL NAME	FRANK M. HINTER NO. 1		HUDSON NO. 2		NO. 3611	
LOCATION	NEW MILTON DISTRICT		NOT GIVEN		WEST UNION DISTRICT	
OWNER	DEVONIAN GAS & OIL CO.		WORLD WIDE PETROLEUM CO.		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	02/13/64		06/22/61		10/12/14	
SAMPLED	05/02/64		07/27/61		07/23/64	
FORMATION	MISS-BIG INJUN		NOT GIVEN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2267		1032		1883	
WELLHEAD PRESSURE,PSIG	1025		580		29	
OPEN FLOW, MCFD	150		139		92	
COMPONENT, MOLE PCT						
METHANE	81.5		75.3		70.6	
ETHANE	8.3		14.2		14.5	
PROPANE	4.1		5.7		7.7	
N-BUTANE	1.6		1.4		2.8	
ISOBUTANE	0.8		1.2		1.4	
N-PENTANE	0.6		0.3		0.8	
ISOPENTANE	0.8		0.5		0.7	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.8		0.3		0.8	
NITROGEN	2.8		0.8		0.3	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.17		0.10		0.06	
HEATING VALUE*	1215		1294		1429	
SPECIFIC GRAVITY	0.707		0.742		0.821	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10333 SAMPLE 9328	INDEX 10334 SAMPLE 9692	INDEX 10335 SAMPLE 9693
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	DODDRIDGE
FIELD	NEW MILTON	NOT GIVEN	NOT GIVEN
WELL NAME	HURST HOME FARM NO. 1	O. W. 28826	NO. 4709
LOCATION	NEW MILTON DISTRICT	CENTRAL DISTRICT	COVE DISTRICT
OWNER	DEVONIAN GAS & OIL CO.	FOLEY OIL AND GAS CO.	EQUITABLE GAS CO.
COMPLETED	02/12/64	08/30/62	02/27/19
SAMPLED	05/04/64	01/08/65	01/08/65
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1956	1965	1900
WELLHEAD PRESSURE,PSIG	650	800	20
OPEN FLOW, MCFD	50	700	5
COMPONENT, MOLE PCT			
METHANE	77.1	79.2	79.2
ETHANE	13.3	12.6	9.8
PROPANE	5.2	4.5	4.2
N-BUTANE	1.6	1.0	1.2
ISOBUTANE	0.5	0.7	0.9
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.6	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	1.2	1.1	3.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.09	0.07	0.19
HEATING VALUE*	1270	1233	1217
SPECIFIC GRAVITY	0.729	0.707	0.718

	INDEX 10336 SAMPLE 9706	INDEX 10337 SAMPLE 9331	INDEX 10338 SAMPLE 9515
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	DODDRIDGE
FIELD	NOT GIVEN	PORTO RICO	STRAIGHT FORK-BLUESTONE CK.
WELL NAME	O.W. 26337	S. A. HURST, JR. NO. 1	NO. 5452
LOCATION	GRANT DISTRICT	NEW MILTON DISTRICT	SOUTHWEST DISTRICT
OWNER	EQUITABLE GAS CO.	DEVONIAN GAS & OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	03/31/61	03/02/62	10/08/63
SAMPLED	01/06/65	05/04/64	01/27/64
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2034	2003	1945
WELLHEAD PRESSURE,PSIG	335	530	670
OPEN FLOW, MCFD	300	500	696
COMPONENT, MOLE PCT			
METHANE	81.1	65.5	82.0
ETHANE	10.6	19.1	8.9
PROPANE	4.0	9.4	3.6
N-BUTANE	1.0	2.7	1.0
ISOBUTANE	0.8	1.1	0.7
N-PENTANE	0.3	0.6	0.4
ISOPENTANE	0.2	0.6	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	1.4	0.3	2.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.09	0.02	0.22
HEATING VALUE*	1216	1458	1178
SPECIFIC GRAVITY	0.699	0.839	0.687

	INDEX 10339 SAMPLE 9288	INDEX 10340 SAMPLE 4367	INDEX 10341 SAMPLE 16096
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	ALLOY	GAULEY DIST. NO. 23	HAWK'S NEST
WELL NAME	SEMET SOLVAY NO. 1	GAULEY MT. COAL CO. NO. 14	M. D. STEELE NO. 1
LOCATION	FAYETTEVILLE 3 SW	FAYETTE QUAD.	LAUREL CREEK
OWNER	CITIES SERVICE OIL CO.	COLUMBIAN CARBON CO.	CABOT OIL & GAS CORP.
COMPLETED	11/09/57	07/05/47	10/20/78
SAMPLED	04/07/65	09/25/47	10/09/80
FORMATION	MISS-BIG INJUN	MISS-	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1904	1639	1260
WELLHEAD PRESSURE,PSIG	505	500	130
OPEN FLOW, MCFD	434	890	210
COMPONENT, MOLE PCT			
METHANE	93.9	95.4	90.5
ETHANE	4.3	2.5	5.8
PROPANE	0.7	---	1.1
N-BUTANE	0.2	---	0.2
ISOBUTANE	0.1	---	0.2
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	0.3	0.7	1.3
OXYGEN	TRACE	0.3	0.2
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.9	0.2
HELIUM	0.04	0.18	0.04
HEATING VALUE*	1075	1011	1076
SPECIFIC GRAVITY	0.597	0.579	0.614

	INDEX 10342 SAMPLE 9357	INDEX 10343 SAMPLE 9358	INDEX 10344 SAMPLE 9376
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	LOUP CREEK	LOUP CREEK	LOUP CREEK
WELL NAME	LOUP CREEK CO. NO. 14	LOUP CREEK CO. NO. 12	LOUP CREEK CO. NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNION CARBIDE CORP.	UNION CARBIDE CORP.	UNION CARBIDE CORP.
COMPLETED	05/--/64	01/02/64	01/20/61
SAMPLED	05/15/64	05/15/64	05/15/64
FORMATION	MISS-MAXTON	MISS-BIG INJUN	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2077	2552	2014
WELLHEAD PRESSURE,PSIG	387	622	590
OPEN FLOW, MCFD	200	750	330
COMPONENT, MOLE PCT			
METHANE	94.0	95.2	94.3
ETHANE	1.5	3.5	3.7
PROPANE	0.3	0.5	0.6
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	3.5	0.4	0.7
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.04	0.05
HEATING VALUE*	991	1053	1056
SPECIFIC GRAVITY	0.582	0.584	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10345 SAMPLE 9548	INDEX 10346 SAMPLE 9185	INDEX 10347 SAMPLE 9588
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	MAGNOLIA	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 9780	RAYMOND KIOUS NO. 1	OAK HILL INV. CO. NO. 1276
LOCATION	FALLS DISTRICT	3 MI. S OF ANSTED	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	GODFREY L. CABOT, INC.	GODFREY L. CABOT, INC.
COMPLETED	05/11/53	08/26/46	06/11/48
SAMPLED	08/18/64	11/25/46	10/12/48
FORMATION	MISS-BIG LIME	PENN-	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1535	1193	2716
WELLHEAD PRESSURE,PSIG	126	165	720
OPEN FLOW, MCFD	5348	300	56
COMPONENT, MOLE PCT			
METHANE	98.4	89.9	98.4
ETHANE	3.8	9.5	1.2
PROPANE	0.6	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.9	0.0	0.0
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.5	0.2
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1068	1081	1018
SPECIFIC GRAVITY	0.594	0.607	0.563

	INDEX 10348 SAMPLE 9686	INDEX 10349 SAMPLE 9687	INDEX 10350 SAMPLE 9886
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	PAINT CREEK	PAINT CREEK	PAINT CREEK E
WELL NAME	EASTERN GAS & FUEL NO. 38	EASTERN GAS & FUEL NO. 38	LOUP CREEK CO. NO. 16
LOCATION	ARMSTRONG CREEK	ARMSTRONG CREEK	KANAWHA DISTRICT
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	UNION CARBIDE CORP.
COMPLETED	11/10/64	11/06/64	01/24/65
SAMPLED	12/30/64	12/30/64	05/25/65
FORMATION	MISS-MAXTON	MISS-WEIR	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2732	3314	2380
WELLHEAD PRESSURE,PSIG	450	735	700
OPEN FLOW, MCFD	3816	5537	1800
COMPONENT, MOLE PCT			
METHANE	96.2	94.8	96.1
ETHANE	1.8	3.4	2.9
PROPANE	0.2	0.4	0.4
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.9	0.7	0.5
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.08	0.04	0.07
HEATING VALUE*	1005	1048	1036
SPECIFIC GRAVITY	0.571	0.587	0.574

	INDEX 10351 SAMPLE 9889	INDEX 10352 SAMPLE 9891	INDEX 10353 SAMPLE 9480
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	ALICE	CEDERVILLE	GLENVILLE
WELL NAME	H. S. COLE NO. 1	FRAME NO. 1	MINERVA STUMP NO. 6350
LOCATION	TROY DISTRICT	NOT GIVEN	GLENVILLE DISTRICT
OWNER	ROYAL OIL & GAS CORP.	ROYAL OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	12/20/64	10/28/64	08/06/23
SAMPLED	05/08/65	02/08/65	07/17/64
FORMATION	MISS-BIG INJUN	MISS-SQUAW & BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1700	2180	1848
WELLHEAD PRESSURE,PSIG	720	700	200
OPEN FLOW, MCFD	1122	3391	144
COMPONENT, MOLE PCT			
METHANE	83.3	84.5	83.1
ETHANE	8.3	8.6	9.9
PROPANE	3.3	2.9	3.3
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.9	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	1.8	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.19	0.11	0.08
HEATING VALUE*	1157	1157	1179
SPECIFIC GRAVITY	0.675	0.664	0.677

	INDEX 10354 SAMPLE 14021	INDEX 10355 SAMPLE 14022	INDEX 10356 SAMPLE 14023
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	GLENVILLE S	GLENVILLE S	GLENVILLE S
WELL NAME	LOUISA MOYERS NO. 2	D.C. MAYES NO. 2	ARBUCKLE-GARRETT NO. 1
LOCATION	CENTER DISTRICT	TROY DISTRICT	GLENVILLE DISTRICT
OWNER	BASIN PETROLEUM CORP.	BASIN PETROLEUM CORP.	BASIN PETROLEUM CORP.
COMPLETED	02/05/73	01/05/73	03/22/73
SAMPLED	06/05/74	06/05/74	06/05/74
FORMATION	MISS-MAXTON	MISS-GREENBRIER	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1260	1894	1822
WELLHEAD PRESSURE,PSIG	550	520	685
OPEN FLOW, MCFD	750	1000	1200
COMPONENT, MOLE PCT			
METHANE	86.1	85.5	85.6
ETHANE	6.2	7.3	8.6
PROPANE	3.8	2.7	2.7
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.4	2.1	1.4
OXYGEN	0.4	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.12	0.12	0.10
HEATING VALUE*	1139	1139	1146
SPECIFIC GRAVITY	0.651	0.656	0.653

* CALCULATED GROSS BTU PER CU. FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ASSUMPTION OF HOT SPRING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10357 SAMPLE 14024	INDEX 10358 SAMPLE 9364	INDEX 10359 SAMPLE 9662
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	GLENVILLE S	NORMANTOWN	NOT GIVEN
WELL NAME	EFFIE MARKS NO. 1	L. J. MCKINNEY NO. 4	NO. 7306
LOCATION	GLENVILLE DISTRICT	CENTER DISTRICT	GLENVILLE DISTRICT
OWNER	BASIN PETROLEUM CORP.	SMITH & BARKER OIL & GAS CO.	EQUITABLE GAS CO.
COMPLETED	01/18/73	--/--/47	10/16/20
SAMPLED	06/05/74	05/08/64	12/09/64
FORMATION	MISS-GREENBRIER	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1744	2065	1480
WELLHEAD PRESSURE,PSIG	700	NOT GIVEN	180
OPEN FLOW, MCFD	1000	5	17
COMPONENT, MOLE PCT			
METHANE	87.1	82.1	84.0
ETHANE	6.9	10.2	9.1
PROPANE	2.4	4.2	3.1
N-BUTANE	0.5	1.2	0.8
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	2.0	0.9	1.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.13	0.09	0.13
HEATING VALUE*	1113	1219	1160
SPECIFIC GRAVITY	0.639	0.694	0.667

	INDEX 10360 SAMPLE 12201	INDEX 10361 SAMPLE 12202	INDEX 10362 SAMPLE 10014
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	REVEL	REVEL	SAND FORK
WELL NAME	JONES B NO. 1	KANAWHA UNION BANK A NO. 1	M. C. COLLINS NO. 7
LOCATION	DEKALB DISTRICT	TROY DISTRICT	GLENNVILLE DISTRICT
OWNER	KEWANEE OIL CO.	KEWANEE OIL CO.	PENNZOIL CO.
COMPLETED	10/07/69	09/11/69	04/15/65
SAMPLED	02/06/70	02/04/70	07/27/65
FORMATION	PENN-SALT SAND	MISS-WEIR	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1406	1926	1960
WELLHEAD PRESSURE,PSIG	165	720	250
OPEN FLOW, MCFD	327	3500	1250
COMPONENT, MOLE PCT			
METHANE	83.7	81.3	87.3
ETHANE	7.9	9.1	7.5
PROPANE	3.2	3.8	2.4
N-BUTANE	0.7	0.9	0.5
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	3.3	1.1
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.4	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.20	0.17	0.10
HEATING VALUE*	1137	1156	1134
SPECIFIC GRAVITY	0.663	0.682	0.644

	INDEX 10363 SAMPLE 9890	INDEX 10364 SAMPLE 9502	INDEX 10365 SAMPLE 9494
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	STOUTS MILLS	STUMPTOWN-NORMANTOWN-SHOCK	STUMPTOWN-NORMANTOWN-STOCK
WELL NAME	BAILEY MOYER NO. 1	MARTHA TURNER NO. 8563	BENNETT NO. 5067
LOCATION	NOT GIVEN	CENTER DISTRICT	CENTER DISTRICT
OWNER	NOT GIVEN	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	12/20/64	09/--/41	10/05/18
SAMPLED	05/04/65	07/16/64	07/16/64
FORMATION	MISS-SQUAW & BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2180	2070	1990
WELLHEAD PRESSURE,PSIG	700	110	80
OPEN FLOW, MCFD	1500	14	11
COMPONENT, MOLE PCT			
METHANE	83.8	81.2	71.5
ETHANE	9.3	10.8	16.5
PROPANE	3.1	4.5	7.2
N-BUTANE	0.7	1.0	1.8
ISOBUTANE	0.5	0.6	0.9
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	1.6	1.3	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.13	0.02	0.04
HEATING VALUE*	1173	1214	1351
SPECIFIC GRAVITY	0.672	0.695	0.777

	INDEX 10366 SAMPLE 9172	INDEX 10367 SAMPLE 5213	INDEX 10368 SAMPLE 10812
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GREENBRIER	HAMPSHIRE
FIELD	TANNER	NOT GIVEN	NOT GIVEN
WELL NAME	F. A. WEAVER NO. 2	THORNBURY NO. 1	H. B. BILLER, ET AL.
LOCATION	S-30, W-20	NOT GIVEN	SHERMAN DISTRICT
OWNER	PENNZOIL CO.	DEEP ROCK OIL CO.	UNITED FUEL GAS CO.
COMPLETED	08/11/60	NOT GIVEN	07/13/66
SAMPLED	11/15/63	05/29/52	12/10/66
FORMATION	MISS-BIG INJUN	DEVO-CHERT & ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2022	6375	6506
WELLHEAD PRESSURE,PSIG	590	2400	2200
OPEN FLOW, MCFD	100	500	8690
COMPONENT, MOLE PCT			
METHANE	77.9	92.9	97.3
ETHANE	12.7	0.9	1.1
PROPANE	5.0	0.1	0.1
N-BUTANE	1.4	0.1	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	1.2	5.2	1.4
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.10	0.17	0.08
HEATING VALUE*	1259	963	1008
SPECIFIC GRAVITY	0.724	0.587	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10369 SAMPLE 10742	INDEX 10370 SAMPLE 10715	INDEX 10371 SAMPLE 9221
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARDY	HARDY	HARDY
FIELD	HARDY COUNTY	LOST RIVER	LOST RIVER-ELKINS
WELL NAME	SAMUEL N. FUNK NO. 9368	CLEVELAND EVANS, ET AL. 9386	C. P. WILKENS NO. 9301
LOCATION	MOOREFIELD DISTRICT	MOOREFIELD DISTRICT	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	04/16/66	06/04/66	12/03/63
SAMPLED	10/06/66	09/02/66	01/16/64
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6926	6408	6756
WELLHEAD PRESSURE,PSIG	2245	2149	2250
OPEN FLOW, MCFD	32000	90000	1500
COMPONENT, MOLE PCT			
METHANE	96.4	97.6	97.5
ETHANE	1.1	1.1	1.0
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.3	1.1	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.12	0.13	0.10
HEATING VALUE*	996	1009	1008
SPECIFIC GRAVITY	0.573	0.560	0.565

	INDEX 10372 SAMPLE 9485	INDEX 10373 SAMPLE 9520	INDEX 10374 SAMPLE 11668
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	BROWN-LUMBERPORT	BROWN-LUMBERPORT	BRUSHY FORK
WELL NAME	S. KELLY NO. 1961	NO. 7441	C. S. TRIMBLE NO. 3
LOCATION	SARDIS DISTRICT	TENMILE DISTRICT	SIMPSON DISTRICT
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	TWM PETROLEUM INC.
COMPLETED	11/12/10	01/30/25	02/07/68
SAMPLED	07/16/64	07/24/64	10/09/68
FORMATION	DEVO-FIFTY FOOT SAND	DEVO-FIFTY FOOT SAND	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2943	2397	4156
WELLHEAD PRESSURE,PSIG	38	170	2080
OPEN FLOW, MCFD	2844	53	4464
COMPONENT, MOLE PCT			
METHANE	84.2	84.8	93.0
ETHANE	8.1	8.3	4.7
PROPANE	3.1	2.9	0.9
N-BUTANE	0.9	0.8	0.2
ISOBUTANE	0.7	0.5	0.1
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.6	0.4	0.1
NITROGEN	1.5	1.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.11	0.12	0.06
HEATING VALUE*	1193	1172	1074
SPECIFIC GRAVITY	0.685	0.672	0.598

	INDEX 10375 SAMPLE 12613	INDEX 10376 SAMPLE 9518	INDEX 10377 SAMPLE 9703
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	KENNEDY DISTRICT	MEATHOUSE FORK-BRISTOL	NOT GIVEN
WELL NAME	NO. 11296, RANDOLPH	NO. 7473	NO. 2459
LOCATION	GRANT DISTRICT	TENMILE DISTRICT	SARDIS DISTRICT
OWNER	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.	EQUITABLE GAS CO.
COMPLETED	08/27/70	11/19/13	11/02/11
SAMPLED	NOT GIVEN	07/24/64	01/07/65
FORMATION	DEVO-BENSON	DEVO-GORDON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4156	2755	1940
WELLHEAD PRESSURE,PSIG	1835	31	7
OPEN FLOW, MCFD	3217	46	3
COMPONENT, MOLE PCT			
METHANE	86.2	69.3	82.0
ETHANE	9.0	14.6	7.7
PROPANE	2.4	8.5	3.7
N-BUTANE	0.6	2.8	1.6
ISOBUTANE	0.3	1.4	0.9
N-PENTANE	0.3	0.6	0.6
ISOPENTANE	0.1	1.0	0.3
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.1	0.6	0.9
NITROGEN	0.8	0.9	1.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.06	0.04	0.13
HEATING VALUE*	1149	1429	1241
SPECIFIC GRAVITY	0.651	0.827	0.720

	INDEX 10378 SAMPLE 9484	INDEX 10379 SAMPLE 11734	INDEX 10380 SAMPLE 4436
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARRISON	HARRISON	JACKSON
FIELD	WESTON-JANE LEW	WESTON-JANE LEW	ELK POCA ORISKANY
WELL NAME	ROSA V. DAWSON NO. 6927	T. H. SMITH NO. 10860	LUCY BOSWELL NO. 1, SER.1235
LOCATION	GRANT DISTRICT	UNION DISTRICT	KENNA QUAD.
OWNER	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP	GODFREY L. CABOT, INC.
COMPLETED	01/03/18	NOT GIVEN	08/08/47
SAMPLED	07/16/64	01/04/69	12/24/47
FORMATION	DEVO-FIFTH	DEVO-BENSON	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2073	NOT GIVEN	4921
WELLHEAD PRESSURE,PSIG	428	1880	1600
OPEN FLOW, MCFD	950	NOT GIVEN	569
COMPONENT, MOLE PCT			
METHANE	85.8	84.5	80.8
ETHANE	7.6	9.7	17.9
PROPANE	2.5	2.8	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.6	0.4	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	1.6	1.1	0.7
OXYGEN	0.1	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.07	0.26	0.05
HEATING VALUE*	1156	1168	1139
SPECIFIC GRAVITY	0.668	0.665	0.649

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10381 SAMPLE 12784	INDEX 10382 SAMPLE 4585	INDEX 10383 SAMPLE 9499
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	GROUND HOG CREEK	JACKSON COUNTY	MOUNT ALTO
WELL NAME	H. F. YOUNG NO. 1	N. WATERBURY NO. 1	C. W. BAIER NO. 9332
LOCATION	RAVENSWOOD DISTRICT	NOT GIVEN	UNION DISTRICT
OWNER	MANAGEMENT CONTRCL CORP.	UNITED CARBON CO.	HOPE NATURAL GAS CO.
COMPLETED	NOT GIVEN	03/04/48	01/--/50
SAMPLED	04/20/71	10/08/48	07/21/64
FORMATION	SILU-NEWBURG	DEVO-BASAL	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	4984	3760
WELLHEAD PRESSURE,PSIG	NOT GIVEN	175	790
OPEN FLOW, MCFD	NOT GIVEN	100	10
COMPONENT, MOLE PCT			
METHANE	89.1	59.4	76.8
ETHANE	5.2	34.6	13.6
PROPANE	2.4	---	5.8
N-BUTANE	0.7	---	1.2
ISOBUTANE	0.6	---	0.4
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	1.3	5.8	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.08	0.05	0.04
HEATING VALUE*	1129	1222	1248
SPECIFIC GRAVITY	0.641	0.750	0.721

	INDEX 10384 SAMPLE 10920	INDEX 10385 SAMPLE 9503	INDEX 10386 SAMPLE 11140
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	NEWBURG	NOT GIVEN	PARCHMENT
WELL NAME	D. K. SMITH, NO. A-1	OTIS SHINN NO. 10519	J. B. CARNEY NO. 1-758
LOCATION	RIPLEY DISTRICT	RIPLEY DISTRICT	RIPLEY DISTRICT
OWNER	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.	COMMONWEALTH GAS CORP.
COMPLETED	02/24/67	03/--/64	05/04/67
SAMPLED	04/11/67	07/21/64	08/01/67
FORMATION	SILU-NEWBURG	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5612	5071	4697
WELLHEAD PRESSURE,PSIG	1845	950	1830
OPEN FLOW, MCFD	21645	636	11800
COMPONENT, MOLE PCT			
METHANE	92.9	85.1	88.0
ETHANE	3.5	8.0	6.0
PROPANE	1.2	2.7	2.0
N-BUTANE	0.4	0.9	0.7
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.1	2.0	2.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.10	0.05	0.08
HEATING VALUE*	1077	1152	1120
SPECIFIC GRAVITY	0.607	0.665	0.643

	INDEX 10387 SAMPLE 11141	INDEX 10388 SAMPLE 9147	INDEX 10389 SAMPLE 9157
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	PARCHMENT	PN DISTRICT	PN DISTRICT
WELL NAME	STEWART SAYRE NO. 1-748	G. W. VANCE NO. 1	FREDA JOHNSON NO. 1
LOCATION	RIPLEY DISTRICT	RIPLEY DISTRICT	RIPLEY
OWNER	COMMONWEALTH GAS CORP.	CABOT CORP.	CABOT CORP.
COMPLETED	08/05/66	05/18/60	07/02/62
SAMPLED	08/05/67	11/01/63	11/01/63
FORMATION	SILU-NEWBURG	DEVO-ORISKANY	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5500	4993	2606
WELLHEAD PRESSURE,PSIG	2180	1680	580
OPEN FLOW, MCFD	6782	1314	50
COMPONENT, MOLE PCT			
METHANE	89.3	86.7	84.5
ETHANE	3.5	7.3	3.8
PROPANE	1.1	2.1	2.3
N-BUTANE	0.4	0.9	1.1
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	4.0	1.8	6.9
OXYGEN	0.7	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.09	0.10	0.50
HEATING VALUE*	1043	1138	1057
SPECIFIC GRAVITY	0.623	0.654	0.656

	INDEX 10390 SAMPLE 4553	INDEX 10391 SAMPLE 11857	INDEX 10392 SAMPLE 12270
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	RAVENSWOOD	RAVENWOOD	RIPLEY
WELL NAME	BLANCHE ASHCRAFT NO. 2	S. P. MILLER NO. 1	EDNA SHOCKLEY ET AL. 9540
LOCATION	SANDY CREEK	RAVENWOOD DISTRICT	RAVENWOOD DISTRICT
OWNER	COLUMBIAN CARBON CO.	COMMONWEALTH GAS CORP.	UNITED FUEL GAS CO.
COMPLETED	01/20/48	04/08/69	02/24/70
SAMPLED	06/11/48	05/07/69	05/13/70
FORMATION	DEVO-ORISKANY	SILU-NEWBURG	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4470	4896	5646
WELLHEAD PRESSURE,PSIG	1300	1880	2182
OPEN FLOW, MCFD	759	27000	29500
COMPONENT, MOLE PCT			
METHANE	82.9	88.0	89.4
ETHANE	15.7	5.7	4.9
PROPANE	---	2.5	2.3
N-BUTANE	---	0.9	0.6
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.6	0.3
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.6	0.3
NITROGEN	0.9	0.8	1.6
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.08	0.08	0.09
HEATING VALUE*	1121	1166	1123
SPECIFIC GRAVITY	0.638	0.661	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10393 SAMPLE 12225	INDEX 10394 SAMPLE 4456	INDEX 10395 SAMPLE 4457
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	RIPLEY N	SISSONVILLE	SISSONVILLE
WELL NAME	JOHN MCCOY NO. 1-789	NO. 6218	NO. 6189
LOCATION	RIPLEY DISTRICT	NOT GIVEN	NOT GIVEN
OWNER	COMMONWEALTH GAS CORP.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	12/12/70	10/16/47	09/08/47
SAMPLED	03/13/70	02/23/48	02/23/48
FORMATION	SILU-NEWBURG	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5673	4743	4925
WELLHEAD PRESSURE,PSIG	2175	775	430
OPEN FLOW, MCFD	70000	2023	189
COMPONENT, MOLE PCT			
METHANE	88.3	79.2	78.4
ETHANE	4.9	19.6	19.9
PROPANE	2.4	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.6	---	---
NITROGEN	1.8	0.1	0.4
OXYGEN	TRACE	0.8	0.9
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.09	0.06	0.05
HEATING VALUE*	1184	1154	1151
SPECIFIC GRAVITY	0.656	0.658	0.662

	INDEX 10396 SAMPLE 4469	INDEX 10397 SAMPLE 4473	INDEX 10398 SAMPLE 9402
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	SISSONVILLE	SISSONVILLE	SISSONVILLE
WELL NAME	NO. 6199	NO. 6218	R. D. HUTCHISON NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	ASHLAND OIL & REFINING CO.
COMPLETED	08/25/47	10/03/47	11/10/44
SAMPLED	02/23/48	02/23/48	06/--/64
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4851	4780	4942
WELLHEAD PRESSURE,PSIG	725	830	1680
OPEN FLOW, MCFD	1726	1057	2113
COMPONENT, MOLE PCT			
METHANE	79.3	79.5	85.1
ETHANE	19.8	19.2	7.8
PROPANE	---	---	2.4
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	0.5	0.7	2.3
OXYGEN	0.4	0.2	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1151	1149	1142
SPECIFIC GRAVITY	0.657	0.656	0.664

	INDEX 10399 SAMPLE 9497	INDEX 10400 SAMPLE 4366	INDEX 10401 SAMPLE 9076
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	KANAWHA	KANAWHA
FIELD	UTICA	BLUE CREEK	BLUE CREEK
WELL NAME	LIZZIE HOLLERON NO. 10159	LUCINDA CARTE NO. 6151	CHARLOTTE CORK NO. 1
LOCATION	GRANT DISTRICT	LAT. 38-26, LONG. 81-27	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	UNITED FUEL GAS CO.	ASHLAND OIL & REFINING CO.
COMPLETED	08/--/58	07/28/47	01/23/63
SAMPLED	07/21/64	09/17/47	09/05/63
FORMATION	DEVO-ORISKANY	DEVO-	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4945	5312	1293
WELLHEAD PRESSURE,PSIG	445	1670	380
OPEN FLOW, MCFD	25	18151	11300
COMPONENT, MOLE PCT			
METHANE	81.1	77.8	93.7
ETHANE	10.5	20.1	2.4
PROPANE	4.3	---	0.7
N-BUTANE	1.1	---	0.2
ISOBUTANE	0.2	---	0.2
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	TRACE
NITROGEN	2.0	0.0	2.1
OXYGEN	TRACE	0.4	TRACE
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	1.7	0.1
HELIUM	0.12	0.03	0.19
HEATING VALUE*	1196	1148	1032
SPECIFIC GRAVITY	0.692	0.673	0.591

	INDEX 10402 SAMPLE 9354	INDEX 10403 SAMPLE 10071	INDEX 10404 SAMPLE 10428
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	BLUE CREEK	CENTRAL DIVISION	CENTRAL DIVISION
WELL NAME	COMPANY NO. 1	BLACK BAND COAL NO. 5252	BLK. BAND COAL&COKE CO.-3969
LOCATION	NOT GIVEN	LOUDON DISTRICT	KANAWHA STATE FOREST
OWNER	ASHLAND OIL & REFINING CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	10/10/61	07/02/65	10/27/65
SAMPLED	05/07/64	08/17/65	03/02/66
FORMATION	MISS-BIG LIME	SILU-NEWBURG	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2059	5212	5572
WELLHEAD PRESSURE,PSIG	490	2073	2015
OPEN FLOW, MCFD	607	52350	2477
COMPONENT, MOLE PCT			
METHANE	80.7	93.3	93.4
ETHANE	12.2	3.1	2.9
PROPANE	4.8	0.8	0.6
N-BUTANE	1.3	0.3	0.3
ISOBUTANE	0.6	0.2	0.3
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	TRACE	1.5	1.6
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.05	0.11	0.11
HEATING VALUE*	1239	1066	1062
SPECIFIC GRAVITY	0.700	0.605	0.605

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10405 SAMPLE 510	INDEX 10406 SAMPLE 4365	INDEX 10407 SAMPLE 9360
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	CLENDENIN	CLENDENIN	CLENDENIN
WELL NAME	JAMES JARRETT NO. 1	NUMA BLK. COAL CO. NO. 5828	OSBORNE NO. 7
LOCATION	TOWNSITE	LAT. 38-23, LONG. 81-28	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	ASHLAND OIL & REFINING CO.
COMPLETED	--/--/11	07/03/47	08/--/22
SAMPLED	10/15/20	09/15/47	05/08/64
FORMATION	MISS-SQUAW	DEVO-	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1904	5177	2108
WELLHEAD PRESSURE,PSIG	450	825	NOT GIVEN
OPEN FLOW, MCFD	1500	4075	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.2	75.4	71.6
ETHANE	4.3	20.7	15.0
PROPANE	---	---	7.4
N-BUTANE	---	---	2.3
ISOBUTANE	---	---	0.8
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.6
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	1.8	1.4	1.1
OXYGEN	0.3	0.4	0.3
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	2.1	TRACE
HELIUM	0.10	0.04	0.05
HEATING VALUE*	1021	1135	1353
SPECIFIC GRAVITY	0.587	0.685	0.784

	INDEX 10408 SAMPLE 9287	INDEX 10409 SAMPLE 12471	INDEX 10410 SAMPLE 9375
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	COLBON	COOPERS CREEK	DAVIS CREEK
WELL NAME	W. H. VICKERS NO. 1-B	PUSHKIN NO. B-1	COURTLAND CO. NO. 5
LOCATION	ELK DISTRICT	POCA DISTRICT	CHARLESTON QUAD.
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/26/46	06/20/70	05/31/63
SAMPLED	04/09/64	10/20/70	05/18/64
FORMATION	DEVO-ORISKANY	SILU-NEWBURG	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4964	5807	1590
WELLHEAD PRESSURE,PSIG	1450	1978	430
OPEN FLOW, MCFD	2214	12000	808
COMPONENT, MOLE PCT			
METHANE	83.8	95.3	83.3
ETHANE	7.4	1.9	9.5
PROPANE	2.5	0.4	3.7
N-BUTANE	0.9	0.2	1.3
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	3.7	1.7	1.0
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.04	0.10	0.09
HEATING VALUE*	1123	1030	1195
SPECIFIC GRAVITY	0.670	0.583	0.682

	INDEX 10411 SAMPLE 9877	INDEX 10412 SAMPLE 10738	INDEX 10413 SAMPLE 4313
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	DAVIS CREEK	DAVIS CREEK	KANAWHA CITY
WELL NAME	W. C. HARDY ET AL.NO. 15	COURTLAND CO., ET AL. NO. 3	CAMPBELLS CREEK CO. NO. 4
LOCATION	DAVIS CREEK	WASHINGTON DISTRICT	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	COMMONWEALTH GAS CORP.	COLUMBIAN CARBON CO.
COMPLETED	03/05/65	07/14/66	08/05/40
SAMPLED	04/27/65	09/30/66	05/21/47
FORMATION	SILU-NEWBURG	SILU-NEWBURG	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5272	5402	6204
WELLHEAD PRESSURE,PSIG	2060	1950	1800
OPEN FLOW, MCFD	2190	20135	1000
COMPONENT, MOLE PCT			
METHANE	93.6	91.2	40.1
ETHANE	3.0	3.7	1.7
PROPANE	0.8	1.2	---
N-BUTANE	0.2	0.4	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	1.7	2.2	5.6
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	2.1
HELIUM	0.12	0.16	0.19
HEATING VALUE*	1050	1077	437
SPECIFIC GRAVITY	0.597	0.619	0.330

	INDEX 10414 SAMPLE 4458	INDEX 10415 SAMPLE 4459	INDEX 10416 SAMPLE 4519
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN
WELL NAME	NO. 6239	NO. 6242	NO. 5848
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	12/17/47	12/24/47	01/06/48
SAMPLED	04/01/48	04/01/48	05/06/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5450	5098	5163
WELLHEAD PRESSURE,PSIG	1550	1300	975
OPEN FLOW, MCFD	2282	7117	1037
COMPONENT, MOLE PCT			
METHANE	77.9	77.4	78.5
ETHANE	21.6	19.2	20.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	1.7	1.0
OXYGEN	0.3	1.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1176	1128	1154
SPECIFIC GRAVITY	0.665	0.667	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10417 SAMPLE 4520	INDEX 10418 SAMPLE 4629	INDEX 10419 SAMPLE 4630
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN
WELL NAME	NO. 6263	NO. 6296	NO. 1227
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	03/23/48	06/03/48	06/03/48
SAMPLED	05/06/48	11/17/48	11/17/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5137	5244	5326
WELLHEAD PRESSURE,PSIG	1165	1125	1150
OPEN FLOW, MCFD	582	6367	4093
COMPONENT, MOLE PCT			
METHANE	80.2	71.1	70.9
ETHANE	19.2	---	27.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	2.1	0.7
OXYGEN	0.2	0.3	0.6
ARGON	---	0.0	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1156	720	1213
SPECIFIC GRAVITY	0.659	0.421	0.699

	INDEX 10420 SAMPLE 5431	INDEX 10421 SAMPLE 9423	INDEX 10422 SAMPLE 9425
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA-CLENDENIN	KELLYS CK.-MAMMOTH	KELLYS CREEK-MAMMOTH
WELL NAME	MATTIE G. RAND NO. 6939	LEWIS HOLDING NO. 1	MARMET NO. 14
LOCATION	BIG SANDY DISTRICT	CABIN CREEK DISTRICT	CABIN CREEK DISTRICT
OWNER	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	09/03/52	06/01/60	01/06/21
SAMPLED	03/23/53	06/23/64	06/23/64
FORMATION	DEVO-ORISKANY	PENN-SALT SAND	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5354	985	2080
WELLHEAD PRESSURE,PSIG	1085	205	290
OPEN FLOW, MCFD	13319	266	850
COMPONENT, MOLE PCT			
METHANE	85.4	95.8	78.3
ETHANE	8.8	1.0	11.3
PROPANE	2.8	0.3	4.7
N-BUTANE	0.8	TRACE	1.7
ISOBUTANE	0.4	TRACE	1.0
N-PENTANE	0.2	TRACE	0.7
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	TRACE	0.9
NITROGEN	0.9	2.3	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.04	0.16	0.03
HEATING VALUE*	1164	996	1309
SPECIFIC GRAVITY	0.661	0.572	0.749

	INDEX 10423 SAMPLE 9645	INDEX 10424 SAMPLE 9421	INDEX 10425 SAMPLE 9489
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KELLYS CREEK-MAMMOTH	MALDEN-CAMPBELL CREEK	N. B. TOMPKINS
WELL NAME	LEWIS HOLDING NO. 5	HANCOCK NO. 7	NO. 4 SERIAL NO. 871
LOCATION	CABIN CREEK DISTRICT	CABIN CREEK DISTRICT	MALDEN DISTRICT
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	CABOT CORP.
COMPLETED	10/27/61	11/06/20	11/27/36
SAMPLED	10/06/64	06/23/64	07/14/64
FORMATION	-GREY INJUN	MISS-WEIR	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2298	1800	4520
WELLHEAD PRESSURE,PSIG	500	420	1010
OPEN FLOW, MCFD	203	525	853
COMPONENT, MOLE PCT			
METHANE	82.1	82.1	84.1
ETHANE	11.7	9.7	7.4
PROPANE	3.5	3.8	3.6
N-BUTANE	1.0	1.2	0.9
ISOBUTANE	0.5	1.0	0.1
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.3	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	0.3	0.8	0.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	3.0
HELIUM	0.04	0.03	0.07
HEATING VALUE*	1214	1232	1144
SPECIFIC GRAVITY	0.686	0.703	0.686

	INDEX 10426 SAMPLE 9490	INDEX 10427 SAMPLE 9507	INDEX 10428 SAMPLE 9225
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	N. B. TOMPKINS	N. B. TOMPKINS	NORTHERN DIVISION
WELL NAME	TOMPKINS NO. 8	NO. 6	NO. 9306
LOCATION	MALDEN DISTRICT	MALDEN DISTRICT	ELK DISTRICT
OWNER	CABOT CORP.	CABOT CORP.	UNITED FUEL GAS CO.
COMPLETED	04/30/64	08/23/37	09/17/63
SAMPLED	07/14/64	08/14/64	01/21/64
FORMATION	MISS-BIG INJUN	DEVO-ORISKANY	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1475	4436	1025
WELLHEAD PRESSURE,PSIG	402	NOT GIVEN	325
OPEN FLOW, MCFD	949	492	1453
COMPONENT, MOLE PCT			
METHANE	80.8	88.2	90.9
ETHANE	9.7	8.1	3.3
PROPANE	4.2	3.2	0.8
N-BUTANE	1.9	0.9	0.3
ISOBUTANE	0.8	0.2	0.1
N-PENTANE	0.8	0.3	TRACE
ISOPENTANE	0.7	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	TRACE
NITROGEN	0.6	0.4	3.6
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	2.2	0.1
HELIUM	0.04	0.05	0.20
HEATING VALUE*	1271	1150	1023
SPECIFIC GRAVITY	0.706	0.641	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10429 SAMPLE 9226	INDEX 10430 SAMPLE 9227	INDEX 10431 SAMPLE 2857
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	NORTHERN DIVISION	NORTHERN DIVISION	NOT GIVEN
WELL NAME	NO. 8977	NO. 8960	COPENHAVER HEIRS NO. 1
LOCATION	MALDEN DISTRICT	BIG SANDY DISTRICT	LICK BR.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	COLUMBIAN CARBON CO.
COMPLETED	11/06/60	08/10/60	NOT GIVEN
SAMPLED	01/21/64	01/21/64	05/--/41
FORMATION	MISS-BIG INJUN	MISS-WEIR	SILU-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1646	2255	NOT GIVEN
WELLHEAD PRESSURE,PSIG	455	250	NOT GIVEN
OPEN FLOW, MCFD	1784	327	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.9	71.0	49.2
ETHANE	11.0	16.5	2.8
PROPANE	3.8	6.6	---
N-BUTANE	1.2	1.5	---
ISOBUTANE	0.6	1.0	---
N-PENTANE	0.2	0.4	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.4	---
NITROGEN	0.4	1.9	7.9
OXYGEN	0.1	0.2	0.2
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	39.9
HELIUM	0.05	0.05	0.21
HEATING VALUE*	1227	1316	549
SPECIFIC GRAVITY	0.696	0.771	0.991

	INDEX 10432 SAMPLE 4766	INDEX 10433 SAMPLE 9166	INDEX 10434 SAMPLE 10950
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	NOT GIVEN	PAINT CREEK	ROCKY FORK
WELL NAME	NO. 20-769	EASTERN GAS & FUEL NO. 11	U.F.G. NO. 9449
LOCATION	NOT GIVEN	NOT GIVEN	UNION DISTRICT
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	ASHLAND OIL & REFINING CO.	UNITED FUEL GAS CO.
COMPLETED	05/19/49	07/18/60	02/24/67
SAMPLED	10/21/49	11/11/63	05/04/67
FORMATION	SILU-MEDINA, WHITE	MISS-WEIR	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6038	2068	5617
WELLHEAD PRESSURE,PSIG	1900	660	2220
OPEN FLOW, MCFD	560	158	31515
COMPONENT, MOLE PCT			
METHANE	42.8	94.7	92.0
ETHANE	0.6	3.2	3.4
PROPANE	0.3	0.5	1.1
N-BUTANE	0.1	0.1	0.4
ISOBUTANE	0.0	TRACE	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	5.8	1.1	1.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	50.0	0.1	0.1
HELIUM	0.20	0.04	0.09
HEATING VALUE*	457	1042	1082
SPECIFIC GRAVITY	1.075	0.586	0.617

	INDEX 10435 SAMPLE 11133	INDEX 10436 SAMPLE 11731	INDEX 10437 SAMPLE 9906
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	ROCKY FORK	ROCKY FORK	SISSONVILLE
WELL NAME	SMITH BAILEY NO. 1	H. G. MILAM NO. 2	RAYMOND CTY COAL NO. 1556
LOCATION	UNION DISTRICT	NOT GIVEN	UNION TAX DISTRICT
OWNER	JAMACO PROPERTIES, INC.	APPALACHIAN EXP. & DEV. INC.	CABOT CORP.
COMPLETED	09/21/67	01/11/69	01/19/65
SAMPLED	09/21/67	01/11/69	05/26/65
FORMATION	SILU-NEWBURG	SILU-NEWBURG	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5572	5488	5096
WELLHEAD PRESSURE,PSIG	2100	1875	1500
OPEN FLOW, MCFD	23000	3500	343
COMPONENT, MOLE PCT			
METHANE	92.2	91.4	88.1
ETHANE	3.4	3.3	6.1
PROPANE	1.1	1.0	1.9
N-BUTANE	0.4	0.4	0.7
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	1.9	2.5	1.9
OXYGEN	0.1	0.4	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.09	0.05
HEATING VALUE*	1066	1067	1126
SPECIFIC GRAVITY	0.611	0.619	0.647

	INDEX 10438 SAMPLE 11764	INDEX 10439 SAMPLE 14381	INDEX 10440 SAMPLE 9439
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	LEWIS	LEWIS
FIELD	SISSONVILLE	FINSTER	LORENTZ
WELL NAME	CAVENDER ET AL. B-1	MARTHA POSEY NO. 11842	LEWIS CO. FARM NO. 10324
LOCATION	ELK DISTRICT	COLLINS SETTLEMENT DISTRICT	HACKEES CREEK DISTRICT
OWNER	CITIES SERVICE OIL CO.	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.
COMPLETED	12/29/68	10/09/74	08/08/61
SAMPLED	02/14/69	06/11/75	07/14/64
FORMATION	SILU-NEWBURG	DEVO-FIFTY FOOT SAND	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5793	2293	4422
WELLHEAD PRESSURE,PSIG	2271	960	1600
OPEN FLOW, MCFD	52000	3916	4378
COMPONENT, MOLE PCT			
METHANE	95.0	88.9	87.1
ETHANE	1.1	4.9	7.6
PROPANE	0.3	2.1	2.0
N-BUTANE	0.0	0.5	0.6
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	3.3	2.4	1.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.11	0.14	0.09
HEATING VALUE*	990	1095	1132
SPECIFIC GRAVITY	0.577	0.632	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10441 SAMPLE 9454		INDEX 10442 SAMPLE 13707		INDEX 10443 SAMPLE 13708	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LEWIS		LEWIS		LEWIS	
FIELD	MURPHY CREEK		MURPHY CREEK		MURPHY CREEK	
WELL NAME	PORTER ARNOLD FARM NO. 1872		WOOFTER A-455		BUTCHER A-454	
LOCATION	COURT HOUSE DISTRICT		FREEMAN CREEK DISTRICT		FREEMANS CREEK DISTRICT	
OWNER	HOPE NATURAL GAS CO.		ALLEGHENY LAND & MINERALS		ALLEGHENY LAND & MINERALS	
COMPLETED	07/06/10		09/14/72		10/20/72	
SAMPLED	07/15/64		08/24/73		08/24/73	
FORMATION	DEVO-GORDON		DEVO-ORISKANY		DEVO-HUNTERSVILLE&ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2604		6682		6735	
WELLHEAD PRESSURE,PSIG	975		2650		2681	
OPEN FLOW, MCFD	2400		2768		4300	
COMPONENT, MOLE PCT						
METHANE	89.1		95.6		94.1	
ETHANE	5.9		2.9		3.6	
PROPANE	1.6		0.4		0.8	
N-BUTANE	0.3		0.1		0.2	
ISOBUTANE	0.3		0.2		0.2	
N-PENTANE	0.1		0.0		0.1	
ISOPENTANE	0.1		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	2.2		0.5		0.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.18		0.33		0.03	
HEATING VALUE*	1089		1050		1075	
SPECIFIC GRAVITY	0.626		0.585		0.600	

	INDEX 10444 SAMPLE 9448		INDEX 10445 SAMPLE 9451		INDEX 10446 SAMPLE 9663	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LEWIS		LEWIS		LEWIS	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	W.M. GIMMEL FARM NO. 10441		JAMES R. MCCLAIN NO. 10317		NO. 7002	
LOCATION	SKIN CREEK DISTRICT		COLLINS SETTLEMENT DISTRICT		COURTHOUSE DISTRICT	
OWNER	HOPE NATURAL GAS CO.		HOPE NATURAL GAS CO.		EQUITABLE GAS CO.	
COMPLETED	05/06/63		06/24/61		11/15/14	
SAMPLED	07/15/64		07/15/64		12/08/64	
FORMATION	MISS-BIG INJUN		DEVO-FOURTH SAND		DEVO-GORDON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1987		1927		2565	
WELLHEAD PRESSURE,PSIG	730		675		32	
OPEN FLOW, MCFD	1353		1905		27	
COMPONENT, MOLE PCT						
METHANE	89.0		91.4		78.7	
ETHANE	5.9		5.5		11.5	
PROPANE	1.6		1.2		4.6	
N-BUTANE	0.5		0.3		1.3	
ISOBUTANE	0.3		0.2		0.9	
N-PENTANE	0.1		TRACE		0.4	
ISOPENTANE	0.2		0.1		0.4	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.5	
NITROGEN	1.9		1.0		1.3	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.1	
HELIUM	0.10		0.09		0.07	
HEATING VALUE*	1099		1082		1260	
SPECIFIC GRAVITY	0.630		0.609		0.727	

	INDEX 10447 SAMPLE 9665		INDEX 10448 SAMPLE 9666		INDEX 10449 SAMPLE 9667	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LEWIS		LEWIS		LEWIS	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. 7024		25203 - NO. 1		NO. 1969	
LOCATION	FREEMANS CREEK		COLLINS SETTLEMENT DISTRICT		COURTHOUSE DISTRICT	
OWNER	EQUITABLE GAS CO.		JAMES S. RAY		EQUITABLE GAS CO.	
COMPLETED	07/21/15		05/17/60		09/24/07	
SAMPLED	12/08/64		12/08/64		12/08/64	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1440		1756		1719	
WELLHEAD PRESSURE,PSIG	100		600		320	
OPEN FLOW, MCFD	337		360		155	
COMPONENT, MOLE PCT						
METHANE	82.7		89.9		85.9	
ETHANE	9.2		4.2		8.5	
PROPANE	3.3		1.6		2.6	
N-BUTANE	1.0		0.7		0.8	
ISOBUTANE	0.7		0.2		0.4	
N-PENTANE	0.4		0.2		0.2	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.4		0.2		0.2	
NITROGEN	1.7		2.1		0.9	
OXYGEN	0.1		0.1		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		TRACE	
HELIUM	0.09		0.17		0.08	
HEATING VALUE*	1195		1081		1158	
SPECIFIC GRAVITY	0.690		0.627		0.657	

	INDEX 10450 SAMPLE 11687		INDEX 10451 SAMPLE 12050		INDEX 10452 SAMPLE 9783	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LEWIS		LEWIS		LEWIS	
FIELD	NOT GIVEN		PETERSON		SKIN CREEK	
WELL NAME	MARY HULL NO. 1		HARRY MYERS NO. 1		ALDIS CLARK NO. 10648	
LOCATION	COLLINS SETTLEMENT DISTRICT		COLLINS SETTLEMENT DISTRICT		SKIN CREEK DISTRICT	
OWNER	ST. CLAIR OIL CO.		LITTLE SWISS OIL & GAS CO.		HOPE NATURAL GAS CO.	
COMPLETED	03/06/68		09/01/68		09/29/64	
SAMPLED	11/20/68		09/14/69		03/03/65	
FORMATION	DEVO-GORDON		MISS-BIG INJUN		DEVO-BENSON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2111		2140		4596	
WELLHEAD PRESSURE,PSIG	750		780		1895	
OPEN FLOW, MCFD	900000		2500		2316	
COMPONENT, MOLE PCT						
METHANE	86.3		86.6		90.0	
ETHANE	7.7		6.9		6.5	
PROPANE	2.9		2.5		1.3	
N-BUTANE	0.7		0.5		0.4	
ISOBUTANE	0.3		0.3		0.3	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.3		0.2		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	1.8		2.2		0.9	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.3		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.11		0.15		0.06	
HEATING VALUE*	1133		1117		1104	
SPECIFIC GRAVITY	0.651		0.643		0.623	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10453 SAMPLE 9808	INDEX 10454 SAMPLE 12638	INDEX 10455 SAMPLE 4428
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	SKIN CREEK	VANDALIA	VATIS
WELL NAME	E. L. SMITH NO. 10645	RUSSELL & DENISON NO. 1	T. L. MONEYPENNY NO. E-1638
LOCATION	SKIN CREEK DISTRICT	COLLINS SETTLEMENT DISTRICT	FREEMAN CREEK DIST.
OWNER	HOPE NATURAL GAS CO.	ST. CLAIR OIL CO.	CARNEGIE NATURAL GAS CO.
COMPLETED	12/09/64	09/28/70	11/27/47
SAMPLED	03/17/65	01/22/71	02/03/48
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4617	4128	2291
WELLHEAD PRESSURE,PSIG	1680	1575	505
OPEN FLOW, MCFD	8691	2223	989
COMPONENT, MOLE PCT			
METHANE	89.8	89.2	95.1
ETHANE	6.8	6.5	2.8
PROPANE	1.5	1.9	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.7	1.1	1.3
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.05	0.07	0.31
HEATING VALUE*	1109	1107	1014
SPECIFIC GRAVITY	0.624	0.626	0.576

	INDEX 10456 SAMPLE 11060	INDEX 10457 SAMPLE 9444	INDEX 10458 SAMPLE 11713
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	WESTON	WESTON-JANE LEW	WILDCAT
WELL NAME	F. WHITE NO. 10888	T. L. HUDKINS FARM NO. 10357	W. W. NORRIS NO. 10994
LOCATION	FREEMAN CREEK DISTRICT	FREEMANS CREEK DISTRICT	FREEMAN CREEK DISTRICT
OWNER	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	07/05/67	03/02/62	08/05/68
SAMPLED	08/09/67	07/15/64	12/06/68
FORMATION	DEVO-BENSON	MISS-BIG INJUN	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4613	1370	4165
WELLHEAD PRESSURE,PSIG	1680	590	1820
OPEN FLOW, MCFD	9500	1592	825
COMPONENT, MOLE PCT			
METHANE	79.8	84.4	84.1
ETHANE	10.8	8.6	10.1
PROPANE	3.4	2.9	3.1
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	1.4	0.3	0.1
CYCLOPENTANE	0.7	TRACE	0.1
HEXANES PLUS	0.6	0.3	0.2
NITROGEN	1.6	1.7	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.07	0.08	0.06
HEATING VALUE*	1251	1168	1178
SPECIFIC GRAVITY	0.724	0.672	0.664

	INDEX 10459 SAMPLE 9414	INDEX 10460 SAMPLE 9219	INDEX 10461 SAMPLE 9419
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	ALUM CREEK	CENTRAL DIVISION	JULIAN-MADISON
WELL NAME	LINCOLN MINERAL NO. 8	NO. 6945	LITTLE COAL LAND CO. NO. 15
LOCATION	NOT GIVEN	NOT GIVEN	JEFFERSON DISTRICT
OWNER	ASHLAND OIL & REFINING CO.	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	09/17/43	06/12/52	06/25/36
SAMPLED	06/--/64	01/20/64	06/29/64
FORMATION	DEVO-BROWN SHALE	DEVO-BROWN SHALE	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3400	3023	1590
WELLHEAD PRESSURE,PSIG	350	375	346
OPEN FLOW, MCFD	848	348	907
COMPONENT, MOLE PCT			
METHANE	79.1	76.1	78.0
ETHANE	12.4	14.0	11.8
PROPANE	4.4	4.8	5.1
N-BUTANE	1.0	1.2	1.6
ISOBUTANE	0.4	0.5	0.7
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.3	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	1.8	2.3	1.2
OXYGEN	0.0	0.3	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.10	0.04
HEATING VALUE*	1207	1226	1278
SPECIFIC GRAVITY	0.700	0.720	0.736

	INDEX 10462 SAMPLE 9545	INDEX 10463 SAMPLE 9424	INDEX 10464 SAMPLE 9363
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	BLAIR	CHAPMANSVILLE-LOGAN	GILBERT
WELL NAME	NO. 9771	PATTERSON NO. 5	ALBERT COLE NO. 7
LOCATION	LOGAN DISTRICT	CHAPMANSVILLE DISTRICT	MATEWAN QUAD.
OWNER	HOPE NATURAL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	CITIES SERVICE OIL CO.
COMPLETED	10/04/55	08/31/60	06/06/63
SAMPLED	08/12/64	06/26/64	05/08/64
FORMATION	MISS-BIG LIME	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2036	1183	2502
WELLHEAD PRESSURE,PSIG	47	405	735
OPEN FLOW, MCFD	NOT GIVEN	277	4875
COMPONENT, MOLE PCT			
METHANE	91.1	74.4	88.7
ETHANE	3.7	15.1	6.5
PROPANE	1.4	6.3	1.3
N-BUTANE	0.8	1.6	0.3
ISOBUTANE	0.4	0.9	0.3
N-PENTANE	0.5	0.3	TRACE
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.7	0.3	0.1
NITROGEN	1.0	0.4	2.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.09	0.04	0.03
HEATING VALUE*	1131	1325	1074
SPECIFIC GRAVITY	0.640	0.757	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10465 SAMPLE 9495		INDEX 10466 SAMPLE 9404		INDEX 10467 SAMPLE 9582	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LOGAN		LOGAN		LOGAN	
FIELD	MAGNOLIA		MANN-OCEANA		MANN-OCEANA	
WELL NAME	NO. 9758		PARDEE LAND CO. NO. 1		ELK CREEK COAL LD. NO. 15	
LOCATION	TRIADELPHIA DISTRICT		TRIADELPHIA DISTRICT		TRIADELPHIA DISTRICT	
OWNER	HOPE NATURAL GAS CO.		ASHLAND OIL & REFINING CO.		ASHLAND OIL & REFINING CO.	
COMPLETED	03/06/53		09/15/63		04/18/59	
SAMPLED	07/06/64		06/--/64		08/11/64	
FORMATION	MISS-BIG LIME		MISS-WEIR		MISS-BIG LIME	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2454		3145		2148	
WELLHEAD PRESSURE,PSIG	785		500		810	
OPEN FLOW, MCFD	2630		412		2524	
COMPONENT, MOLE PCT						
METHANE	90.4		91.8		89.8	
ETHANE	6.3		5.8		6.6	
PROPANE	1.5		1.2		1.8	
N-BUTANE	0.4		0.2		0.4	
ISOBUTANE	0.3		0.2		0.2	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.1		TRACE		0.1	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	0.6		0.5		0.5	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.1	
HELIUM	0.01		0.03		TRACE	
HEATING VALUE*	1106		1088		1122	
SPECIFIC GRAVITY	0.621		0.607		0.630	

	INDEX 10468 SAMPLE 14768		INDEX 10469 SAMPLE 9546		INDEX 10470 SAMPLE 9420	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LOGAN		LOGAN		LOGAN	
FIELD	MANN-OCEANA		NOT GIVEN		RANGER-ALLEN-FERRELLSBURG	
WELL NAME	NO. 11870		NO. 10451		ISLAND CREEK NO. 16	
LOCATION	BUFFALO CREEK		LOGAN DISTRICT		CHAPMANSVILLE DISTRICT	
OWNER	CONSOLIDATED GAS SUPPLY CORP		HOPE NATURAL GAS CO.		OWENS LIBBEY OWENS GAS DEPT.	
COMPLETED	12/30/74		05/08/63		12/29/55	
SAMPLED	09/17/76		08/11/64		06/24/64	
FORMATION	MISS-BIG LIME & BEREA		MISS-MAXTON		DEVO-SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	6193		1990		3169	
WELLHEAD PRESSURE,PSIG	852		632		460	
OPEN FLOW, MCFD	5938		7234		112	
COMPONENT, MOLE PCT						
METHANE	90.1		93.0		78.3	
ETHANE	6.0		0.7		13.5	
PROPANE	1.8		0.2		5.0	
N-BUTANE	0.6		TRACE		1.1	
ISOBUTANE	0.4		TRACE		0.3	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		TRACE		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.5		5.4		1.0	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.1	
HELIUM	0.10		0.39		0.05	
HEATING VALUE*	1132		969		1235	
SPECIFIC GRAVITY	0.635		0.584		0.707	

	INDEX 10471 SAMPLE 9326		INDEX 10472 SAMPLE 9327		INDEX 10473 SAMPLE 5373	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	LOGAN		LOGAN		LOGAN	
FIELD	WACOTOCK		WACOTOCK		WYOMING	
WELL NAME	NO. W-22		GUYAN MERCANTILE W-3		PARDEE LAND NO. 33	
LOCATION	LOGAN DISTRICT		LOGAN DISTRICT		TRIDELPHIA DISTRICT	
OWNER	COMMONWEALTH GAS CORP.		COMMONWEALTH GAS CORP.		UNITED PRODUCING CO., INC.	
COMPLETED	01/04/26		06/26/26		10/03/52	
SAMPLED	04/23/64		04/23/64		01/02/53	
FORMATION	MISS-GREENBRIER & BEREA		MISS-GREENBRIER		MISS-BEREA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2350		2240		4445	
WELLHEAD PRESSURE,PSIG	550		290		658	
OPEN FLOW, MCFD	1413		1309		959	
COMPONENT, MOLE PCT						
METHANE	72.5		85.7		93.8	
ETHANE	15.3		8.3		4.2	
PROPANE	6.4		2.9		0.7	
N-BUTANE	2.3		1.1		0.1	
ISOBUTANE	0.8		0.2		0.1	
N-PENTANE	0.5		0.3		0.1	
ISOPENTANE	0.8		0.3		0.0	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.7		0.5		0.1	
NITROGEN	0.0		0.4		0.7	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		TRACE		0.1	
HELIUM	0.02		0.05		0.04	
HEATING VALUE*	1375		1191		1060	
SPECIFIC GRAVITY	0.788		0.671		0.593	

	INDEX 10474 SAMPLE 9435		INDEX 10475 SAMPLE 4602		INDEX 10476 SAMPLE 9442	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	MARION		MARION		MARION	
FIELD	BROWN-LUMBERPORT		FAIRMONT		FARMINGTON	
WELL NAME	J. T. CRISS NO. 485		JOHN G. VINCENT ET AL NO. 1		E. I. TALKINGTON NO. 9523	
LOCATION	MANNINGTON DISTRICT		SEC. 1, UNION DISTRICT		LINCOLN DISTRICT	
OWNER	HOPE NATURAL GAS CO.		OWENS-ILLINOIS GLASS CO.		HOPE NATURAL GAS CO.	
COMPLETED	09/--/03		07/12/48		01/24/18	
SAMPLED	07/16/64		10/20/48		07/15/64	
FORMATION	DEVO-GORDON		MISS-KEENER		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2880		1090		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	15		220		28	
OPEN FLOW, MCFD	27		411		14	
COMPONENT, MOLE PCT						
METHANE	71.9		88.9		68.8	
ETHANE	12.2		9.5		15.9	
PROPANE	5.9		---		8.1	
N-BUTANE	2.7		---		2.8	
ISOBUTANE	1.5		---		1.5	
N-PENTANE	0.6		---		0.6	
ISOPENTANE	1.2		---		1.1	
CYCLOPENTANE	0.2		---		0.1	
HEXANES PLUS	0.8		---		0.7	
NITROGEN	1.9		1.0		0.1	
OXYGEN	TRACE		0.3		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.08		0.12		0.05	
HEATING VALUE*	1425		1071		1449	
SPECIFIC GRAVITY	0.814		0.609		0.833	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10477 SAMPLE 9478	INDEX 10478 SAMPLE 9701	INDEX 10479 SAMPLE 9702
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MARION	MARION	MARION
FIELD	FARMINGTON	NOT GIVEN	NOT GIVEN
WELL NAME	J. N. KUHN NO. 1658	NO. 5169	NO. 5201
LOCATION	GRANT DISTRICT	FAIRMONT DISTRICT	FAIRMONT DISTRICT
OWNER	HOPE NATURAL GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	07/31/10	06/21/16	11/14/16
SAMPLED	07/15/64	01/07/65	01/07/65
FORMATION	DEVO-FIFTH	MISS-BIG INJUN	DEVO-FIFTH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2680	1875	2892
WELLHEAD PRESSURE,PSIG	43	26	160
OPEN FLOW, MCFD	26	40	16
COMPONENT, MOLE PCT			
METHANE	79.8	90.3	83.1
ETHANE	11.1	4.6	9.8
PROPANE	4.6	1.2	3.5
N-BUTANE	1.3	0.4	0.9
ISOBUTANE	0.8	0.3	0.7
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.3	0.3
NITROGEN	0.8	2.5	1.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.14	0.08
HEATING VALUE*	1257	1072	1195
SPECIFIC GRAVITY	0.718	0.619	0.682

	INDEX 10480 SAMPLE 9452	INDEX 10481 SAMPLE 9342	INDEX 10482 SAMPLE 4595
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MARION	MASON	MASON
FIELD	PLUM RUN	J. F. WHEATON	MASON
WELL NAME	JOSEPH CAMPBELL NO. 114	NO. 129	LEO OTIS HUSSELL NO. 1
LOCATION	MANNINGTON DISTRICT	HANNAH DISTRICT	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	PEAKE PETROLEUM CO.	COLUMBIAN CARBON CO.
COMPLETED	04/--/99	12/07/62	06/10/48
SAMPLED	07/15/64	04/30/64	10/08/48
FORMATION	DEVO-FIFTH	DEVO-ORISKANY	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3337	4130	3483
WELLHEAD PRESSURE,PSIG	27	950	700
OPEN FLOW, MCFD	32	59	445
COMPONENT, MOLE PCT			
METHANE	83.0	88.0	70.4
ETHANE	10.0	6.4	25.5
PROPANE	3.1	2.0	---
N-BUTANE	0.0	0.6	---
ISOBUTANE	0.6	0.1	---
N-PENTANE	0.4	TRACE	---
ISOPENTANE	TRACE	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.1	---
NITROGEN	1.2	2.2	3.4
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.11	0.10	0.10
HEATING VALUE*	1197	1099	1170
SPECIFIC GRAVITY	0.666	0.636	0.699

	INDEX 10483 SAMPLE 4596	INDEX 10484 SAMPLE 4551	INDEX 10485 SAMPLE 4552
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MASON	MASON	MASON
FIELD	MASON	MASON DISTRICT	MASON DISTRICT
WELL NAME	H. A. GERLACH NO. 1	E. F. DURST NO. 1	GOLDIE ANKRUM NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	RIGHT FORK-COLOGNE DIST.
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	03/18/48	03/06/48	04/28/48
SAMPLED	10/08/48	07/30/48	06/11/48
FORMATION	DEVO-SHALE	DEVO-SHALE	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3200	3485	2735
WELLHEAD PRESSURE,PSIG	460	860	800
OPEN FLOW, MCFD	39	84	103
COMPONENT, MOLE PCT			
METHANE	54.8	74.5	75.0
ETHANE	37.3	21.7	22.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	3.3	1.7
OXYGEN	0.2	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.12	0.12
HEATING VALUE*	1224	1144	1170
SPECIFIC GRAVITY	0.772	0.678	0.677

	INDEX 10486 SAMPLE 10542	INDEX 10487 SAMPLE 9512	INDEX 10488 SAMPLE 9807
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MASON	MCDOWELL	MCDOWELL
FIELD	NOT GIVEN	BIG CREEK	BROWNS CREEK
WELL NAME	VALLEY TONEY NO. 1	NO. 10220	PEOPLES 1ST NATL. BANK 10659
LOCATION	LEWIS DIST., 12-CC-89	BIG CREEK DISTRICT	BROWNS CREEK DISTRICT
OWNER	POWVA OIL CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	08/26/65	04/16/63	09/29/64
SAMPLED	03/22/66	07/27/64	03/17/65
FORMATION	DEVO-ORISKANY	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3446	4423	3593
WELLHEAD PRESSURE,PSIG	1145	410	950
OPEN FLOW, MCFD	250	641	2014
COMPONENT, MOLE PCT			
METHANE	84.7	97.9	98.0
ETHANE	8.5	1.3	1.3
PROPANE	3.5	0.1	0.1
N-BUTANE	0.9	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.7	0.5	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.11	0.07	0.06
HEATING VALUE*	1156	1018	1019
SPECIFIC GRAVITY	0.663	0.564	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10489 SAMPLE 9797		INDEX 10490 SAMPLE 12348		INDEX 10491 SAMPLE 4573	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	MCDOWELL		MCDOWELL		MCDOWELL	
FIELD	GILBERT		GILBERT		NOT GIVEN	
WELL NAME	SIBLEY COAL & COKE NO. 2		EDWARDS NO. A-1		FORD MOTOR CO. NO. 1261	
LOCATION	SANDY RIVER DISTRICT		IAGER QUADRANGLE		NOT GIVEN	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		GODFREY L. CABOT, INC.	
COMPLETED	10/26/64		NOT GIVEN		04/20/48	
SAMPLED	03/02/65		04/11/70		10/08/48	
FORMATION	MISS-BIG LIME		MISS-BIG LIME & BEREA		MISS-MAXTON & BIG LIME	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2960		3660		1975	
WELLHEAD PRESSURE,PSIG	915		920		NOT GIVEN	
OPEN FLOW, MCFD	11137		3156		189	
COMPONENT, MOLE PCT						
METHANE	95.6		97.3		95.5	
ETHANE	2.7		1.5		4.0	
PROPANE	0.4		0.1		---	
N-BUTANE	0.2		0.0		---	
ISOBUTANE	TRACE		0.0		---	
N-PENTANE	0.1		0.0		---	
ISOPENTANE	TRACE		0.0		---	
CYCLOPENTANE	TRACE		0.0		---	
HEXANES PLUS	0.1		0.0		---	
NITROGEN	0.7		0.7		0.0	
OXYGEN	0.0		TRACE		0.3	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.1		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	TRACE		0.1		0.2	
HELIUM	0.09		0.11		0.17	
HEATING VALUE*	1043		1015		1039	
SPECIFIC GRAVITY	0.581		0.565		0.578	

	INDEX 10492 SAMPLE 9511		INDEX 10493 SAMPLE 12057		INDEX 10494 SAMPLE 9562	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	MCDOWELL		MCDOWELL		MCDOWELL	
FIELD	NOT GIVEN		NOT GIVEN		PINEVILLE	
WELL NAME	NO. 10366		MCDOWELL NO. 11148		NO. 9679	
LOCATION	SANDY RIVER DISTRICT		BIG CREEK DISTRICT		NOT GIVEN	
OWNER	HOPE NATURAL GAS CO.		CONSOLIDATED GAS SUPPLY CORP		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	11/26/62		04/21/69		06/27/52	
SAMPLED	07/27/64		09/26/69		08/26/64	
FORMATION	MISS-BEREA		MISS-BEREA		MISS-BIG LIME & WEIR	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3582		4807		3649	
WELLHEAD PRESSURE,PSIG	805		950		852	
OPEN FLOW, MCFD	3610		2157		1300	
COMPONENT, MOLE PCT						
METHANE	97.7		96.8		97.7	
ETHANE	1.5		1.6		1.2	
PROPANE	0.1		0.1		0.1	
N-BUTANE	0.0		0.1		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.1		0.0	
ISOPENTANE	0.0		TRACE		0.0	
CYCLOPENTANE	0.0		0.1		0.0	
HEXANES PLUS	0.0		0.1		0.0	
NITROGEN	0.5		0.7		0.8	
OXYGEN	0.0		0.7		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.3		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.06		0.12		0.10	
HEATING VALUE*	1019		1029		1014	
SPECIFIC GRAVITY	0.565		0.574		0.565	

	INDEX 10495 SAMPLE 9750		INDEX 10496 SAMPLE 9724		INDEX 10497 SAMPLE 15917	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	MCDOWELL		MCDOWELL		MINERAL	
FIELD	POCAHONTAS LAND CORP.		RODERFIELD POOL		NOT GIVEN	
WELL NAME	NO. 44, SER NO. 1337		PEOPLES 1ST NATL. BANK 10659		MASTELLAR COAL CO. 20364-T	
LOCATION	NOT GIVEN		BROWNS CREEK DISTRICT		NEW CREEK DISTRICT	
OWNER	CABOT CORP.		HOPE NATURAL GAS CO.		COLUMBIA GAS	
COMPLETED	08/16/51		09/29/64		12/20/78	
SAMPLED	NOT GIVEN		02/05/65		03/03/80	
FORMATION	MISS-BEREA		MISS-BEREA		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4178		3593		8494	
WELLHEAD PRESSURE,PSIG	485		950		3600	
OPEN FLOW, MCFD	555		2014		9728	
COMPONENT, MOLE PCT						
METHANE	97.2		97.9		97.6	
ETHANE	1.9		1.3		1.6	
PROPANE	0.2		0.0		0.1	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.6		0.6		0.4	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.08		0.06		0.04	
HEATING VALUE*	1024		1015		1020	
SPECIFIC GRAVITY	0.568		0.564		0.565	

	INDEX 10498 SAMPLE 9181		INDEX 10499 SAMPLE 9196		INDEX 10500 SAMPLE 11249	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	MINGO		MINGO		MINGO	
FIELD	CENTRAL		CENTRAL		CENTRAL DIVISION	
WELL NAME	NO. 9070		NO. 8839		WYOMING COALALAND CO. NO. 11	
LOCATION	NOT GIVEN		STAFFORD DISTRICT		STAFFORD DISTRICT	
OWNER	UNITED FUEL GAS CO.		UNITED FUEL GAS CO.		UNITED FUEL GAS CO.	
COMPLETED	11/14/61		04/18/60		11/01/67	
SAMPLED	11/01/63		02/11/64		12/26/67	
FORMATION	MISS-BIG LIME		MISS-BEREA		MISS-BIG LIME & BEREA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2485		5417		2775	
WELLHEAD PRESSURE,PSIG	725		740		730	
OPEN FLOW, MCFD	1162		700		2316	
COMPONENT, MOLE PCT						
METHANE	95.9		93.7		92.4	
ETHANE	2.6		4.8		5.4	
PROPANE	0.6		0.6		0.9	
N-BUTANE	0.2		0.0		0.2	
ISOBUTANE	TRACE		0.0		0.1	
N-PENTANE	TRACE		0.0		0.2	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	TRACE		0.0		0.1	
NITROGEN	0.7		0.7		0.6	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		TRACE		TRACE	
HELIUM	0.12		0.09		0.05	
HEATING VALUE*	1035		1051		1080	
SPECIFIC GRAVITY	0.576		0.587		0.603	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10501 SAMPLE 10590	INDEX 10502 SAMPLE 5160	INDEX 10503 SAMPLE 9382
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	GILBERT	GILBERT DIST. NO. 27	KERMIT
WELL NAME	U. F. G. NO. 9333	THACKER LAND CO. NO. 1	NO. 8219
LOCATION	CARTER COORDINATES 4-N-92	MATEWAN QUAD. MAGNOLIA DIST.	HARDY DISTRICT
OWNER	UNITED FUEL GAS CO.	COLUMBIAN CARBON CO.	UNITED FUEL GAS CO.
COMPLETED	10/25/64	10/30/51	05/02/54
SAMPLED	06/06/66	01/29/51	06/05/64
FORMATION	MISS-BEREA	MISS-LIME	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3267	2255	2334
WELLHEAD PRESSURE,PSIG	750	800	440
OPEN FLOW, MCFD	762	16817	193
COMPONENT, MOLE PCT			
METHANE	93.6	90.0	80.0
ETHANE	4.5	6.5	12.2
PROPANE	1.0	1.4	4.8
N-BUTANE	0.4	0.3	1.1
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.4	1.0	1.0
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.2	0.0
HELIUM	0.06	0.05	0.04
HEATING VALUE*	1068	1087	1227
SPECIFIC GRAVITY	0.594	0.617	0.700

	INDEX 10504 SAMPLE 9383	INDEX 10505 SAMPLE 9385	INDEX 10506 SAMPLE 9386
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	KERMIT	KERMIT	KERMIT
WELL NAME	NO. 6075	NO. 8993	NO. 8475
LOCATION	HARVEY DISTRICT	LEE DISTRICT	MAGNOLIA DISTRICT
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	02/06/53	11/28/60	12/08/57
SAMPLED	06/08/64	06/05/64	06/05/64
FORMATION	DEVO-BROWN SHALE	MISS-BIG LIME	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2965	2415	3945
WELLHEAD PRESSURE,PSIG	545	660	450
OPEN FLOW, MCFD	751	6083	58
COMPONENT, MOLE PCT			
METHANE	78.2	91.4	82.5
ETHANE	13.3	6.1	10.5
PROPANE	5.3	1.3	3.3
N-BUTANE	1.1	0.3	0.7
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	0.4	2.0
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.06	0.05	0.04
HEATING VALUE*	1234	1096	1157
SPECIFIC GRAVITY	0.707	0.611	0.670

	INDEX 10507 SAMPLE 9580	INDEX 10508 SAMPLE 9993	INDEX 10509 SAMPLE 9152
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	LOGAN-HOLDEN-DINGESS	LOGAN-MINGO	NOT GIVEN
WELL NAME	COTIGA NO. 1	U. S. STEEL CORP. NO. 7-1692	NO. 8469
LOCATION	PIGEON CREEK, LENORE	MAGNOLIA DISTRICT	NOT GIVEN
OWNER	ASHLAND OIL & REFINING CO.	CARNEGIE NATURAL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	04/05/43	08/10/56	09/19/57
SAMPLED	08/11/64	07/16/65	11/01/63
FORMATION	DEVO-SHALE	MISS-GREENBRIER	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3690	2550	4100
WELLHEAD PRESSURE,PSIG	515	685	510
OPEN FLOW, MCFD	403	20000	112000
COMPONENT, MOLE PCT			
METHANE	78.5	90.7	92.3
ETHANE	13.1	7.1	5.4
PROPANE	4.6	1.0	0.7
N-BUTANE	1.1	0.3	0.1
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.4	0.1	1.0
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	TRACE	0.05
HEATING VALUE*	1219	1103	1063
SPECIFIC GRAVITY	0.704	0.614	0.599

	INDEX 10510 SAMPLE 287	INDEX 10511 SAMPLE 290	INDEX 10512 SAMPLE 9748
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MONONGALIA
FIELD	TRIPLE STATE	TRIPLE STATE	BURNS CHAPEL S
WELL NAME	NO. A8	NO. 531	BERN NO. 1
LOCATION	1/2 MI KERMIT	5 MI W KERMIT, W. VA.	CLINTON DISTRICT
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/95	--/--/16	10/22/64
SAMPLED	05/25/20	05/25/20	02/18/65
FORMATION	MISS-BIG LIME	NOT GIVEN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1840	2303	7559
WELLHEAD PRESSURE,PSIG	110	90	2900
OPEN FLOW, MCFD	1000	1000	4390
COMPONENT, MOLE PCT			
METHANE	73.0	75.3	97.2
ETHANE	24.7	23.0	1.7
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.6	1.0	0.8
OXYGEN	0.5	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	0.12	0.02
HEATING VALUE*	1182	1175	1018
SPECIFIC GRAVITY	0.688	0.675	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10513 SAMPLE 15027	INDEX 10514 SAMPLE 9443	INDEX 10515 SAMPLE 9704
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MONONGALIA	MONONGALIA	MONONGALIA
FIELD	GREER	MAPLE-WADESTOWN	NOT GIVEN
WELL NAME	M. MILLER 12478	L. C. SHRIVER NO. 994	NO. 5321
LOCATION	CLINTON DISTRICT	BATTELLE DISTRICT	CLAY DISTRICT
OWNER	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.	EQUITABLE GAS CO.
COMPLETED	NOT GIVEN	11/--/08	11/01/21
SAMPLED	10/30/79	07/15/64	01/12/65
FORMATION	DEVO-ONONDAGA	DEVO-FIFTY FOOT SAND	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7496	2714	2330
WELLHEAD PRESSURE,PSIG	NOT GIVEN	200	NOT GIVEN
OPEN FLOW, MCFD	2316	14	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	88.1	78.0
ETHANE	1.7	6.1	8.8
PROPANE	0.1	1.8	6.1
N-BUTANE	0.1	0.7	2.5
ISOBUTANE	0.0	0.4	1.5
N-PENTANE	0.0	0.2	0.4
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.5
NITROGEN	0.5	2.0	1.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.02	0.14	0.10
HEATING VALUE*	1025	1117	1309
SPECIFIC GRAVITY	0.571	0.643	0.756

	INDEX 10516 SAMPLE 9705	INDEX 10517 SAMPLE 14690	INDEX 10518 SAMPLE 14691
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MONONGALIA	NICHOLAS	NICHOLAS
FIELD	NOT GIVEN	20 MILE CREEK	20 MILE CREEK
WELL NAME	NO. 5153	FEDERAL COAL NO. 4	BETHLEHEM NO. B-1
LOCATION	CLAY DISTRICT	NOT GIVEN	NOT GIVEN
OWNER	EQUITABLE GAS CO.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	07/01/08	NOT GIVEN	08/14/75
SAMPLED	01/12/65	06/04/76	06/04/76
FORMATION	DEVO-FIFTH	NOT GIVEN	MISS-INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3060	2471	1840
WELLHEAD PRESSURE,PSIG	136	525	540
OPEN FLOW, MCFD	24	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	91.1	90.0
ETHANE	6.8	5.9	6.8
PROPANE	1.9	1.5	1.7
N-BUTANE	0.6	0.3	0.3
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.2	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.09	0.03	0.04
HEATING VALUE*	1117	1098	1104
SPECIFIC GRAVITY	0.634	0.613*	0.619

	INDEX 10519 SAMPLE 14693	INDEX 10520 SAMPLE 14695	INDEX 10521 SAMPLE 14696
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	FEDERAL COAL NO. 13	FEDERAL COAL NO. 16	BETHLEHEM NO. B-14
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	12/09/75	05/15/75	09/17/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	MISS-BIG INJUN	DEVO-BLUE MONDAY	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2612	2063	2267
WELLHEAD PRESSURE,PSIG	520	675	420
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.3	92.9	91.0
ETHANE	5.8	4.2	5.7
PROPANE	1.5	1.1	1.5
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.5	0.9	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.04	0.09	0.08
HEATING VALUE*	1089	1075	1089
SPECIFIC GRAVITY	0.608	0.605	0.611

	INDEX 10522 SAMPLE 14698	INDEX 10523 SAMPLE 14699	INDEX 10524 SAMPLE 14700
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	BETHLEHEM NO. B-17	FEDERAL COAL NO. 6	BLANTON NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	NOT GIVEN	01/04/75	05/10/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	NOT GIVEN	MISS-INJUN	MISS-INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2454	1898
WELLHEAD PRESSURE,PSIG	560	540	545
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.3	90.3	90.9
ETHANE	3.3	6.0	6.1
PROPANE	0.6	1.7	1.5
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.3	0.9	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.15	0.03	0.04
HEATING VALUE*	1044	1104	1096
SPECIFIC GRAVITY	0.588	0.621	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10525 SAMPLE 14701	INDEX 10526 SAMPLE 4312	INDEX 10527 SAMPLE 4597
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	GAULEY	GAULEY
WELL NAME	BETHLEHEM NO. B-25	ROWENA GROSE NO. 1	C. H. RADER NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	08/28/75	04/08/47	06/16/48
SAMPLED	06/04/76	05/21/47	10/12/48
FORMATION	MISS-BIG LIME	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2212	1745	1742
WELLHEAD PRESSURE,PSIG	625	565	560
OPEN FLOW, MCFD	NOT GIVEN	1784	636
COMPONENT, MOLE PCT			
METHANE	90.1	87.8	85.6
ETHANE	6.5	11.7	12.9
PROPANE	1.7	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.5	0.1	1.1
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.04	0.05	0.04
HEATING VALUE*	1107	1099	1098
SPECIFIC GRAVITY	0.624	0.615	0.626

	INDEX 10528 SAMPLE 4464	INDEX 10529 SAMPLE 4477	INDEX 10530 SAMPLE 4362
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	GAULEY DIST. NO. 22	GAULEY DIST. NO. 22	GAULEY DIST. NO. 23
WELL NAME	LEAH FRANK NO. 2, GW-989	LEAH FRANK NO. 1, GW-980	H. J. SUMMERS NO. 1GW-947
LOCATION	NEAR SWISS	NEAR SWISS	NOT GIVEN
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	02/16/48	01/22/48	07/12/47
SAMPLED	04/15/48	04/15/48	09/25/47
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2093	2018	1575
WELLHEAD PRESSURE,PSIG	465	445	535
OPEN FLOW, MCFD	246	964	3468
COMPONENT, MOLE PCT			
METHANE	88.8	88.6	89.3
ETHANE	9.8	10.9	9.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.9	0.0	0.9
OXYGEN	0.3	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1075	1093	1066
SPECIFIC GRAVITY	0.610	0.612	0.610

	INDEX 10531 SAMPLE 4449	INDEX 10532 SAMPLE 4450	INDEX 10533 SAMPLE 4452
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	GAULEY DISTRICT	GAULEY DISTRICT	GAULEY DISTRICT
WELL NAME	ABNEY PAYNE NO. 1, GW-953	W. R. GROSE NO. 1, GW-960	ROWENA GROSE NO. 1, GW-918
LOCATION	NEAR SWISS	NEAR SWISS	NEAR SWISS
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	08/01/47	06/20/47	04/08/47
SAMPLED	03/08/48	03/08/48	03/08/48
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1596	1629	1745
WELLHEAD PRESSURE,PSIG	385	565	565
OPEN FLOW, MCFD	4787	640	1784
COMPONENT, MOLE PCT			
METHANE	88.6	88.9	90.9
ETHANE	10.6	10.1	8.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	0.0	0.0
OXYGEN	0.4	0.6	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1087	1082	1079
SPECIFIC GRAVITY	0.612	0.612	0.600

	INDEX 10534 SAMPLE 9782	INDEX 10535 SAMPLE 11244	INDEX 10536 SAMPLE 7197
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	HAMILTON	HAMILTON	NICHOLAS COUNTY
WELL NAME	C. L. TOMLINSON 10665	C. F. TOMLINSON NO. 10902	NO. 10212
LOCATION	HAMILTON DISTRICT	HAMILTON DISTRICT	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.
COMPLETED	12/11/64	NOT GIVEN	01/22/59
SAMPLED	03/03/65	12/14/67	09/02/59
FORMATION	DEVO-BLUE MONDAY	MISS-MAXTON	DEVO-BLUE MONDAY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1664	1850	1793
WELLHEAD PRESSURE,PSIG	490	395	495
OPEN FLOW, MCFD	823	1958	2214
COMPONENT, MOLE PCT			
METHANE	95.6	94.9	96.9
ETHANE	2.8	1.9	1.7
PROPANE	0.5	0.3	0.3
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.6	2.2	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.06	0.17	0.07
HEATING VALUE*	1043	1010	1041
SPECIFIC GRAVITY	0.580	0.577	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10537 SAMPLE 9493	INDEX 10538 SAMPLE 14692	INDEX 10539 SAMPLE 14694
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	NOT GIVEN	PETERS CREEK	PETERS CREEK
WELL NAME	NO. 10226	WALKER NO. 1	KEENAN NO. 1
LOCATION	HAMILTON DISTRICT	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	04/14/59	10/18/75	11/06/75
SAMPLED	07/23/64	06/04/76	06/04/76
FORMATION	DEVO-BLUE MONDAY	MISS-MAXTON	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1415	1865	1216
WELLHEAD PRESSURE,PSIG	495	190	190
OPEN FLOW, MCFD	283	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	92.3	90.5
ETHANE	2.3	5.2	6.5
PROPANE	0.4	1.1	1.5
N-BUTANE	TRACE	0.2	0.3
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.7	0.6	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.08	0.04	0.05
HEATING VALUE*	1030	1080	1103
SPECIFIC GRAVITY	0.573	0.603	0.620

	INDEX 10540 SAMPLE 9335	INDEX 10541 SAMPLE 9343	INDEX 10542 SAMPLE 9431
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	POCAHONTAS
FIELD	SHARP MCMILLEN	SHARP MCMILLEN	DURBIN
WELL NAME	NO. 57	NO. 34	USA-N-1
LOCATION	GRANT DISTRICT	GRANT DISTRICT	NOT GIVEN
OWNER	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	06/19/57	02/17/56	05/08/64
SAMPLED	04/24/64	04/24/64	07/01/64
FORMATION	MISS-BIG LIME	MISS-BIG LIME	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1606	1845	4949
WELLHEAD PRESSURE,PSIG	425	480	1685
OPEN FLOW, MCFD	164	2011	1347
COMPONENT, MOLE PCT			
METHANE	91.9	90.9	97.5
ETHANE	5.5	5.9	0.9
PROPANE	1.3	1.6	0.0
N-BUTANE	0.3	0.6	0.0
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	0.3	0.2	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.5
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1097	1120	1004
SPECIFIC GRAVITY	0.611	0.624	0.567

	INDEX 10543 SAMPLE 9486	INDEX 10544 SAMPLE 9161	INDEX 10545 SAMPLE 9677
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	ETAM	GLADESVILLE	HORTON
WELL NAME	BESSIE F. DAVIS NO. 10281	HOLMES-B NO. 1	USA-N-1
LOCATION	RENO DISTRICT	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	PHILLIPS PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	10/12/60	11/02/62	02/07/63
SAMPLED	07/15/64	11/01/63	12/16/64
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5098	7688	7180
WELLHEAD PRESSURE,PSIG	1194	3128	1800
OPEN FLOW, MCFD	470	2600	696
COMPONENT, MOLE PCT			
METHANE	97.9	83.5	76.8
ETHANE	1.2	1.3	1.8
PROPANE	0.1	0.2	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.8	11.9	20.3
OXYGEN	0.0	2.8	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.04	0.02	0.46
HEATING VALUE*	1016	874	818
SPECIFIC GRAVITY	0.565	0.629	0.649

	INDEX 10546 SAMPLE 14845	INDEX 10547 SAMPLE 14846	INDEX 10548 SAMPLE 14851
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE
WELL NAME	M. J. RENE	PRESTON CO. COAL NO. 484	PRESTON CO. COAL NO. 478
LOCATION	VALLEY DISTRICT	VALLEY DISTRICT	VALLEY DISTRICT
OWNER	RAY RESOURCES CORP.	RAY RESOURCES CORP.	RAY RESOURCES CORP.
COMPLETED	NOT GIVEN	12/04/74	11/14/74
SAMPLED	11/01/76	11/01/76	NOT GIVEN
FORMATION	NOT GIVEN	DEVO-HUNTERSVILLE	DEVO-HUNTERSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	7792	7602
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3037	5165
COMPONENT, MOLE PCT			
METHANE	97.4	97.6	97.5
ETHANE	1.7	1.6	1.7
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1021	1029	1021
SPECIFIC GRAVITY	0.569	0.567	0.568

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10549 SAMPLE 14852	INDEX 10550 SAMPLE 5879	INDEX 10551 SAMPLE 14820
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORGANTOWN QUADRANGLE	NOT GIVEN	NOT GIVEN
WELL NAME	PRESTON CO. COAL NO. 474	LAWRENCE BURGER NO. 1	B.M. MORGAN NO. 481
LOCATION	VALLEY DISTRICT	UNION DISTRICT	MORGANTOWN QUADRANGLE
OWNER	RAY RESOURCES CORP.	COLUMBIAN CARBON CO.	RAY RESOURCES CORP.
COMPLETED	12/04/74	05/03/55	11/18/75
SAMPLED	NOT GIVEN	07/13/55	10/25/76
FORMATION	DEVO-HUNTERSVILLE	DEVO-ORISKANY	DEVO-HUNTERVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7792	4981	7861
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1150	NOT GIVEN
OPEN FLOW, MCFD	3037	1555	2919
COMPONENT, MOLE PCT			
METHANE	97.5	98.2	97.3
ETHANE	1.7	1.0	1.7
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.02	0.10	0.02
HEATING VALUE*	1021	1015	1019
SPECIFIC GRAVITY	0.568	0.561	0.565

	INDEX 10552 SAMPLE 9432	INDEX 10553 SAMPLE 5139	INDEX 10554 SAMPLE 4762
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	PARSONS	PRESTON COUNTY	TERRA ALTA
WELL NAME	USA-0-1	NO. 9636	J. PAUL MARTIN NO. 2
LOCATION	NOT GIVEN	PORTLAND DISTRICT	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	03/17/64	06/19/51	06/21/49
SAMPLED	07/01/64	10/16/51	10/18/49
FORMATION	SILU-TUSCARORA	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7058	5248	5172
WELLHEAD PRESSURE,PSIG	2620	2250	2140
OPEN FLOW, MCFD	16300	1981	2071
COMPONENT, MOLE PCT			
METHANE	78.7	96.9	97.3
ETHANE	1.8	1.1	1.2
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	18.6	1.4	1.0
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.42	0.05	0.04
HEATING VALUE*	835	1007	1016
SPECIFIC GRAVITY	0.643	0.571	0.571

	INDEX 10555 SAMPLE 4845	INDEX 10556 SAMPLE 4892	INDEX 10557 SAMPLE 5011
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	TERRA ALTA	TERRA ALTA	TERRA ALTA
WELL NAME	FITZPATRIC NO. 1	NO. 9391	MARGARET C. KRAUS 9462
LOCATION	PORTLAND DISTRICT	PORTLAND DISTRICT	NOT GIVEN
OWNER	NOLLFM OIL & GAS CORP.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	NOT GIVEN	03/07/50	01/16/51
SAMPLED	05/15/50	05/10/50	02/20/51
FORMATION	NOT GIVEN	DEVO-CHERT & ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5505	5511	5101
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1875	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3048	12500
COMPONENT, MOLE PCT			
METHANE	96.8	97.0	96.8
ETHANE	1.3	1.2	1.2
PROPANE	0.2	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.0	1.2	1.4
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1020	1012	1008
SPECIFIC GRAVITY	0.572	0.572	0.571

	INDEX 10558 SAMPLE 5170	INDEX 10559 SAMPLE 9338	INDEX 10560 SAMPLE 9314
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PUTNAM	PUTNAM
FIELD	TERRA ALTA	MCCOLLOCH	MIDWAY LEASE
WELL NAME	JONES NO. 464-C	NO. 45	NO. 560
LOCATION	NOT GIVEN	SCOTT DISTRICT	UNION DISTRICT
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	PEAKE PETROLEUM CO.	COMMONWEALTH GAS CORP.
COMPLETED	12/13/51	03/03/55	10/29/51
SAMPLED	01/28/52	04/30/64	04/22/64
FORMATION	DEVO-CHERT	DEVO-SHALE	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4651	3487	3707
WELLHEAD PRESSURE,PSIG	2175	700	430
OPEN FLOW, MCFD	5000	381	140
COMPONENT, MOLE PCT			
METHANE	96.6	83.2	83.4
ETHANE	1.2	9.4	10.4
PROPANE	0.1	3.9	3.9
N-BUTANE	0.1	1.1	0.9
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.6	1.5	0.6
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.14	0.12
HEATING VALUE*	1007	1176	1184
SPECIFIC GRAVITY	0.574	0.675	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10561 SAMPLE 9316	INDEX 10562 SAMPLE 9329	INDEX 10563 SAMPLE 11048
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PUTNAM	PUTNAM	PUTNAM
FIELD	MIDWAY LEASE	OAKLAND	ROCKY FORK
WELL NAME	NO. 564	NO. 718	UFG NO. 9454
LOCATION	UNION DISTRICT	L. W. BOWLING FARM	POCATALICO DISTRICT
OWNER	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.	UNITED FUEL GAS CO.
COMPLETED	01/15/52	12/11/63	06/01/67
SAMPLED	04/22/64	05/01/64	08/01/67
FORMATION	DEVO-BROWN SHALE	DEVO-ORISKANY	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3285	5101	5377
WELLHEAD PRESSURE,PSIG	410	950	2240
OPEN FLOW, MCFD	315	504	59000
COMPONENT, MOLE PCT			
METHANE	82.7	85.1	92.7
ETHANE	10.2	7.9	3.2
PROPANE	4.2	2.8	1.0
N-BUTANE	1.0	1.1	0.4
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.3
NITROGEN	1.3	1.9	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.12	0.06	0.09
HEATING VALUE*	1179	1157	1039
SPECIFIC GRAVITY	0.674	0.665	0.613

	INDEX 10564 SAMPLE 9362	INDEX 10565 SAMPLE 9315	INDEX 10566 SAMPLE 9319
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PUTNAM	PUTNAM	PUTNAM
FIELD	SISSONVILLE	TWO MILE DIVISION	TWO MILE DIVISION
WELL NAME	R. T. TROUT NO. 1436	SARAH BRYDLE ET AL NO. 1	NO. M54
LOCATION	POCATALICO DISTRICT	SCOTT DISTRICT	CURRY DISTRICT
OWNER	CABOT CORP.	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.
COMPLETED	09/20/55	02/27/58	07/21/41
SAMPLED	05/13/64	04/22/64	04/22/64
FORMATION	DEVO-ORISKANY	DEVO-BROWN SHALE	MISS-BEREA&DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4581	3333	2129
WELLHEAD PRESSURE,PSIG	NOT GIVEN	450	360
OPEN FLOW, MCFD	200	189	219
COMPONENT, MOLE PCT			
METHANE	88.4	82.6	82.3
ETHANE	5.6	9.9	9.9
PROPANE	1.7	3.9	3.8
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	2.3	1.8	1.8
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.05	0.19	0.13
HEATING VALUE*	1107	1170	1187
SPECIFIC GRAVITY	0.641	0.673	0.683

	INDEX 10567 SAMPLE 9367	INDEX 10568 SAMPLE 9883	INDEX 10569 SAMPLE 4453
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	BEAVER	CENTRAL DIVISION	CLEAR FORK DIST. NO. 24
WELL NAME	NO. 25	A. B. ANDERSON ET AL.NO.9358	C.C. DICKINSON NO.1-B GW-965
LOCATION	NOT GIVEN	SLAB FORK DIST.	NEAR DAMERON
OWNER	CABOT CORP.	UNITED FUEL GAS CO.	COLUMBIAN CARBON CO.
COMPLETED	09/28/56	03/04/65	03/10/48
SAMPLED	05/08/64	04/30/65	04/15/48
FORMATION	MISS-MAXTON	MISS-WEIR	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1675	4500	2601
WELLHEAD PRESSURE,PSIG	92	905	565
OPEN FLOW, MCFD	110	1540	1220
COMPONENT, MOLE PCT			
METHANE	96.8	98.1	96.7
ETHANE	2.4	1.2	1.7
PROPANE	0.3	0.0	---
N-BUTANE	TRACE	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.3	0.6	1.2
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.0	0.2
HELIUM	0.05	0.08	0.06
HEATING VALUE*	1031	1015	1010
SPECIFIC GRAVITY	0.569	0.562	0.570

	INDEX 10570 SAMPLE 4454	INDEX 10571 SAMPLE 9333	INDEX 10572 SAMPLE 9337
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	CLEAR FORK DIST. NO. 24	CRAB ORCHARD	DOROTHY SARITA
WELL NAME	PRICE DAVIS NO. 1 GW-955	NO. 120	NO. 119
LOCATION	NEAR DAMERON	SLAB FORK DISTRICT	CLEAR FORK DISTRICT
OWNER	COLUMBIAN CARBON CO.	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.
COMPLETED	12/13/47	09/17/62	04/17/62
SAMPLED	04/15/48	04/23/64	04/30/64
FORMATION	MISS-	MISS-BIG LIME	MISS-WEIR & BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2639	2361	2375
WELLHEAD PRESSURE,PSIG	640	740	510
OPEN FLOW, MCFD	498	2780	200
COMPONENT, MOLE PCT			
METHANE	95.8	97.9	95.1
ETHANE	2.0	1.3	3.6
PROPANE	---	0.1	0.6
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	1.9	0.5	0.3
OXYGEN	0.1	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.06	0.17	0.04
HEATING VALUE*	1002	1018	1006
SPECIFIC GRAVITY	0.576	0.563	0.584

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10573 SAMPLE 9339		INDEX 10574 SAMPLE 9875		INDEX 10575 SAMPLE 9514	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	RALEIGH		RALEIGH		RALEIGH	
FIELD	DOROTHY SARITA		HOPKINS FORK-JARROLDS VALLEY		MCGRAW	
WELL NAME	NO. 112		DOR. SAR. NO. 107		NO. 9164	
LOCATION	CLEAR FORK DISTRICT		MARSH FORK DISTRICT		TRAP HILL DISTRICT	
OWNER	PEAKE PETROLEUM CO.		PEAKE PETROLEUM CO.		HOPE NATURAL GAS CO.	
COMPLETED	05/05/49		06/22/61		09/27/47	
SAMPLED	04/30/64		07/22/65		07/27/64	
FORMATION	MISS-BIG LIME&PENN-SALT SAND		PENN-SALT SAND		MISS-MAXTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2227		1420		2022	
WELLHEAD PRESSURE,PSIG	700		113		285	
OPEN FLOW, MCFD	188		280		251	
COMPONENT, MOLE PCT						
METHANE	95.7		90.3		96.9	
ETHANE	3.3		4.2		2.2	
PROPANE	0.4		1.1		0.2	
N-BUTANE	0.1		0.3		TRACE	
ISOBUTANE	TRACE		0.1		TRACE	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.1		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		0.1		TRACE	
NITROGEN	0.3		2.7		0.4	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.7		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.04		0.23		0.06	
HEATING VALUE*	1047		1044		1026	
SPECIFIC GRAVITY	0.579		0.604		0.567	

	INDEX 10576 SAMPLE 4526		INOEX 10577 SAMPLE 4634		INDEX 10578 SAMPLE 9876	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	RALEIGH		RALEIGH		RALEIGH	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. 9175		O. C. DANIEL NO. 9212		EUNICE NO. 12	
LOCATION	NOT GIVEN		3 MI. N BOLT		MARSH CREEK DISTRICT	
OWNER	HOPE NATURAL GAS CO.		HOPE NATURAL GAS CO.		PEAKE PETROLEUM CO.	
COMPLETED	12/15/47		07/12/48		03/13/53	
SAMPLED	05/24/48		11/15/48		04/22/65	
FORMATION	MISS-M		MISS-MAXTON		MISS-WEIR	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2026		2148		2337	
WELLHEAD PRESSURE,PSIG	520		600		160	
OPEN FLOW, MCFD	2192		600		520	
COMPONENT, MOLE PCT						
METHANE	95.0		95.4		94.0	
ETHANE	2.5		3.4		3.6	
PROPANE	---		---		0.7	
N-BUTANE	---		---		0.3	
ISOBUTANE	---		---		0.1	
N-PENTANE	---		---		TRACE	
ISOPENTANE	---		---		0.1	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		0.1	
NITROGEN	2.0		0.6		0.8	
OXYGEN	0.2		0.2		TRACE	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.3		0.1	
HELIUM	0.06		0.06		0.05	
HEATING VALUE*	1007		1027		1058	
SPECIFIC GRAVITY	0.578		0.577		0.593	

	INDEX 10579 SAMPLE 9740		INDEX 10580 SAMPLE 15922		INDEX 10581 SAMPLE 9370	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	RALEIGH		RALEIGH		RALEIGH	
FIELD	PINEY		SHADY SPRING DISTRICT		SNUFFER	
WELL NAME	NO. 1 SERIAL NO. 1106		NO. 20622-T		NO. 1	
LOCATION	NOT GIVEN		CRAB ORCHARD QUADRANGLE		NOT GIVEN	
OWNER	CABOT CORP.		COLUMBIA GAS TRANS. CORP.		CABOT CORP.	
COMPLETED	12/09/44		09/24/79		05/22/44	
SAMPLED	02/11/65		03/11/80		05/08/64	
FORMATION	MISS-MAXTON & WEIR		MISS-WEIR		MISS-BIG LIME	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3367		3298		2680	
WELLHEAD PRESSURE,PSIG	825		928		330	
OPEN FLOW, MCFD	268		3998		8	
COMPONENT, MOLE PCT						
METHANE	98.0		93.8		97.9	
ETHANE	1.3		1.3		1.3	
PROPANE	0.1		0.4		0.1	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.4		0.0	
N-PENTANE	0.0		0.1		0.0	
ISOPENTANE	0.0		0.3		0.0	
CYCLOPENTANE	0.0		0.7		0.0	
HEXANES PLUS	0.0		1.3		0.0	
NITROGEN	0.5		1.4		0.5	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.07		0.08		0.08	
HEATING VALUE*	1019		1108		1018	
SPECIFIC GRAVITY	0.563		0.627		0.563	

	INDEX 10582 SAMPLE 4376		INDEX 10583 SAMPLE 9334		INDEX 10584 SAMPLE 9336	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	RALEIGH		RALEIGH		RALEIGH	
FIELD	TRAP HILL DISTRICT		WELCHLANDS		WELCHLANDS	
WELL NAME	WELL NO. 9126		NO. 66		NO. 72	
LOCATION	NOT GIVEN		SLAB FORK DISTRICT		SLAB FORK DISTRICT	
OWNER	HOPE NATURAL GAS CO.		PEAKE PETROLEUM CO.		PEAKE PETROLEUM CO.	
COMPLETED	07/--/47		08/29/58		11/18/58	
SAMPLED	09/26/47		04/27/64		04/27/64	
FORMATION	MISS-		MISS-BIG LIME		MISS-MAXTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2076		2377		1875	
WELLHEAD PRESSURE,PSIG	530		NOT GIVEN		349	
OPEN FLOW, MCFD	926		650		5800	
COMPONENT, MOLE PCT						
METHANE	96.1		97.9		96.7	
ETHANE	2.8		1.2		2.1	
PROPANE	---		0.1		0.2	
N-BUTANE	---		0.0		0.0	
ISOBUTANE	---		0.0		0.0	
N-PENTANE	---		0.0		0.0	
ISOPENTANE	---		0.0		0.0	
CYCLOPENTANE	---		0.0		0.0	
HEXANES PLUS	---		0.0		0.0	
NITROGEN	0.5		0.6		0.6	
OXYGEN	0.3		TRACE		TRACE	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.1		0.2	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.0		0.1	
HELIUM	0.06		0.07		0.08	
HEATING VALUE*	1024		1016		1023	
SPECIFIC GRAVITY	0.573		0.563		0.569	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10585 SAMPLE 9346	INDEX 10586 SAMPLE 12311	INDEX 10587 SAMPLE 12312
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RANDOLPH	RANDOLPH	RANDOLPH
FIELD	ALPENA	BROOK RUN	BROOK RUN
WELL NAME	HARDY NO. 1	L. MOSS NO. 1	L. MOSS NO. 1
LOCATION	HORTON QUAD.	ROARING CREEK DISTRICT	ROARING CREEK DISTRICT
OWNER	CITIES SERVICE OIL CO.	WHITE SHIELD OIL & GAS CORP.	WHITE SHIELD OIL & GAS CORP.
COMPLETED	01/19/60	07/26/69	07/26/69
SAMPLED	04/30/64	06/18/70	06/18/70
FORMATION	DEVO-CHERT & ORISKANY	DEVO-RILEY & BENSON	MISS-SQUAW
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3351	1264
WELLHEAD PRESSURE,PSIG	1510	1150	440
OPEN FLOW, MCFD	569	200	5410
COMPONENT, MOLE PCT			
METHANE	98.0	87.7	93.9
ETHANE	1.1	7.5	3.0
PROPANE	TRACE	2.2	0.6
N-BUTANE	0.0	0.5	0.1
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.6	0.8	1.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.2	0.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.05	0.05	0.12
HEATING VALUE*	1012	1131	1039
SPECIFIC GRAVITY	0.569	0.640	0.584

	INDEX 10588 SAMPLE 6030	INDEX 10589 SAMPLE 12179	INDEX 10590 SAMPLE 9519
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RANDOLPH	RANDOLPH	RITCHIE
FIELD	NOT GIVEN	ROARING CREEK	BEACON RUN
WELL NAME	HILL ARNOLD NO. 1 GW1208	MOSS NO. 1	NO. 10082
LOCATION	NOT GIVEN	NOT GIVEN	UNION DISTRICT
OWNER	COLUMBIAN CARBON CO.	WHITE SHIELD OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	11/10/55	07/04/69	05/24/57
SAMPLED	03/05/56	01/23/70	07/23/64
FORMATION	DEVO-ORISKANY	DEVO-BENSON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	9838	3500	1080
WELLHEAD PRESSURE,PSIG	2045	1050	243
OPEN FLOW, MCFD	9832	200	12
COMPONENT, MOLE PCT			
METHANE	98.5	93.5	75.2
ETHANE	1.0	3.1	15.2
PROPANE	0.0	0.7	6.0
N-BUTANE	0.0	0.1	1.4
ISOBUTANE	0.0	TRACE	0.8
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	TRACE	0.4
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	0.5	1.4	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.8	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.05	0.12	0.04
HEATING VALUE*	1016	1036	1318
SPECIFIC GRAVITY	0.562	0.584	0.749

	INDEX 10591 SAMPLE 9501	INDEX 10592 SAMPLE 9492	INDEX 10593 SAMPLE 9173
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RITCHIE	RITCHIE	RITCHIE
FIELD	HAZEL GREENE-LAWFORD	MANONE	MELLEN
WELL NAME	HARMAN NO. 3070	WESTFALL NO. 10029	RITCHIE MINES NO. 72
LOCATION	MURPHY DISTRICT	MURPHY DISTRICT	S23, W31
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	PENNZOIL CO.
COMPLETED	09/--/13	02/--/57	11/29/60
SAMPLED	07/16/64	07/16/64	11/19/63
FORMATION	MISS-BEREA	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2139	1871	2138
WELLHEAD PRESSURE,PSIG	60	201	30
OPEN FLOW, MCFD	17	47	34
COMPONENT, MOLE PCT			
METHANE	64.9	82.5	71.1
ETHANE	14.8	10.6	15.5
PROPANE	9.7	3.6	7.3
N-BUTANE	4.4	0.8	2.5
ISOBUTANE	1.7	0.4	0.9
N-PENTANE	1.3	0.2	0.6
ISOPENTANE	1.1	0.2	0.7
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	1.1	0.2	0.6
NITROGEN	0.7	1.3	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.06	0.05	0.10
HEATING VALUE*	1547	1187	1392
SPECIFIC GRAVITY	0.897	0.680	0.800

	INDEX 10594 SAMPLE 9500	INDEX 10595 SAMPLE 6983	INDEX 10596 SAMPLE 9819
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RITCHIE	RITCHIE	ROANE
FIELD	RACY	SAND HILL	GEARY DISTRICT
WELL NAME	NO. 4839	NO. 10160	DENVER MORRIS NO. 1
LOCATION	GRANT DISTRICT	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	CHESLENN OIL CO.
COMPLETED	11/--/16	10/12/58	10/29/64
SAMPLED	07/16/64	02/23/59	03/15/65
FORMATION	MISS-BEREA	-WISSIS CREEK	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2269	6960	1114
WELLHEAD PRESSURE,PSIG	360	2040	400
OPEN FLOW, MCFD	13	5396	731
COMPONENT, MOLE PCT			
METHANE	73.9	92.7	82.8
ETHANE	15.8	2.8	8.8
PROPANE	6.5	0.7	3.1
N-BUTANE	1.6	0.3	0.9
ISOBUTANE	0.7	0.4	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.5	0.4
NITROGEN	0.6	1.9	2.5
OXYGEN	TRACE	0.2	TRACE
ARGON	0.1	0.2	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.05	TRACE	0.09
HEATING VALUE*	1122	1049	1176
SPECIFIC GRAVITY	0.705	0.613	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10597 SAMPLE 9506	INDEX 10598 SAMPLE 9699	INDEX 10599 SAMPLE 9700
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	ROANE	TAYLOR	TAYLOR
FIELD	RICHARDSON	NOT GIVEN	NOT GIVEN
WELL NAME	RADAKER NO. 7122	NO. 6043	NO. 6137
LOCATION	SPENCER QUAD.	BOOTHS CREEK DISTRICT	BOOTHS CREEK DISTRICT
OWNER	HOPE NATURAL GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	02/23/14	04/28/18	09/27/43
SAMPLED	08/--/64	01/07/65	01/07/65
FORMATION	MISS-BEREA	DEVO-FIFTH	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2544	2412	977
WELLHEAD PRESSURE,PSIG	940	84	35
OPEN FLOW, MCFD	NOT GIVEN	5	33
COMPONENT, MOLE PCT			
METHANE	74.9	92.1	82.9
ETHANE	12.6	4.5	8.9
PROPANE	6.8	1.0	3.4
N-BUTANE	2.1	0.3	1.1
ISOBUTANE	0.8	0.3	0.8
N-PENTANE	0.5	0.1	0.4
ISOPENTANE	0.5	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.6
NITROGEN	1.3	1.1	1.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.09	0.01	0.10
HEATING VALUE*	1317	1079	1216
SPECIFIC GRAVITY	0.760	0.609	0.697

	INDEX 10600 SAMPLE 9378	INDEX 10601 SAMPLE 9483	INDEX 10602 SAMPLE 9676
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TUCKER	TUCKER
FIELD	CAANAN VALLEY	ETAM	HORTON
WELL NAME	J. G. KUYKENDALL NO. 454	INA E. NESTOR NO. 9924	USA-T-1
LOCATION	DRY FORK DISTRICT	LICKING DISTRICT	NOT GIVEN
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	HOPE NATURAL GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	03/25/46	04/28/55	08/21/64
SAMPLED	05/27/64	07/15/64	12/16/64
FORMATION	DEVO-ORISKANY	DEVO-ONONDAGA	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8250	4473	6822
WELLHEAD PRESSURE,PSIG	3175	1631	2630
OPEN FLOW, MCFD	4150	138	22000
COMPONENT, MOLE PCT			
METHANE	97.8	97.8	79.4
ETHANE	1.1	1.3	1.8
PROPANE	0.1	TRACE	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.7	17.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.05	0.04	0.42
HEATING VALUE*	1013	1014	842
SPECIFIC GRAVITY	0.565	0.564	0.640

	INDEX 10603 SAMPLE 4092	INDEX 10604 SAMPLE 4093	INDEX 10605 SAMPLE 13158
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TUCKER	TUCKER
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	KUYKENDALL NO. 1	KUYKENDALL NO. 1	MULLENAX NO. A-1
LOCATION	NOT GIVEN	NOT GIVEN	PARSONS QUADRANGLE
OWNER	OHIO OIL CO.	OHIO OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/15/45	08/15/45	12/11/71
SAMPLED	08/20/45	08/20/45	02/29/72
FORMATION	DEVO-ORISKANY	PENN-	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8000	8000	5455
WELLHEAD PRESSURE,PSIG	3200	3200	2645
OPEN FLOW, MCFD	1500	1500	28000
COMPONENT, MOLE PCT			
METHANE	97.6	98.3	79.0
ETHANE	1.8	1.4	1.8
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.3
NITROGEN	0.2	0.0	17.1
OXYGEN	0.1	0.1	0.4
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.06	0.05	0.41
HEATING VALUE*	1021	1021	869
SPECIFIC GRAVITY	0.568	0.564	0.653

	INDEX 10606 SAMPLE 4659	INDEX 10607 SAMPLE 9174	INDEX 10608 SAMPLE 9553
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TYLER	TYLER
FIELD	TUCKER	BRADEN STATION	SCHUTTE
WELL NAME	NO. 418	NELSON FORRESTER	MCCOY NO. 6173
LOCATION	NOT GIVEN	MCELROY DISTRICT	NOT GIVEN
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	QUAKER STATE OIL REF. CORP.	HOPE NATURAL GAS CO.
COMPLETED	12/23/48	01/20/60	05/15/22
SAMPLED	03/23/49	11/21/63	08/17/64
FORMATION	DEVO-ORISKANY	DEVO-GORDON	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8056	2726	2842
WELLHEAD PRESSURE,PSIG	2500	62	53
OPEN FLOW, MCFD	468	7	17
COMPONENT, MOLE PCT			
METHANE	96.6	58.5	64.3
ETHANE	1.2	16.8	19.7
PROPANE	0.1	12.4	9.7
N-BUTANE	0.1	4.6	2.3
ISOBUTANE	0.0	2.0	1.2
N-PENTANE	0.0	0.9	0.5
ISOPENTANE	0.0	1.1	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.8	0.4
NITROGEN	1.5	2.5	1.3
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.05	0.10	0.06
HEATING VALUE*	1007	1568	1437
SPECIFIC GRAVITY	0.572	0.934	0.836

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10609 SAMPLE 9458	INDEX 10610 SAMPLE 9449	INDEX 10611 SAMPLE 9177
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	ABBOTT-FRENCH CREEK	BUCKHANNON CENTURY	BUCKHANNON
WELL NAME	DELIA M. GOLDEN NO. 10188	J.V.MCDERMOTT FARM NO. 10509	W. S. GOULD NO. 593
LOCATION	BANK DISTRICT	UNION DISTRICT	MEADE DISTRICT
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	CUMBERLAND&ALLEGHENY GAS CO.
COMPLETED	08/19/59	10/04/63	12/19/60
SAMPLED	07/15/64	07/15/64	11/21/63
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-BENSON & RILEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4050	3964	4048
WELLHEAD PRESSURE,PSIG	790	1280	1330
OPEN FLOW, MCFD	1699	4387	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.5	90.3	90.5
ETHANE	6.7	6.4	6.0
PROPANE	1.5	1.4	1.6
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.0	0.8	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.07	0.06	0.10
HEATING VALUE*	1105	1100	1100
SPECIFIC GRAVITY	0.624	0.619	0.619

	INDEX 10612 SAMPLE 10369	INDEX 10613 SAMPLE 9379	INDEX 10614 SAMPLE 9664
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	BUCKHANNON	FRENCH CREEK	MEADE DISTRICT
WELL NAME	ALVIN TEAL QUEEN	O. G. NEELY NO. 583	29417 - NO. 1
LOCATION	WARREN DISTRICT	MEADE DISTRICT	MEADE DISTRICT
OWNER	ALLERTON MILLER	CUMBERLAND&ALLEGHENY GAS CO.	ALLERTON MILLER
COMPLETED	09/22/65	07/21/59	03/26/63
SAMPLED	01/06/66	05/26/64	12/10/64
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4408	3898	2230
WELLHEAD PRESSURE,PSIG	1720	1200	510
OPEN FLOW, MCFD	3000	222	2100
COMPONENT, MOLE PCT			
METHANE	88.3	91.7	88.9
ETHANE	7.1	5.4	7.0
PROPANE	2.1	1.3	1.8
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	0.8	0.6	0.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.06	0.08	0.07
HEATING VALUE*	1135	1090	1125
SPECIFIC GRAVITY	0.641	0.610	0.634

	INDEX 10615 SAMPLE 8617	INDEX 10616 SAMPLE 9380	INDEX 10617 SAMPLE 12208
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	PECKS RUN	ROCK CAVE	TALLMANSVILLE
WELL NAME	LUCILLE POST 10353	G. E. MEARNS NO. 538	GEORGE A. TENNEY A-393
LOCATION	NOT GIVEN	BANKS DISTRICT	WASHINGTON DISTRICT
OWNER	HOPE NATURAL GAS CO.	CUMBERLAND&ALLEGHENY GAS CO.	ALLEGHENY LAND & MINERAL CO.
COMPLETED	04/09/62	12/28/55	11/12/69
SAMPLED	07/23/62	05/26/64	02/16/70
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4530	4076	3922
WELLHEAD PRESSURE,PSIG	1540	1100	1500
OPEN FLOW, MCFD	25283	1202	4153
COMPONENT, MOLE PCT			
METHANE	89.9	89.3	90.1
ETHANE	6.4	7.0	5.6
PROPANE	1.7	2.0	1.7
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.6	0.3	1.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.07	0.07	0.05
HEATING VALUE*	1107	1129	1092
SPECIFIC GRAVITY	0.622	0.632	0.619

	INDEX 10618 SAMPLE 12215	INDEX 10619 SAMPLE 12396	INDEX 10620 SAMPLE 12397
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	TALLMANSVILLE	TALLMANSVILLE	TALLMANSVILLE
WELL NAME	GEORGE ROESSING NO. 2	GOODWIN NO. A-401	GOODWIN NO. A-401
LOCATION	WASHINGTON DISTRICT	WASHINGTON DISTRICT	WASHINGTON DISTRICT
OWNER	WESTEANS PETROLEUM, INC.	ALLEGHENY LAND & MINERAL CO.	ALLEGHENY LAND & MINERAL CO.
COMPLETED	10/22/69	06/03/70	06/03/70
SAMPLED	03/--/70	08/25/70	08/25/70
FORMATION	DEVO-BENSON	DEVO-FIFTH SAND	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3988	2181	3892
WELLHEAD PRESSURE,PSIG	1600	650	1340
OPEN FLOW, MCFD	2705	998	1400
COMPONENT, MOLE PCT			
METHANE	88.9	91.6	90.2
ETHANE	6.4	4.9	5.8
PROPANE	2.0	1.3	1.8
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	1.2	1.1
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.07	0.09	0.08
HEATING VALUE*	1105	1078	1091
SPECIFIC GRAVITY	0.629	0.605	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10621 SAMPLE 9381	INDEX 10622 SAMPLE 4554	INDEX 10623 SAMPLE 4592
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	WAYNE	WAYNE
FIELD	TURKEY RUN	BRANCHLAND	BRANCHLAND
WELL NAME	F. A. ALLMAN NO. 521	NO. 6181	U-6181
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CUMBERLAND&ALLEGHENY GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	05/23/55	NOT GIVEN	DRILL STEM TEST
SAMPLED	05/26/64	06/03/48	11/02/48
FORMATION	DEVO-FIFTH	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2655	7085	7164
WELLHEAD PRESSURE,PSIG	620	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1818	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.6	78.1	74.5
ETHANE	9.9	4.9	9.4
PROPANE	3.0	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.5	1.6	2.4
OXYGEN	TRACE	0.5	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	14.8	13.3
HELIUM	0.05	0.08	0.07
HEATING VALUE*	1183	879	923
SPECIFIC GRAVITY	0.667	0.732	0.742

	INDEX 10624 SAMPLE 4699	INDEX 10625 SAMPLE 9460	INDEX 10626 SAMPLE 9468
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	BRANCHLAND	CRUM-KERMIT	CRUM-KERMIT
WELL NAME	NO. 6181	WILSON COAL HAND CO. NO. 8	WILSON COAL LAND CO. NO. 54
LOCATION	NOT GIVEN	LINCOLN DISTRICT	LINCOLN DISTRICT
OWNER	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	NOT GIVEN	12/08/54	05/11/51
SAMPLED	04/14/49	07/10/64	07/09/64
FORMATION	NOT GIVEN	MISS-MAXTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7760	1337	2326
WELLHEAD PRESSURE,PSIG	NOT GIVEN	360	405
OPEN FLOW, MCFD	NOT GIVEN	141	11
COMPONENT, MOLE PCT			
METHANE	85.1	81.6	81.3
ETHANE	2.1	10.4	8.9
PROPANE	0.6	4.2	3.8
N-BUTANE	0.2	1.0	0.9
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	5.5	1.8	3.9
OXYGEN	0.5	0.1	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.5	0.1	TRACE
HELIUM	0.11	0.09	0.17
HEATING VALUE*	930	1184	1145
SPECIFIC GRAVITY	0.659	0.684	0.679

	INDEX 10627 SAMPLE 9469	INDEX 10628 SAMPLE 9471	INDEX 10629 SAMPLE 9473
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	CRUM-KERMIT	CRUM-KERMIT	CRUM-KERMIT
WELL NAME	WILSON COAL LAND CO. NO. 9	WILSON COAL LAND CO. NO. 54	WILSON COAL LAND CO. NO. 17
LOCATION	LINCOLN DISTRICT	LINCOLN DISTRICT	LINCOLN DISTRICT
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	12/28/49	05/11/51	04/17/30
SAMPLED	07/08/64	07/08/64	07/08/64
FORMATION	MISS-BIG LIME	DEVO-SHALE	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1219	2442	585
WELLHEAD PRESSURE,PSIG	402	340	335
OPEN FLOW, MCFD	81	154	2000
COMPONENT, MOLE PCT			
METHANE	80.9	78.2	81.8
ETHANE	10.3	11.7	9.9
PROPANE	4.7	5.3	4.1
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.0	2.6	2.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.10	0.08	0.11
HEATING VALUE*	1201	1205	1174
SPECIFIC GRAVITY	0.694	0.705	0.682

	INDEX 10630 SAMPLE 9579	INDEX 10631 SAMPLE 9647	INDEX 10632 SAMPLE 9455
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	CRUM-KERMIT	FORT GAY-HUBBARDS TOWN	HANY-COVE CREEK
WELL NAME	E. G. COLEMAN NO. 1	BARNEY ASBURY B-1	HOARD BALDWIN NO. 30
LOCATION	LINCOLN DISTRICT	BUTLER DISTRICT	STONEWALL DISTRICT
OWNER	ASHLAND OIL & REFINING CO.	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	09/26/43	06/17/58	05/13/43
SAMPLED	08/12/64	09/29/64	07/03/64
FORMATION	DEVO-SHALE	MISS-BEREA	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2186	2057	1220
WELLHEAD PRESSURE,PSIG	300	583	325
OPEN FLOW, MCFD	1107	208	166
COMPONENT, MOLE PCT			
METHANE	77.4	73.7	80.9
ETHANE	13.1	12.0	9.6
PROPANE	5.7	7.4	4.3
N-BUTANE	1.2	2.0	0.9
ISOBUTANE	0.2	0.7	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.4	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.8	3.0	3.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.07	0.16	0.12
HEATING VALUE*	1232	1281	1158
SPECIFIC GRAVITY	0.712	0.757	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10633 SAMPLE 9462		INDEX 10634 SAMPLE 9464		INDEX 10635 SAMPLE 9475	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	HANY-COVE CREEK		HANY-COVE CREEK		HANY-COVE CREEK	
WELL NAME	C.E. COUNTS NO. 1		C. E. COUNTS NO. 1		HOARD BALDWIN NO. 2	
LOCATION	GRANT DISTRICT		GRANT DISTRICT		GRANT DISTRICT	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	06/21/48		06/21/48		02/01/62	
SAMPLED	07/10/64		07/10/64		07/10/64	
FORMATION	MISS-BIG LIME		DEVO-SHALE		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1516		2386		1215	
WELLHEAD PRESSURE,PSIG	255		435		138	
OPEN FLOW, MCFD	65		183		208	
COMPONENT, MOLE PCT						
METHANE	83.9	----------	79.4	----------	83.9	----------
ETHANE	8.5		10.9		10.1	
PROPANE	3.1	----------	4.6	----------	3.1	----------
N-BUTANE	0.8		1.0		0.8	
ISOBUTANE	0.5	----------	0.4	----------	0.3	----------
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2	----------	0.2	----------	0.2	----------
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	2.4		3.0		1.0	
OXYGEN	TRACE	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0	----------	0.1	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	0.1	----------
HELIUM	0.09		0.12		0.07	
HEATING VALUE*	1154	----------	1184	----------	1176	----------
SPECIFIC GRAVITY	0.670		0.696		0.669	

	INDEX 10636 SAMPLE 9467		INDEX 10637 SAMPLE 9474		INDEX 10638 SAMPLE 9646	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	HERBERT		HERBERT		HERBERT	
WELL NAME	LUCRETIA KNIGHT NO. 1		O. J. SPURLOCK NO. 2		GYPSY WRIGHT NO. 1	
LOCATION	UNION DISTRICT		UNION DISTRICT		STONEWALL DISTRICT	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	06/09/61		09/04/59		12/16/59	
SAMPLED	07/08/64		07/09/64		09/29/64	
FORMATION	DEVO-CORNIFEROUS		SILU-BIG SIX		SILU-BIG SIX	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3160		3809		3879	
WELLHEAD PRESSURE,PSIG	780		860		1200	
OPEN FLOW, MCFD	3585		219		243	
COMPONENT, MOLE PCT						
METHANE	87.1	----------	86.5	----------	76.6	----------
ETHANE	4.3		4.6		2.6	
PROPANE	1.6	----------	1.8	----------	0.6	----------
N-BUTANE	0.6		0.7		0.3	
ISOBUTANE	0.3	----------	0.2	----------	0.2	----------
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.1	----------	0.1	----------	0.1	----------
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2	----------	0.2	----------	0.2	----------
NITROGEN	5.2		5.1		18.9	
OXYGEN	TRACE	----------	TRACE	----------	0.0	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2	----------	0.2	----------	TRACE	----------
HELIUM	0.16		0.20		0.35	
HEATING VALUE*	1050	----------	1063	----------	878	----------
SPECIFIC GRAVITY	0.636		0.643		0.668	

	INDEX 10639 SAMPLE 15690		INDEX 10640 SAMPLE 9470		INDEX 10641 SAMPLE 9465	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	LOCKWOOD E		LOST CREEK		LYNN-CRETE E	
WELL NAME	TRACT 1 NO.20530		KOONCE & ZIMMERMAN NO. 2		GUYAN OIL CO. NO. 4	
LOCATION	EAST LYNN DISTRICT		LINCOLN DISTRICT		STONEWALL DISTRICT	
OWNER	COLUMBIA GAS TRANS. CORP.		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	10/17/77		02/14/41		05/20/30	
SAMPLED	07/12/79		07/08/64		07/09/63	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		DEVO-SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1390		1171		1884	
WELLHEAD PRESSURE,PSIG	430		380		685	
OPEN FLOW, MCFD	3890		411		302	
COMPONENT, MOLE PCT						
METHANE	84.6	----------	81.1	----------	79.9	----------
ETHANE	6.2		8.6		10.0	
PROPANE	2.7	----------	3.8	----------	4.8	----------
N-BUTANE	0.5		0.8		1.0	
ISOBUTANE	0.2	----------	0.3	----------	0.2	----------
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	TRACE	----------	0.2	----------	0.2	----------
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1	----------	0.1	----------	0.1	----------
NITROGEN	5.1		4.6		3.4	
OXYGEN	0.0	----------	TRACE	----------	0.0	----------
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1	----------	0.1	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE	----------	0.1	----------	0.0	----------
HELIUM	0.27		0.12		0.14	
HEATING VALUE*	1071	----------	1133	----------	1172	----------
SPECIFIC GRAVITY	0.646		0.681		0.691	

	INDEX 10642 SAMPLE 9466		INDEX 10643 SAMPLE 4700		INDEX 10644 SAMPLE 9476	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	LYNN-CRETE E		NOT GIVEN		NOT GIVEN	
WELL NAME	CLYDE MILLER NO. 1		ISAAC B. SMITH, HRS. NO. 1		HOARD BALDWIN NO. 36	
LOCATION	STONEWALL DISTRICT		NOT GIVEN		STONEWALL DISTRICT	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		CHAPMERS OIL & GAS CO.		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	04/29/53		02/12/49		NOT GIVEN	
SAMPLED	07/09/64		NOT GIVEN		08/11/64	
FORMATION	DEVO-BROWN SHALE&CORNIFEROUS		SILU-CLINTON		NOT GIVEN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2096		4180		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	401		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	75		984		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	81.4	----------	67.3	----------	80.7	----------
ETHANE	8.6		1.2		9.8	
PROPANE	3.9	----------	0.4	----------	4.4	----------
N-BUTANE	0.8		0.2		1.1	
ISOBUTANE	0.2	----------	0.1	----------	0.7	----------
N-PENTANE	0.1		---		0.3	
ISOPENTANE	0.2	----------	0.0	----------	0.2	----------
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.0		0.2	
NITROGEN	4.3		29.5		2.3	
OXYGEN	TRACE	----------	0.2	----------	TRACE	----------
ARGON	TRACE		0.1		0.0	
HYDROGEN	0.1	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	TRACE	----------
HELIUM	0.13		0.20		0.17	
HEATING VALUE*	1132	----------	725	----------	1199	----------
SPECIFIC GRAVITY	0.677		0.690		0.697	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10645 SAMPLE 9323		INDEX 10646 SAMPLE 4423		INDEX 10647 SAMPLE 9456	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WETZEL	
FIELD	WAYNE DIVISION		WAYNE-LINCOLN		BIG RUN-BURCHFIELD	
WELL NAME	RAY STALEY NO. 666		C. E. COUNTS NO. 1		JACKSON LAMBERT NO. 818	
LOCATION	BUTLER DISTRICT		GRANT DISTRICT		CENTER DISTRICT	
OWNER	COMMONWEALTH GAS CORP.		OWENS, LIBBEY-OWENS GAS DEPT		HOPE NATURAL GAS CO.	
COMPLETED	05/06/60		10/29/47		--/--/06	
SAMPLED	04/23/64		02/12/48		07/15/64	
FORMATION	MISS-BEREA		MISS-LIME		DEVO-GORDON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1821		1516		2924	
WELLHEAD PRESSURE,PSIG	650		425		33	
OPEN FLOW, MCFD	189		NOT GIVEN		18	
COMPONENT, MOLE PCT						
METHANE	81.8		69.3		46.7	
ETHANE	5.8		25.6		23.5	
PROPANE	2.9		---		16.0	
N-BUTANE	0.8		---		5.1	
ISOBUTANE	0.1		---		2.9	
N-PENTANE	0.2		---		0.8	
ISOPENTANE	0.2		---		1.6	
CYCLOPENTANE	0.1		---		0.2	
HEXANES PLUS	0.1		---		0.9	
NITROGEN	7.1		4.2		2.1	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		---		0.0	
HYDROGEN	0.3		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE		0.3		0.1	
HELIUM	0.54		0.13		0.05	
HEATING VALUE*	1065		1161		1735	
SPECIFIC GRAVITY	0.663		0.704		1.034	

	INDEX 10648 SAMPLE 9440		INDEX 10649 SAMPLE 9453		INDEX 10650 SAMPLE 9690	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WETZEL		WETZEL		WETZEL	
FIELD	COBURN-EARNSHAW		KNOB FORK		NOT GIVEN	
WELL NAME	SAMUEL CUMMINGS NO. 761		PETER GLOVER FARM NO. 3		NO. 5129	
LOCATION	GRANT DISTRICT		CENTER DISTRICT		CHURCH DISTRICT	
OWNER	HOPE NATURAL GAS CO.		HOPE NATURAL GAS CO.		EQUITABLE GAS CO.	
COMPLETED	08/05/05		05/19/97		11/06/15	
SAMPLED	07/16/64		07/15/64		01/11/65	
FORMATION	DEVO-FOURTH SAND		MISS-BIG INJUN		DEVO-FOURTH SAND	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3085		1998		2888	
WELLHEAD PRESSURE,PSIG	78		16		85	
OPEN FLOW, MCFD	16		26		13	
COMPONENT, MOLE PCT						
METHANE	79.3		77.6		78.1	
ETHANE	11.7		9.8		12.9	
PROPANE	4.1		4.7		4.8	
N-BUTANE	1.1		2.0		1.1	
ISOBUTANE	0.9		1.1		0.9	
N-PENTANE	0.3		0.9		0.3	
ISOPENTANE	0.3		0.4		0.2	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.3		1.4		0.2	
NITROGEN	1.6		1.5		1.2	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.07		0.10		0.05	
HEATING VALUE*	1228		1323		1246	
SPECIFIC GRAVITY	0.710		0.767		0.716	

	INDEX 10651 SAMPLE 9694		INDEX 10652 SAMPLE 9695		INDEX 10653 SAMPLE 9696	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WETZEL		WETZEL		WETZEL	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. 5192		NO. 5414		NO. 5210	
LOCATION	CHURCH DISTRICT		CHURCH DISTRICT		CHURCH DISTRICT	
OWNER	EQUITABLE GAS CO.		EQUITABLE GAS CO.		EQUITABLE GAS CO.	
COMPLETED	07/20/16		05/07/26		10/01/16	
SAMPLED	01/11/65		01/11/65		01/11/65	
FORMATION	DEVO-GORDON		DEVO-FIFTH		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3351		3265		2004	
WELLHEAD PRESSURE,PSIG	51		25		72	
OPEN FLOW, MCFD	61		22		11	
COMPONENT, MOLE PCT						
METHANE	81.2		74.9		84.7	
ETHANE	10.3		14.5		7.8	
PROPANE	3.9		5.6		2.8	
N-BUTANE	1.0		1.6		1.0	
ISOBUTANE	0.9		1.1		0.6	
N-PENTANE	0.3		0.4		0.3	
ISOPENTANE	0.2		0.4		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.5		0.5		0.5	
NITROGEN	1.4		0.6		1.9	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.08		0.05		0.11	
HEATING VALUE*	1223		1318		1171	
SPECIFIC GRAVITY	0.703		0.757		0.676	

	INDEX 10654 SAMPLE 9697		INDEX 10655 SAMPLE 9698		INDEX 10656 SAMPLE 9477	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WETZEL		WETZEL		WETZEL	
FIELD	NOT GIVEN		NOT GIVEN		READER	
WELL NAME	NO. 1643		NO. 1624		JOSEPHINE BRAST NO. 1055	
LOCATION	GRANT DISTRICT		GRANT DISTRICT		GREENE DISTRICT	
OWNER	EQUITABLE GAS CO.		EQUITABLE GAS CO.		HOPE NATURAL GAS CO.	
COMPLETED	02/14/98		11/21/96		04/06/09	
SAMPLED	01/11/65		01/11/65		07/16/64	
FORMATION	DEVO-GORDON		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2674		1760		2123	
WELLHEAD PRESSURE,PSIG	49		41		33	
OPEN FLOW, MCFD	16		21		9	
COMPONENT, MOLE PCT						
METHANE	75.2		82.9		79.9	
ETHANE	11.4		7.8		10.0	
PROPANE	6.0		3.1		4.2	
N-BUTANE	2.4		1.2		1.3	
ISOBUTANE	1.3		0.8		0.9	
N-PENTANE	0.6		0.5		0.5	
ISOPENTANE	0.6		0.3		0.5	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.7		0.6		0.6	
NITROGEN	1.5		2.2		1.6	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.2		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.09		0.14		0.11	
HEATING VALUE*	1337		1197		1249	
SPECIFIC GRAVITY	0.776		0.695		0.723	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10657 SAMPLE 4941		INDEX 10658 SAMPLE 4871		INDEX 10659 SAMPLE 15528	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WIRT		WIRT		WIRT	
FIELD	KANAWHA-CLENDENIN		NOT GIVEN		PEE WEE	
WELL NAME	NO. 4552		T. P. BEARD NO. 1, SER. 1301		B. N. WISEMAN NO. 1	
LOCATION	NOT GIVEN		STEELE DISTRICT		TUCKER DISTRICT	
OWNER	UNITED FUEL GAS CO.		GODFREY L. CABOT, INC.		RAY RESOURCES	
COMPLETED	04/24/50		01/10/50		01/06/77	
SAMPLED	07/08/50		05/11/50		11/20/78	
FORMATION	DEVO-ORISKANY		DEVO-ORISKANY		MISS-BEREA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	5302		5360		1641	
WELLHEAD PRESSURE,PSIG	1980		1700		750	
OPEN FLOW, MCFD	462		10000		6500	
COMPONENT, MOLE PCT						
METHANE	84.6		85.1		85.8	
ETHANE	8.2		8.8		2.6	
PROPANE	2.5		2.9		0.9	
N-BUTANE	0.7		0.8		0.3	
ISOBUTANE	0.3		0.4		0.1	
N-PENTANE	0.2		0.3		0.1	
ISOPENTANE	TRACE		0.0		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	2.5		1.1		8.7	
OXYGEN	0.6		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	---		TRACE		0.3	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	TRACE		0.05		0.95	
HEATING VALUE*	1121		1162		967	
SPECIFIC GRAVITY	0.660		0.665		0.615	

	INDEX 10660 SAMPLE 4566		INDEX 10661 SAMPLE 4635		INDEX 10662 SAMPLE 5086	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WOOD		WOOD		WOOD	
FIELD	CHARLESTON 7-A		KANAWHA-CLENDENIN		KANAWHA-CLENDENIN	
WELL NAME	THOMPSON NO. 1069		NO. 6335		NO. 6651	
LOCATION	STEELE DISTRICT		16.5 MI. S PARKERSBURG		NOT GIVEN	
OWNER	COLUMBIAN CARBON CO.		UNITED FUEL GAS CO.		UNITED FUEL GAS CO.	
COMPLETED	08/12/48		08/30/48		01/24/51	
SAMPLED	09/20/48		10/29/48		08/06/51	
FORMATION	DEVO-L		DEVO-ORISKANY		-MONOCLINAL SLOPE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4943		5309		5205	
WELLHEAD PRESSURE,PSIG	1770		1750		410	
OPEN FLOW, MCFD	4000		2588		2659	
COMPONENT, MOLE PCT						
METHANE	73.0		75.9		82.0	
ETHANE	25.8		22.4		9.5	
PROPANE	---		---		3.7	
N-BUTANE	---		---		0.9	
ISOBUTANE	---		---		0.5	
N-PENTANE	---		---		0.3	
ISOPENTANE	---		---		0.0	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		0.3	
NITROGEN	0.7		1.0		2.5	
OXYGEN	0.3		0.4		0.2	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.2		0.0	
HELIUM	0.05		0.07		0.06	
HEATING VALUE*	1202		1170		1174	
SPECIFIC GRAVITY	0.687		0.673		0.684	

	INDEX 10663 SAMPLE 4656		INDEX 10664 SAMPLE 4732		INDEX 10665 SAMPLE 9491	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WOOD		WOOD		WOOD	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	JOHN HAGUE NO. 1, SER. 1281		G. L. CABOT NO. 2		BIG RUN OIL CO. NO. 8840	
LOCATION	NOT GIVEN		NOT GIVEN		WILLIAMS DISTRICT	
OWNER	GODFREY L. CABOT, INC.		UNITED CARBON CO.		HOPE NATURAL GAS CO.	
COMPLETED	10/03/48		03/02/49		03/--/44	
SAMPLED	01/14/49		05/10/49		07/16/64	
FORMATION	DEVO-ORISKANY		DEVO-ORISKANY		DEVO-SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	5089		4805		2782	
WELLHEAD PRESSURE,PSIG	1300		1340		210	
OPEN FLOW, MCFD	103		1000		37	
COMPONENT, MOLE PCT						
METHANE	85.1		84.1		80.3	
ETHANE	8.7		8.8		11.4	
PROPANE	2.7		2.9		4.3	
N-BUTANE	0.8		0.8		1.0	
ISOBUTANE	0.4		0.4		0.3	
N-PENTANE	0.2		0.3		0.2	
ISOPENTANE	0.1		0.1		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.3		0.3		0.2	
NITROGEN	1.4		2.1		1.8	
OXYGEN	0.1		0.1		TRACE	
ARGON	TRACE		0.1		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.1		0.1		TRACE	
HELIUM	0.05		0.05		0.09	
HEATING VALUE*	1158		1157		1208	
SPECIFIC GRAVITY	0.663		0.672		0.697	

	INDEX 10666 SAMPLE 4936		INDEX 10667 SAMPLE 4782		INDEX 10668 SAMPLE 4758	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WOOD		WOOD		WOOD	
FIELD	STEEL DISTRICT		STEEL DISTRICT POND CREEK		WOOD COUNTY	
WELL NAME	J. A. PUBLE NO. 1, GW-1143		C. W. MOORE NO. 1 GW-1124		BENJAMIN QUICK NO. 1	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	COLUMBIAN CARBON CO.		COLUMBIAN CARBON CO.		GODFREY L. CABOT, INC.	
COMPLETED	05/22/50		08/01/49		08/18/49	
SAMPLED	08/17/50		09/22/49		11/--/49	
FORMATION	DEVO-ORISKANY		DEVO-ORISKANY		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	5140		4884		5053	
WELLHEAD PRESSURE,PSIG	1225		1520		1780	
OPEN FLOW, MCFD	13000		954		174	
COMPONENT, MOLE PCT						
METHANE	85.1		84.0		83.1	
ETHANE	8.7		8.9		8.6	
PROPANE	2.9		3.0		2.8	
N-BUTANE	1.0		0.9		0.9	
ISOBUTANE	0.2		0.4		0.5	
N-PENTANE	0.3		0.2		0.2	
ISOPENTANE	0.2		0.4		0.2	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.3		0.3	
NITROGEN	1.0		1.7		2.9	
OXYGEN	0.2		0.1		0.3	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.05		0.05		0.05	
HEATING VALUE*	1145		1171		1144	
SPECIFIC GRAVITY	0.667		0.676		0.679	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10669 SAMPLE 4780	INDEX 10670 SAMPLE 9407	INDEX 10671 SAMPLE 9411
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WOOD	WYOMING	WYOMING
FIELD	WOOD COUNTY	BAILEYSVILLE	BAILEYSVILLE
WELL NAME	JACOB GATES NO. 1 SER. 1282	W. M. RITTER NO. 184	W. M. RITTER NO. 211
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	GODFREY L. CABOT, INC.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	03/03/49	04/06/60	01/15/64
SAMPLED	11/15/49	06/--/64	06/--/64
FORMATION	DEVO-ORISKANY	PENN-SALT SAND	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5225	1949	3265
WELLHEAD PRESSURE,PSIG	1600	535	850
OPEN FLOW, MCFD	NOT GIVEN	22800	1175
COMPONENT, MOLE PCT			
METHANE	84.2	96.9	95.8
ETHANE	8.9	2.1	2.9
PROPANE	2.9	0.3	0.3
N-BUTANE	0.9	0.0	TRACE
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	1.8	0.5	0.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.05	0.06	0.06
HEATING VALUE*	1164	1027	1030
SPECIFIC GRAVITY	0.674	0.570	0.576

	INDEX 10672 SAMPLE 9369	INDEX 10673 SAMPLE 9361	INDEX 10674 SAMPLE 9372
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	BIG HUFF	GILBERT	GILBERT
WELL NAME	NO. 7	SUE BAILEY NO. 1	NO. 20
LOCATION	NOT GIVEN	GILBERT QUAD.	NOT GIVEN
OWNER	CABOT CORP.	CITIES SERVICE OIL CO.	CABOT CORP.
COMPLETED	09/20/55	06/07/63	09/22/55
SAMPLED	05/12/64	05/08/64	05/12/64
FORMATION	MISS-BEREA	MISS-BEREA	MISS-MAXTON & BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3864	3460	2566
WELLHEAD PRESSURE,PSIG	430	810	235
OPEN FLOW, MCFD	100	838	13
COMPONENT, MOLE PCT			
METHANE	93.7	93.7	93.6
ETHANE	4.0	4.5	1.3
PROPANE	0.5	0.6	0.2
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	1.6	0.7	4.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	0.04	0.20
HEATING VALUE*	1037	1053	977
SPECIFIC GRAVITY	0.588	0.590	0.581

	INDEX 10675 SAMPLE 9739	INDEX 10676 SAMPLE 9523	INDEX 10677 SAMPLE 4571
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	GILBERT & PLUMLEY	MANN-OCEANA	NOT GIVEN
WELL NAME	G&P NO. 28, SER. NO. 1553	NO. 9023	W. H. WALKER NO. 1263
LOCATION	HUFF CREEK DISTRICT	OCEANA DISTRICT	NOT GIVEN
OWNER	CABOT CORP.	HOPE NATURAL GAS CO.	GODFREY L. CABOT, INC.
COMPLETED	11/06/64	11/01/46	05/21/48
SAMPLED	02/16/65	07/30/64	10/08/48
FORMATION	MISS-BEREA & RAVENCLIFF	MISS-BEREA	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4041	3608	2524
WELLHEAD PRESSURE,PSIG	820	810	750
OPEN FLOW, MCFD	10723	539	1594
COMPONENT, MOLE PCT			
METHANE	96.9	95.5	94.5
ETHANE	2.3	3.3	5.0
PROPANE	0.2	0.3	---
N-BUTANE	TRACE	0.1	---
ISOBUTANE	TRACE	0.0	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	0.4	0.6	0.0
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1028	1040	1047
SPECIFIC GRAVITY	0.568	0.578	0.583

	INDEX 10678 SAMPLE 4572	INDEX 10679 SAMPLE 4633	INDEX 10680 SAMPLE 9151
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	GOLDA HAYNES NO. 1272	LILLIE BARRETT NO. 9194	NO. 9015
LOCATION	NOT GIVEN	OCEANA DISTRICT	NOT GIVEN
OWNER	GODFREY L. CABOT, INC.	HOPE NATURAL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	05/27/48	03/26/48	09/24/63
SAMPLED	10/08/48	10/27/48	11/05/63
FORMATION	MISS-MAXTON	MISS-RAVENCLIFF	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1940	1548	3412
WELLHEAD PRESSURE,PSIG	NOT GIVEN	530	815
OPEN FLOW, MCFD	1679	2214	2116
COMPONENT, MOLE PCT			
METHANE	97.1	95.2	93.0
ETHANE	2.5	4.0	4.3
PROPANE	---	---	0.5
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	0.0	0.4	1.5
OXYGEN	0.3	0.2	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.07	0.05	0.10
HEATING VALUE*	1028	1036	1043
SPECIFIC GRAVITY	0.569	0.579	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10681 SAMPLE 9169	INDEX 10682 SAMPLE 9496	INDEX 10683 SAMPLE 4433
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	NOT GIVEN	NOT GIVEN	OCEANA
WELL NAME	W. M. RITTER NO. 181	NO. 10339	C. W. MURPHY NO. 1
LOCATION	NOT GIVEN	OCEANA DISTRICT	PINEVILLE DISTRICT
OWNER	ASHLAND OIL & REFINING CO.	HOPE NATURAL GAS CO.	GODFREY L. CABOT, INC.
COMPLETED	12/22/59	09/08/61	09/01/47
SAMPLED	11/15/63	07/07/64	01/08/48
FORMATION	MISS-BEREA	MISS-RAVENCLIFF	MISS--GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3509	1915	2359
WELLHEAD PRESSURE,PSIG	600	557	760
OPEN FLOW, MCFD	750	4282	1264
COMPONENT, MOLE PCT			
METHANE	97.3	92.3	94.7
ETHANE	1.7	4.5	4.2
PROPANE	0.2	0.9	---
N-BUTANE	0.0	0.2	---
ISOBUTANE	0.0	0.2	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	0.7	1.3	0.2
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.10	0.09	0.05
HEATING VALUE*	1021	1067	1035
SPECIFIC GRAVITY	0.567	0.605	0.582

	INDEX 10684 SAMPLE 9510	INDEX 10685 SAMPLE 9340	INDEX 10686 SAMPLE 9341
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	PINEVILLE	WELCHLANDS	WELCHLANDS
WELL NAME	NO. 9148	NO. 36	NO. 61
LOCATION	BAILEYSVILLE DISTRICT	SLAB FORK DISTRICT	SLAB FORK DISTRICT
OWNER	HOPE NATURAL GAS CO.	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.
COMPLETED	09/14/49	05/11/56	03/14/58
SAMPLED	07/27/64	04/30/64	04/30/64
FORMATION	MISS-BEREA	MISS-WEIR	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3340	3373	3429
WELLHEAD PRESSURE,PSIG	305	750	NOT GIVEN
OPEN FLOW, MCFD	848	360	300
COMPONENT, MOLE PCT			
METHANE	94.7	97.9	97.7
ETHANE	3.2	0.9	1.1
PROPANE	0.5	TRACE	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.1	0.8	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1036	1109	1109
SPECIFIC GRAVITY	0.583	0.560	0.561

	INDEX 10687 SAMPLE 4792	INDEX 10688 SAMPLE 4523	INDEX 10689 SAMPLE 4524
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	WYOMING	WYOMING COUNTY	WYOMING COUNTY
WELL NAME	W. M. RITTER NO. 79	NO. 9112	NO. 9156
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED PROD. CO., INC.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	02/24/49	08/17/47	12/02/47
SAMPLED	07/31/69	05/20/48	05/20/48
FORMATION	PENN-SALT SAND	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1887	3530	2556
WELLHEAD PRESSURE,PSIG	775	795	770
OPEN FLOW, MCFD	1641	3723	2055
COMPONENT, MOLE PCT			
METHANE	96.9	97.0	90.8
ETHANE	2.1	2.0	7.9
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.5	0.4	0.6
OXYGEN	TRACE	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.06	0.06	0.10
HEATING VALUE*	1031	1018	1061
SPECIFIC GRAVITY	0.572	0.570	0.600

	INDEX 10690 SAMPLE 4525	INDEX 10691 SAMPLE 2184	INDEX 10692 SAMPLE 1236
STATE	WEST VIRGINIA	WYOMING	WYOMING
COUNTY	WYOMING	ALBANY	BIG HORN
FIELD	WYOMING COUNTY	REX LAKE	ALKALI DOME
WELL NAME	NO. 9139	COUGHLIN NO. 3	NO. 1
LOCATION	NOT GIVEN	SEC. 26, T16N, R77W	SEC. 10, T55N, R95W
OWNER	HOPE NATURAL GAS CO.	OHIO OIL CO.	VICTOR COTNER
COMPLETED	12/15/47	06/21/30	04/04/25
SAMPLED	05/20/48	09/24/30	10/09/25
FORMATION	MISS-	CRET-SHANNON	CRET-GREYBULL
GEOLOGIC PROVINCE CODE	160	535	520
DEPTH, FEET	3417	385	380
WELLHEAD PRESSURE,PSIG	815	15	NOT GIVEN
OPEN FLOW, MCFD	1107	20	500
COMPONENT, MOLE PCT			
METHANE	96.3	85.3	80.0
ETHANE	2.9	3.0	1.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	11.6	16.5
OXYGEN	0.3	2.9	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	1.2
HELIUM	0.03	0.09	0.26
HEATING VALUE*	1027	868	837
SPECIFIC GRAVITY	0.575	0.620	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10693 SAMPLE 1238	INDEX 10694 SAMPLE 1239	INDEX 10695 SAMPLE 2140
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	BYRON	BYRON	BYRON
WELL NAME	HAVIG NO. 1	BYRON-UNION NO. 1	COZZENS NO. 1
LOCATION	SEC. 31, T56N, R96W	SEC. 22, T56N, R97W	SEC. 23, T56N, R97W
OWNER	CALIFORNIA CO.	BYRON-UNION OIL CO.	OHIO OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/10/25	10/10/25	09/12/30
FORMATION	CRET-TORCHLIGHT	CRET-TORCHLIGHT	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2734	2430	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	84.1	55.6
ETHANE	18.7	15.1	27.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	0.0	16.9
OXYGEN	0.4	0.4	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.4	0.2
HELIUM	TRACE	TRACE	0.26
HEATING VALUE*	1148	1123	1047
SPECIFIC GRAVITY	0.655	0.635	0.760

	INDEX 10696 SAMPLE 15791	INDEX 10697 SAMPLE 9408	INDEX 10698 SAMPLE 1240
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	DOBIE CREEK	FIVE MILE	GARLAND
WELL NAME	DOBIE CREEK NO. 11-1	TORGENSON NO. 1	NO. 3
LOCATION	SEC. 11, T49N, R94W	SEC. 29, T49N, R93W	SEC. 3, T55N, R97W
OWNER	AMERICAN QUASAR PETROLEUM CO	HUSKY OIL CO.	ALLEN OIL CO.
COMPLETED	12/24/78	04/15/61	NOT GIVEN
SAMPLED	07/25/79	06/19/64	10/13/25
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	NOT GIVEN	9026	1279
WELLHEAD PRESSURE,PSIG	2290	2451	NOT GIVEN
OPEN FLOW, MCFD	30	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	84.7	76.9
ETHANE	8.4	8.8	18.4
PROPANE	3.1	3.2	---
N-BUTANE	0.8	0.7	---
ISOBUTANE	0.5	0.7	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.2	1.2	1.9
OXYGEN	0.2	0.0	0.8
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	2.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1161	1170	1109
SPECIFIC GRAVITY	0.665	0.667	0.679

	INDEX 10699 SAMPLE 1241	INDEX 10700 SAMPLE 1242	INDEX 10701 SAMPLE 1243
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	CROSS GAS NO. 1	NO. 1 NEVILLE	NO. 2 NEVILLE
LOCATION	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	OHIO OIL CO.	MONTANA-WYOMING OIL CO.	MONTANA-WYOMING OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/13/25	10/13/25	10/13/25
FORMATION	CRET-CLOVERLY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1800	500	1560
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	76.1	72.1
ETHANE	16.2	22.3	27.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.8	0.9	0.1
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.6	0.3
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	1108	1171	1216
SPECIFIC GRAVITY	0.651	0.676	0.694

	INDEX 10702 SAMPLE 1244	INDEX 10703 SAMPLE 1245	INDEX 10704 SAMPLE 1246
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	LOVELL G & E NO. 1	NO. 1 GEO. EASTON	U. S. GOVT.
LOCATION	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	LOVELL GAS & ELECTRIC CO.	UTAH-WYOMING CONSOL. OIL CO.	UTAH-WYOMING CONSOL. OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/13/25	10/13/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1780	1640	1300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	73.3	74.1
ETHANE	16.5	25.7	23.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	0.1	1.9
OXYGEN	0.4	0.7	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1121	1203	1163
SPECIFIC GRAVITY	0.648	0.689	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10705 SAMPLE 1247	INDEX 10706 SAMPLE 1250	INDEX 10707 SAMPLE 1251
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	GEO. EASTON NO. 2	B. A. SESSIONS NO. 1	OLD COLONY
LOCATION	SEC. 33, T56N, R97W	SEC. 34, T56N, R97W	SEC. 33, T56N, R97W
OWNER	OHIO OIL CO.	MOUNTAIN OIL & GAS CO.	OHIO OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/25	10/14/25	10/14/25
FORMATION	CRET-CLOVERLY	NOT GIVEN	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1535	1830	1782
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.8	74.1	76.3
ETHANE	25.3	24.6	22.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	0.3	0.1
OXYGEN	0.5	0.6	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1191	1191	1182
SPECIFIC GRAVITY	0.690	0.685	0.673

	INDEX 10708 SAMPLE 1252	INDEX 10709 SAMPLE 2109	INDEX 10710 SAMPLE 2121
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	E. THOMAS NO. 1	CROSS GAS CO. NO. 2	CROSS GAS CO. NO. 3
LOCATION	SEC. 34, T55N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	CARTER OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	10/14/25	09/09/30	09/08/30
FORMATION	NOT GIVEN	PENN-TENSLEEP	JURA-MORRISON
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1276	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	40
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	90.5	84.2
ETHANE	7.0	6.2	15.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	1.8	TRACE
OXYGEN	0.7	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	1.2	0.2
HELIUM	TRACE	0.08	0.06
HEATING VALUE*	1053	1028	1129
SPECIFIC GRAVITY	0.599	0.604	0.633

	INDEX 10711 SAMPLE 2124	INDEX 10712 SAMPLE 2403	INDEX 10713 SAMPLE 9139
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	MANDERSON
WELL NAME	CROSS GAS CO. NO. 4	NO. 1	F32-19-6
LOCATION	SEC. 33, T56N, R97W	SEC. 28, T56N, R97W	SEC. 19, T50N, R92W
OWNER	OHIO OIL CO.	PORTLAND ASSOCIATES, INC.	MOBIL OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	09/13/61
SAMPLED	09/11/30	09/19/31	10/30/63
FORMATION	CRET-DAKOTA	MISS-MADISON	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5719
WELLHEAD PRESSURE,PSIG	75	1550	1200
OPEN FLOW, MCFD	NOT GIVEN	40000	1000
COMPONENT, MOLE PCT			
METHANE	71.3	83.5	80.8
ETHANE	22.5	9.7	12.4
PROPANE	---	---	3.5
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	5.7	5.5	0.9
OXYGEN	0.3	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	1.2	0.2
HELIUM	0.03	0.11	0.03
HEATING VALUE*	1125	1020	1216
SPECIFIC GRAVITY	0.691	0.638	0.695

	INDEX 10714 SAMPLE 13727	INDEX 10715 SAMPLE 1237	INDEX 10716 SAMPLE 5989
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	NOT GIVEN	SPENCE DOME	TORCHLIGHT W
WELL NAME	GOVERNMENT-TRIGG NO. 16-9	NO. 1	TORCHLIGHT UNIT WELL NO. 2
LOCATION	SEC. 9, T55N, R96W	SEC. 9, T54N, R94W	SEC. 14, T51N, R93W
OWNER	CARDINAL PETROLEUM CO.	MILWAUKEE MINES DEVEL. CO.	STANOLIND OIL & GAS CO.
COMPLETED	07/05/73	08/01/25	12/14/55
SAMPLED	NOT GIVEN	10/09/25	12/20/55
FORMATION	CRET-FRONTIER & PEAY	PENN-TENSLEEP	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9870	260	3140
WELLHEAD PRESSURE,PSIG	1578	NOT GIVEN	110
OPEN FLOW, MCFD	6500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	68.4	46.4
ETHANE	4.7	22.1	24.6
PROPANE	0.5	---	8.2
N-BUTANE	0.1	---	4.7
ISOBUTANE	0.0	---	2.2
N-PENTANE	0.0	---	1.3
ISOPENTANE	0.1	---	1.8
CYCLOPENTANE	TRACE	---	0.3
HEXANES PLUS	0.1	---	1.1
NITROGEN	2.2	3.1	0.0
OXYGEN	0.2	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.6	---	0.0
HYDROGEN SULFIDE**	0.0	---	9.3
CARBON DIOXIDE	1.4	6.1	0.3
HELIUM	0.04	TRACE	0.01
HEATING VALUE*	1039	1089	1616
SPECIFIC GRAVITY	0.619	0.739	1.019

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10717 SAMPLE 8969	INDEX 10718 SAMPLE 9000	INDEX 10719 SAMPLE 9005
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	DEAD HORSE CREEK	DEAD HORSE CREEK	DEAD HORSE CREEK
WELL NAME	GOVERNMENT NO. 1	GOVT. NISSELIUS NO. 1	BARLOW NO. 1
LOCATION	SEC. 30, T29N, R75W	SEC. 27, T48N, R75W	SEC. 22, T48N, R75W
OWNER	CALIFORNIA OIL CO.	GEORGE G. ANDERMAN	GEORGE G. ANDERMAN
COMPLETED	09/04/57	01/--/62	12/--/60
SAMPLED	05/24/63	06/07/63	06/07/63
FORMATION	CRET-PARKMAN	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	6791	6994	6879
WELLHEAD PRESSURE,PSIG	153	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	65	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.2	59.8	56.3
ETHANE	12.4	8.7	16.4
PROPANE	8.7	13.9	15.7
N-BUTANE	2.9	6.3	4.0
ISOBUTANE	1.3	2.5	2.2
N-PENTANE	0.5	1.0	0.8
ISOPENTANE	0.6	2.5	0.7
CYCLOPENTANE	0.1	0.4	0.3
HEXANES PLUS	0.4	1.3	0.8
NITROGEN	2.1	2.6	1.6
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	1.2
HELIUM	0.01	0.23	0.01
HEATING VALUE*	1372	1651	1597
SPECIFIC GRAVITY	0.815	0.998	0.959

	INDEX 10720 SAMPLE 12228	INDEX 10721 SAMPLE 13506	INDEX 10722 SAMPLE 15213
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	HILIGHT	INTERSTATE	KUEHNE SE
WELL NAME	MILLS NO. 10	LOWERY-MC CLURE NO. 1	KUEHNE RANCH UNIT NO. 8
LOCATION	SEC. 10, T44N, R71W	SEC. 31, T50N, R73W	SEC. 20, T54N, R69W
OWNER	INTERNATIONAL NUCLEAR CORP.	ANSCHUTZ CORP.	DAVIS OIL CO.
COMPLETED	01/04/70	09/07/72	NOT GIVEN
SAMPLED	03/20/70	01/16/73	02/--/78
FORMATION	CRET-MUDDY	CRET-MUDDY	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	9754	9597	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1600	2799	NOT GIVEN
OPEN FLOW, MCFD	5910	4300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.3	75.3	21.0
ETHANE	15.8	12.1	3.5
PROPANE	9.5	6.1	1.8
N-BUTANE	2.0	1.5	1.0
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.2	0.4	0.6
ISOPENTANE	0.4	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.6
NITROGEN	2.5	1.7	56.4
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.3
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.6	12.7
HELIUM	0.01	0.02	0.80
HEATING VALUE*	1336	1253	460
SPECIFIC GRAVITY	0.806	0.750	1.009

	INDEX 10723 SAMPLE 13580	INDEX 10724 SAMPLE 14714	INDEX 10725 SAMPLE 11304
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	NOT GIVEN	PORCUPINE	RECLUSE
WELL NAME	THUNDER BASIN FEDERAL NO. 1	BIRDSALL NO. 34-10	GREENOUGH GOVERNMENT NO. 5
LOCATION	SEC. 7, T42N, R70W	SEC. 10, T42N, R71W	SEC. 9, T56N, R74W
OWNER	YATES DRILLING CO.	BURLINGTON NORTHERN INC.	ATLANTIC RICHFIELD CO.
COMPLETED	NOT GIVEN	05/19/75	DRILL STEM TEST NO. 1
SAMPLED	04/--/73	06/27/76	02/14/68
FORMATION	CRET-MUDDY	CRET-TURNER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	10110	9430	7480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3100	NOT GIVEN
OPEN FLOW, MCFD	6500	1813	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.4	71.2	55.3
ETHANE	21.2	12.4	19.4
PROPANE	20.2	7.4	15.0
N-BUTANE	8.0	2.7	3.4
ISOBUTANE	5.3	1.3	1.9
N-PENTANE	1.8	0.8	0.6
ISOPENTANE	3.3	1.4	0.5
CYCLOPENTANE	0.2	0.3	0.2
HEXANES PLUS	1.2	0.9	0.4
NITROGEN	1.4	0.7	2.2
OXYGEN	0.2	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	1.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	2008	1421	1551
SPECIFIC GRAVITY	1.209	0.832	0.937

	INDEX 10726 SAMPLE 11426	INDEX 10727 SAMPLE 11436	INDEX 10728 SAMPLE 11467
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	RECLUSE	RECLUSE	RECLUSE
WELL NAME	GREENOUGH GOVERNMENT	FEDERAL BOW & ARROW NO. 1	BOW & ARROW NO. 2
LOCATION	SEC. 10, T56N, R74W	SEC. 25, T57N, R75W	SEC. 25, T57N, R75W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	04/07/68	DRILL STEM TEST	NOT GIVEN
SAMPLED	04/01/68	04/03/68	04/17/68
FORMATION	CRET-MUDDY	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	7560	7465	7604
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.6	20.2	59.3
ETHANE	17.9	11.9	17.5
PROPANE	17.1	26.8	13.9
N-BUTANE	5.7	20.6	3.6
ISOBUTANE	2.2	6.9	1.7
N-PENTANE	1.3	5.3	0.7
ISOPENTANE	1.4	4.5	0.7
CYCLOPENTANE	0.3	0.6	0.2
HEXANES PLUS	0.8	2.5	0.6
NITROGEN	0.2	0.5	1.1
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1732	2612	1552
SPECIFIC GRAVITY	1.011	1.566	0.915

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10729 SAMPLE 11626		INDEX 10730 SAMPLE 10055		INDEX 10731 SAMPLE 9023	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	CAMPBELL		CAMPBELL		CAMPBELL	
FIELD	RECLUSE		ROCKY POINT		ROZET	
WELL NAME	U.S. FAGERNESS NO. 2		NO. 2 NW 32		STATE OF WYOMING NO. 1	
LOCATION	SEC. 15, T56N, R76W		SEC. 34, T57N, R69W		NOT GIVEN	
OWNER	APACHE CORP.		MCCULLOCH OIL CORP. OF CALIF		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	09/--/67		04/28/63		08/09/60	
SAMPLED	08/24/68		NOT GIVEN		06/27/63	
FORMATION	CRET-MUDDY		CRET-MUDDY		CRET-MUDDY	
GEOLOGIC PROVINCE CODE	515		515		515	
DEPTH, FEET	7500		3710		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1600		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	19000		18000			
COMPONENT, MOLE PCT						
METHANE	75.3		88.8		77.4	
ETHANE	11.7		2.0		5.4	
PROPANE	7.2		3.1		6.8	
N-BUTANE	1.6		1.1		2.6	
ISOBUTANE	0.6		0.7		1.0	
N-PENTANE	0.2		0.3		0.6	
ISOPENTANE	0.2		0.3		0.3	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.1		0.2		0.5	
NITROGEN	2.3		3.1		4.4	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.4		0.7	
HELIUM	0.02		0.01		0.02	
HEATING VALUE*	1360		1112		1250	
SPECIFIC GRAVITY	0.743		0.656		0.762	

	INDEX 10732 SAMPLE 13967		INDEX 10733 SAMPLE 14012		INDEX 10734 SAMPLE 12183	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	CAMPBELL		CAMPBELL		CAMPBELL	
FIELD	SPOTTED HORSE		SPOTTED HORSE		WHITE	
WELL NAME	SKYLINE FEDERAL NO. 16-34		COONES B NO. 1		ATLANTIC-ANDERSON NO. 1	
LOCATION	SEC. 34, T55N, R75W		SEC. 27, T55N, R75W		SEC. 28, T55N, R71W	
OWNER	KISSINGER PETROLEUM CORP.		PHILLIPS PETROLEUM CO.		ATLANTIC RICHFIELD CO.	
COMPLETED	12/23/72		NOT GIVEN		DRILL STEM TEST NO. 1	
SAMPLED	03/28/74		05/25/74		NOT GIVEN	
FORMATION	CRET-MUDDY		CRET-MUDDY		CRET-MUDDY	
GEOLOGIC PROVINCE CODE	515		515		515	
DEPTH, FEET	8300		8072		6034	
WELLHEAD PRESSURE,PSIG	1400		1700		NOT GIVEN	
OPEN FLOW, MCFD	700		500000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	77.3		75.2		59.5	
ETHANE	11.7		11.5		9.5	
PROPANE	5.5		6.0		16.6	
N-BUTANE	1.2		1.6		5.6	
ISOBUTANE	0.6		0.9		3.1	
N-PENTANE	0.3		0.2		1.3	
ISOPENTANE	0.3		1.1		1.2	
CYCLOPENTANE	0.1		0.3		0.2	
HEXANES PLUS	0.2		0.6		0.6	
NITROGEN	1.4		1.3		2.3	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.2		0.0	
HELIUM	0.03		0.03		0.01	
HEATING VALUE*	1242		1305		1642	
SPECIFIC GRAVITY	0.732		0.771		0.978	

	INDEX 10735 SAMPLE 12852		INDEX 10736 SAMPLE 915		INDEX 10737 SAMPLE 7776	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	CAMPBELL		CARBON		CARBON	
FIELD	WILDCAT		ALLEN LAKE		BAGGS S	
WELL NAME	USA NO. 1-2		NO. 1		BAGGS UNIT NO. 8	
LOCATION	SEC. 2, T57N, R76W		SEC. NE1/4-34, T23, R79		SEC. 10, T12N, R92W	
OWNER	ATLANTIC RICHFIELD CO.		LARAMIE SYNDICATE		PHILLIPS PETROLEUM CO.	
COMPLETED	05/29/71		NOT GIVEN		12/31/59	
SAMPLED	NOT GIVEN		06/24/24		11/19/60	
FORMATION	NOT GIVEN		JURA-STRAY		CRET-LEWIS	
GEOLOGIC PROVINCE CODE	515		535		535	
DEPTH, FEET	7423		1685		4100	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		310		950	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	63.3		97.4		90.0	
ETHANE	6.8		0.0		4.1	
PROPANE	13.1		---		1.1	
N-BUTANE	6.0		---		0.2	
ISOBUTANE	2.7		---		0.2	
N-PENTANE	0.7		---		0.1	
ISOPENTANE	3.2		---		0.1	
CYCLOPENTANE	0.6		---		0.0	
HEXANES PLUS	0.9		---		TRACE	
NITROGEN	2.6		2.5		3.1	
OXYGEN	0.0		0.0		0.7	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		0.0		0.2	
HELIUM	0.01		0.02		0.03	
HEATING VALUE*	1428		987		1036	
SPECIFIC GRAVITY	0.969		0.564		0.613	

	INDEX 10738 SAMPLE 11242		INDEX 10739 SAMPLE 916		INDEX 10740 SAMPLE 7434	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	CARBON		CARBON		CARBON	
FIELD	BARREL SPRINGS		BELL SPRINGS		BELL SPRINGS	
WELL NAME	BARREL SPRINGS UNIT NO. 1		NO. 1		NO. 1	
LOCATION	SEC. 15, T16N, R93W		SEC. 6, T23N, R88W		SEC. 19, T23N, R88W	
OWNER	CLARK OIL & REFINING CO.		KASOMING OIL CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	10/13/66		NOT GIVEN		01/--/69	
SAMPLED	12/--/67		08/13/24		03/11/69	
FORMATION	CRET-ALMOND		NOT GIVEN		JURA-SUNDANCE	
GEOLOGIC PROVINCE CODE	515		535		535	
DEPTH, FEET	8729		1424		2706	
WELLHEAD PRESSURE,PSIG	2500		NOT GIVEN		1174	
OPEN FLOW, MCFD	1194		1000		8150	
COMPONENT, MOLE PCT						
METHANE	81.1		88.6		97.4	
ETHANE	7.6		1.1		1.0	
PROPANE	2.6		---		TRACE	
N-BUTANE	1.0		---		0.0	
ISOBUTANE	1.7		---		0.0	
N-PENTANE	0.7		---		0.0	
ISOPENTANE	1.2		---		0.0	
CYCLOPENTANE	TRACE		---		0.0	
HEXANES PLUS	0.1		---		0.0	
NITROGEN	1.9		6.1		1.7	
OXYGEN	1.1		3.5		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	TRACE		---		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.7		0.5		0.2	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1122		908		996	
SPECIFIC GRAVITY	0.685		0.608		0.566	

* GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10741 SAMPLE 14237	INDEX 10742 SAMPLE 15313	INDEX 10743 SAMPLE 7482
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	BLUE GAP	COAL GULCH	COW CREEK
WELL NAME	BLUE GAP UNIT II	CHAMPLIN 444 AMOCO A NO. 1	NO. 1-14
LOCATION	SEC. 7, T14N, R92W	SEC. 17, T17N, R93W	SEC. 14, T15N, R91W
OWNER	CIG EXPLORATION, INC.	AMOCO PRODUCTION CO.	CONTINENTAL OIL CO.
COMPLETED	09/13/74	03/15/78	12/08/59
SAMPLED	11/22/74	06/27/78	03/31/60
FORMATION	CRET-MESAVERDE	CRET-ALMOND	MIOC-DEEP CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9126	9168	2616
WELLHEAD PRESSURE,PSIG	3875	3950	1207
OPEN FLOW, MCFD	3980	2460	2050
COMPONENT, MOLE PCT			
METHANE	87.1	82.4	90.0
ETHANE	5.6	7.9	3.4
PROPANE	2.0	3.3	1.4
N-BUTANE	0.5	0.8	0.4
ISOBUTANE	0.6	0.7	0.1
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.3	0.4	0.1
NITROGEN	0.1	1.2	3.7
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	2.4	0.7
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1108	1166	1035
SPECIFIC GRAVITY	0.668	0.702	0.621

	INDEX 10744 SAMPLE 11755	INDEX 10745 SAMPLE 14795	INDEX 10746 SAMPLE 15270
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	COW CREEK	COW CREEK S	CRESTON UNIT
WELL NAME	COW CREEK NO. 2-13	ASHLAND FEDERAL NO. 13-22X	CRESTON III NO. 3
LOCATION	SEC. 13, T16N, R92W	SEC. 22, T16N, R91W	SEC. 5, T18N, R91W
OWNER	U. S. NATURAL RESOURCES INC.	EXETER EXPLORATION CO.	AMOCO PRODUCTION CO.
COMPLETED	06/1A/67	07/--/76	11/06/77
SAMPLED	02/04/69	09/24/76	04/07/78
FORMATION	PENN-CHEROKEE	CRET-FRONTIER	CRET-ERICSON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3237	7800	8253
WELLHEAD PRESSURE,PSIG	750	4000	3000
OPEN FLOW, MCFD	2000	10000	2979
COMPONENT, MOLE PCT			
METHANE	96.8	96.3	84.9
ETHANE	0.2	0.7	6.6
PROPANE	TRACE	0.3	2.5
N-BUTANE	0.0	0.0	0.7
ISOBUTANE	0.0	0.0	0.7
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.5
NITROGEN	1.3	0.2	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.5	2.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	984	996	1154
SPECIFIC GRAVITY	0.574	0.586	0.692

	INDEX 10747 SAMPLE 15013	INDEX 10748 SAMPLE 5029	INDEX 10749 SAMPLE 9640
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	DEEP CREEK	DEEP CREEK UNIT	DIAMOND DOME
WELL NAME	BROWN HILL UNIT NO. B-31	DEEP CREEK UNIT NO. 1	FEDERAL NO. 1
LOCATION	SEC. 31, T16N, R90W	SEC. 30, T16N, R90W	SEC. 6, T20N, R77W
OWNER	BENSON-MONTIN-GREER DRILLING	AMERADA PETROLEUM CORP.	SUNSET INTERNATION PET. CORP
COMPLETED	NOT GIVEN	10/08/50	07/--/53
SAMPLED	05/26/77	04/01/51	11/10/64
FORMATION	NOT GIVEN	CRET-MESAVERDE	CRET-SHANNON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	2432	1470
WELLHEAD PRESSURE,PSIG	NOT GIVEN	965	154
OPEN FLOW, MCFD	NOT GIVEN	3728	346
COMPONENT, MOLE PCT			
METHANE	98.4	98.2	97.5
ETHANE	0.5	0.5	0.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.3	0.6	1.9
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	0.3	0.1
HELIUM	TRACE	0.01	0.07
HEATING VALUE*	1008	1015	996
SPECIFIC GRAVITY	0.566	0.570	0.565

	INDEX 10750 SAMPLE 2103	INDEX 10751 SAMPLE 895	INDEX 10752 SAMPLE 224
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	DUTTON CREEK	EIGHT MILE LAKE	FERRIS
WELL NAME	NO. 6-X	NO. 1	NO. 1
LOCATION	SEC. 1, T16N, R78W	SEC. 2, T19N, R88W	SEC. 26, T26N, R87W
OWNER	MIDWEST REFINING CO.	MATFIELD OIL CO.	PRODUCERS AND REFINERS CORP.
COMPLETED	02/01/27	11/17/23	05/14/20
SAMPLED	09/03/30	06/25/24	04/07/20
FORMATION	CRET-SHANNON	CRET-DAKOTA	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	1600	3954	17
WELLHEAD PRESSURE,PSIG	235	1710	1000
OPEN FLOW, MCFD	750	21000	10000
COMPONENT, MOLE PCT			
METHANE	64.9	98.3	97.5
ETHANE	0.0	0.0	2.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	34.9	0.1	0.0
OXYGEN	0.0	0.5	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	1.0	0.4
HELIUM	0.10	TRACE	TRACE
HEATING VALUE*	657	996	1027
SPECIFIC GRAVITY	0.699	0.567	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10753 SAMPLE 2142	INDEX 10754 SAMPLE 3062	INDEX 10755 SAMPLE 15281
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	HATFIELD	HORNE VALLEY	HORSESHOE RIDGE
WELL NAME	NO. 2	HORN BROTHERS NO. 1	HORSESHOE RIDGE UNIT NO. 2
LOCATION	SEC. 35, T20N, R88W	SEC. 22, T22N, R78W	SEC. 1, T24N, R83W
OWNER	PRODUCERS & REFINERS CORP.	MARTIN & GAYLORD	ENERGY RESERVES GROUP, INC.
COMPLETED	09/24/28	12/--/39	03/06/78
SAMPLED	09/15/30	12/27/41	05/10/78
FORMATION	CRET-MUDDY	CRET-MUDDY	CRET-HATFIELD
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3749	750	2932
WELLHEAD PRESSURE,PSIG	1530	325	1081
OPEN FLOW, MCFD	15000	7000	4588
COMPONENT, MOLE PCT			
METHANE	96.7	96.8	99.5
ETHANE	0.0	2.3	0.1
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	2.3	0.5	0.3
OXYGEN	0.1	0.2	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.9	0.2	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	980	1022	1012
SPECIFIC GRAVITY	0.573	0.571	0.559

	INDEX 10756 SAMPLE 947	INDEX 10757 SAMPLE 2141	INDEX 10758 SAMPLE 2144
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	MAHONEY DOME	MAHONEY DOME	MAHONEY DOME
WELL NAME	NO. 2	NO. 2	NO. C-3
LOCATION	SEC. 33, T26, R88	SEC. 25, T26N, R88W	SEC. 34, T26N, R88W
OWNER	PRODUCERS & REFINERS CORP.	PRAIRIE OIL & GAS CO.	PRAIRIE OIL & GAS CO.
COMPLETED	11/03/29	02/04/29	04/25/27
SAMPLED	NOT GIVEN	09/16/30	09/12/30
FORMATION	JURA-SUNDANCE	CRET-DAKOTA	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2902	2663	2758
WELLHEAD PRESSURE,PSIG	1200	285	600
OPEN FLOW, MCFD	3000	2000	10000
COMPONENT, MOLE PCT			
METHANE	93.8	90.5	75.3
ETHANE	0.0	5.3	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.7	2.1	19.9
OXYGEN	0.5	0.1	2.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	1.9	2.8
HELIUM	0.03	0.02	0.07
HEATING VALUE*	950	1012	763
SPECIFIC GRAVITY	0.583	0.608	0.675

	INDEX 10759 SAMPLE 3063	INDEX 10760 SAMPLE 11227	INDEX 10761 SAMPLE 4284
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	MEDICINE BOW	MELTON	NOT GIVEN
WELL NAME	CROMBERG NO. 1	FEDERAL-MELTON NO. 1	BAGGS UNIT NO. 1
LOCATION	SEC. 25, T21N, R79W	SEC. 26, T22N, R86W	NOT GIVEN
OWNER	OHIO OIL CO.	FUNDAMENTAL OIL CORP.	KERR-MCGEE & PHILLIPS PET.
COMPLETED	02/--/36	11/01/65	NOT GIVEN
SAMPLED	12/26/41	11/21/67	03/25/47
FORMATION	JURA-SUNDANCE 1ST	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5259	5124	3770
WELLHEAD PRESSURE,PSIG	765	1400	NOT GIVEN
OPEN FLOW, MCFD	750	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	93.8	93.6
ETHANE	28.9	2.6	0.4
PROPANE	---	0.8	---
N-BUTANE	---	0.1	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	0.0	1.3	1.7
OXYGEN	0.2	0.1	0.3
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.2	4.0
HELIUM	0.00	0.05	TRACE
HEATING VALUE*	1234	1063	955
SPECIFIC GRAVITY	0.700	0.604	0.604

	INDEX 10762 SAMPLE 15099	INDEX 10763 SAMPLE 6916	INDEX 10764 SAMPLE 8113
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	NOT GIVEN	OBRIEN SPRINGS	OBRIEN SPRINGS
WELL NAME	CHAMPLIN 242 AMOCO A NO. 1	OBRIEN SPRINGS UNIT NO. 3	OBRIEN SPRINGS UNIT NO. 7
LOCATION	SEC. 1, T19N, R93W	SEC. 34, T25N, R86W	SEC. 34, T25N, R86W
OWNER	AMOCO PRODUCTION CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	10/02/76	10/03/58	06/07/61
SAMPLED	09/17/77	12/16/58	08/07/61
FORMATION	CRET-ALMOND	JURA-NUGGET	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9760	9418	4994
WELLHEAD PRESSURE,PSIG	3650	1603	1930
OPEN FLOW, MCFD	NOT GIVEN	5300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	95.5	95.6
ETHANE	7.9	0.9	2.0
PROPANE	2.8	0.2	0.2
N-BUTANE	1.6	0.1	TRACE
ISOBUTANE	1.6	0.5	0.1
N-PENTANE	1.2	0.1	TRACE
ISOPENTANE	1.1	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	1.1	0.1	TRACE
NITROGEN	0.2	1.0	1.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	2.8	1.3	0.8
HELIUM	0.01	0.10	0.10
HEATING VALUE*	1130	1014	1013
SPECIFIC GRAVITY	0.675	0.590	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSOPPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10765 SAMPLE 8453	INDEX 10766 SAMPLE 8595	INDEX 10767 SAMPLE 9359
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	OBRIEN SPRINGS	OBRIEN SPRINGS	OBRIEN SPRINGS
WELL NAME	OBRIEN SPRINGS UNIT NO. 1	OBRIEN SPRINGS UNIT NO. 1	OBRIEN SPRINGS UNIT NO. 7
LOCATION	SEC. 5, T24N, R86W	SEC. 5, T24N, R86W	SEC. 34, T25N, R86W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	09/15/61	09/28/61	04/27/64
SAMPLED	03/12/62	06/20/62	05/10/64
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3075	4000	4890
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1400	1525
OPEN FLOW, MCFD	NOT GIVEN	200	820
COMPONENT, MOLE PCT			
METHANE	97.6	97.7	94.2
ETHANE	1.2	1.2	3.2
PROPANE	0.1	0.1	0.5
N-BUTANE	0.1	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.2	0.3	0.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.02	0.14	0.08
HEATING VALUE*	1029	1018	1058
SPECIFIC GRAVITY	0.575	0.567	0.597

	INDEX 10768 SAMPLE 2100	INDEX 10769 SAMPLE 10097	INDEX 10770 SAMPLE 3026
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	ROCK CREEK	SEPARATION FLATS	SHERARD
WELL NAME	DIAMOND CATTLE NO. 4	UPPER BUZZARD RANCH 7-1	MARY E. CARTER NO. 1
LOCATION	SEC. 35, T20N, R78W	SEC. 7, T24N, R87W	SEC. 31, T25N, R88W
OWNER	OHIO OIL CO.	AMAX PETROLEUM CORP.	SINCLAIR WYOMING OIL CO.
COMPLETED	NOT GIVEN	05/12/64	10/17/43
SAMPLED	09/03/30	08/30/65	04/29/44
FORMATION	CRET-DAKOTA	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2740	2848	2838
WELLHEAD PRESSURE,PSIG	5	1225	1140
OPEN FLOW, MCFD	NOT GIVEN	6800	150
COMPONENT, MOLE PCT			
METHANE	2.4	95.6	95.0
ETHANE	93.6	1.6	3.1
PROPANE	---	0.4	---
N-BUTANE	---	TRACE	---
ISOBUTANE	---	TRACE	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	TRACE	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	TRACE	---
NITROGEN	3.5	0.9	0.3
OXYGEN	0.1	0.0	0.4
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	1.4	1.1
HELIUM	0.00	0.03	0.05
HEATING VALUE*	1702	1007	1018
SPECIFIC GRAVITY	1.033	0.583	0.583

	INDEX 10771 SAMPLE 12349	INDEX 10772 SAMPLE 12350	INDEX 10773 SAMPLE 15398
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	SUGAR CREEK	SUGAR CREEK	WAMSUTTER
WELL NAME	U.S.A. TROWBRIDGE NO. 1	U.S.A. TROWBRIDGE NO. 1	ECHO SPRINGS NO. 1-2
LOCATION	SEC. 36, T19N, R90W	SEC. 36, T19N, R90W	SEC. 2, T19N, R93W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	MARATHON OIL CO.
COMPLETED	06/--/68	06/--/68	NOT GIVEN
SAMPLED	08/07/70	08/07/70	10/06/78
FORMATION	CRET-FRONTIER	PENN-TENSLEEP	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9000	12000	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3348	3900
OPEN FLOW, MCFD	1750	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.7	76.6	80.3
ETHANE	1.4	1.7	7.0
PROPANE	0.3	0.6	3.8
N-BUTANE	0.1	0.3	1.2
ISOBUTANE	0.1	0.2	1.3
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.0	TRACE	0.7
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	TRACE	0.2	0.6
NITROGEN	1.0	9.6	0.3
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.7	0.0
CARBON DIOXIDE	1.0	9.5	4.0
HELIUM	0.01	0.20	TRACE
HEATING VALUE*	1014	866	1211
SPECIFIC GRAVITY	0.584	0.724	0.746

	INDEX 10774 SAMPLE 16034	INDEX 10775 SAMPLE 1892	INDEX 10776 SAMPLE 2101
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WAMSUTTER	WERTZ	WERTZ
WELL NAME	CHAMPLIN 222D NO. 1	NO. 7	NO. 8
LOCATION	SEC. 7, T19N, R93W	SEC. 7, T26N, R89W	SEC. 7, T26N, R89W
OWNER	AMOCO PRODUCTION CO.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	NOT GIVEN	08/17/29	08/06/29
SAMPLED	08/14/80	11/07/29	09/03/30
FORMATION	CRET-ALMOND	CRET-CLOVERLY	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8970	3637	4100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	1320
OPEN FLOW, MCFD	NOT GIVEN	22000	57000
COMPONENT, MOLE PCT			
METHANE	77.3	87.5	99.9
ETHANE	10.6	10.1	0.0
PROPANE	7.1	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.2	0.0	0.0
OXYGEN	0.0	0.2	0.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.2	2.2	0.0
HELIUM	0.01	0.00	0.07
HEATING VALUE*	1250	1067	1012
SPECIFIC GRAVITY	0.742	0.627	0.555

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10777 SAMPLE 2122	INDEX 10778 SAMPLE 2128	INDEX 10779 SAMPLE 10855
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WERTZ	WERTZ	WEST SIDE CANAL
WELL NAME	NO. 7	NO. 1	JONS NO. 1
LOCATION	SEC. 7, T26N, R89W	SEC. 7, T26N, R89W	SEC. 7, T32N, R91W
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	SUPERIOR OIL CO.
COMPLETED	08/17/29	09/23/20	10/03/66
SAMPLED	09/06/30	09/11/30	01/30/67
FORMATION	CRET-DAKOTA	CRET-FRONTIER	CRET-LANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3637	3427	3058
WELLHEAD PRESSURE,PSIG	1285	620	1280
OPEN FLOW, MCFD	22000	42000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.3	81.8	97.9
ETHANE	8.0	10.9	0.6
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.0	4.8	0.3
OXYGEN	0.1	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.5	2.2	1.0
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1058	1024	1006
SPECIFIC GRAVITY	0.609	0.650	0.570

	INDEX 10780 SAMPLE 10856	INDEX 10781 SAMPLE 10857	INDEX 10782 SAMPLE 2668
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CONVERSE
FIELD	WEST SIDE CANAL	WEST SIDE CANAL	DOUGLAS S
WELL NAME	JONS NO. 1	JONS NO. 1	SILVER FARM NO. 1
LOCATION	SEC. 7, T12N, R91W	SEC. 7, T12N, R91W	SEC. 33, T32N, R71W
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	WHITE ROCK OIL CO.
COMPLETED	10/03/66	10/03/66	NOT GIVEN
SAMPLED	01/30/67	01/30/67	03/25/34
FORMATION	CRET-FOX HILLS	CRET-LANCE	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	515
DEPTH, FEET	3396	2550	128
WELLHEAD PRESSURE,PSIG	1425	1160	21
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	96.8	96.5	87.6
ETHANE	1.6	1.6	3.2
PROPANE	0.5	0.4	---
N-BUTANE	0.2	0.3	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.5	0.5	8.6
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.7	0.1
HELIUM	0.01	0.01	0.07
HEATING VALUE*	1025	1027	945
SPECIFIC GRAVITY	0.579	0.580	0.608

	INDEX 10783 SAMPLE 8933	INDEX 10784 SAMPLE 11657	INDEX 10785 SAMPLE 9107
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	FLAT TOP	FLAT TOP	GLENROCK S
WELL NAME	REESE A-2	GOVERNMENT NO. 1	NO. 89
LOCATION	SEC. 24, T33N, R69W	SEC. 33, T33N, R68W	SEC. 17, T33N, R75W
OWNER	TOWER OIL & GAS CO. OF TEXAS	KANSAS-NEBRASKA NAT. GAS CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/09/52
SAMPLED	04/04/62	10/02/68	10/08/63
FORMATION	CRET-LANCE CREEK	CRET-TEAPOT	CRET-MUDDY U
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	4497	7050	6210
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1950	NOT GIVEN
OPEN FLOW, MCFD	848	2188	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.3	78.9	2.8
ETHANE	9.3	9.2	17.7
PROPANE	5.3	6.7	38.8
N-BUTANE	1.7	1.7	20.5
ISOBUTANE	0.7	0.9	5.1
N-PENTANE	0.9	0.5	5.5
ISOPENTANE	0.5	0.3	7.5
CYCLOPENTANE	0.1	TRACE	0.6
HEXANES PLUS	0.3	0.1	3.3
NITROGEN	1.8	1.6	0.0
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	0.06	TRACE
HEATING VALUE*	1256	1256	2879
SPECIFIC GRAVITY	0.722	0.727	1.726

	INDEX 10786 SAMPLE 9108	INDEX 10787 SAMPLE 9109	INDEX 10788 SAMPLE 9366
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	GLENROCK S	GLENROCK S	LAPRELLE
WELL NAME	NO. 130	NO. 57	JEFF HAWKS A -GOVT. NO. 1
LOCATION	SEC. 19, T33N, R75W	SEC. 16, T33N, R75W	SEC. 25, T33N, R71W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	TEXACO INC.
COMPLETED	10/24/52	06/17/52	05/17/64
SAMPLED	10/08/63	10/08/63	05/15/64
FORMATION	CRET-MUDDY L	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	6459	6445	11577
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3895
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	9.0	43.0	81.9
ETHANE	33.7	15.8	10.5
PROPANE	35.1	21.5	3.6
N-BUTANE	10.3	8.3	0.9
ISOBUTANE	4.0	TRACE	0.5
N-PENTANE	2.2	TRACE	0.2
ISOPENTANE	2.1	7.8	0.1
CYCLOPENTANE	0.8	0.7	0.2
HEXANES PLUS	2.3	1.6	0.4
NITROGEN	0.0	0.9	0.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	1.5
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	2420	2055	1199
SPECIFIC GRAVITY	1.469	1.186	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10789 SAMPLE 3046	INDEX 10790 SAMPLE 9521	INDEX 10791 SAMPLE 13456
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CROOK	CROOK
FIELD	SHAWNEE CREEK	DONKEY CREEK	MILLER CREEK N
WELL NAME	SALISBURY NO. 2	E.C. STEVENSON NO. 10	RAUDSEP NO. 6-16
LOCATION	SEC. 27, T32N, R69W	SEC. 29, T50N, R68W	SEC. 6, T51N, R68W
OWNER	WYOMING SOUTHERN OIL CO.	TEXACO INC.	EXETER DRILLING & EXPL. CO.
COMPLETED	05/--/37	10/--/61	07/27/71
SAMPLED	12/13/41	08/03/64	10/20/72
FORMATION	OLIG-WHITE RIVER	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	453	5863	6024
WELLHEAD PRESSURE,PSIG	162	NOT GIVEN	1030
OPEN FLOW, MCFD	2250	NOT GIVEN	10050
COMPONENT, MOLE PCT			
METHANE	95.6	53.3	98.1
ETHANE	2.0	17.1	0.1
PROPANE	---	18.2	0.1
N-BUTANE	---	5.0	TRACE
ISOBUTANE	---	1.6	0.4
N-PENTANE	---	0.9	0.0
ISOPENTANE	---	0.9	0.2
CYCLOPENTANE	---	0.3	0.1
HEXANES PLUS	---	0.6	TRACE
NITROGEN	0.4	1.6	0.3
OXYGEN	0.2	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	0.5	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1004	1660	1024
SPECIFIC GRAVITY	0.585	0.988	0.576

	INDEX 10792 SAMPLE 1994	INDEX 10793 SAMPLE 2120	INDEX 10794 SAMPLE 13589
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	ALKALI BUTTE	ALKALI BUTTE	ALKALI BUTTE
WELL NAME	GOVERNMENT NO. 1	STATE NO. 1	ALKALI BUTTE UNIT NO. 8
LOCATION	SEC. 1, T34N, R95W	SEC. 36, T34N, R95W	SEC. 26, T34N, R95W
OWNER	TEXAS PRODUCTION CO.	TEXAS PRODUCTION CO.	TEXACO INC.
COMPLETED	11/13/28	DRILL STEM TEST	12/28/71
SAMPLED	04/10/30	09/08/30	04/17/73
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-MUDDY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4151	4381	4572
WELLHEAD PRESSURE,PSIG	600	1905	2050
OPEN FLOW, MCFD	NOT GIVEN	15000	11600
COMPONENT, MOLE PCT			
METHANE	94.6	95.2	95.4
ETHANE	4.5	4.3	2.5
PROPANE	---	---	0.8
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.2	0.0	0.4
OXYGEN	0.3	0.1	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1039	1041	1055
SPECIFIC GRAVITY	0.582	0.580	0.588

	INDEX 10795 SAMPLE 4178	INDEX 10796 SAMPLE 8477	INDEX 10797 SAMPLE 8965
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	BEAVER CREEK	BEAVER CREEK	BEAVER CREEK
WELL NAME	UNIT NO. 3	BEAVER CREEK NO. 10	MADISON NO. 38
LOCATION	SEC. 14, T33N, R96W	SEC. 16, T33N, R96W	SEC. 10, T33N, R96W
OWNER	STANOLIND OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/24/46	03/22/62	07/21/55
SAMPLED	12/01/46	03/23/62	05/23/63
FORMATION	CRET-DAKOTA	PERM-PHOSPHORIA	MISS-
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9108	11209	10935
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7219	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.5	81.8	45.4
ETHANE	3.7	5.7	25.7
PROPANE	---	1.8	12.5
N-BUTANE	---	0.8	6.2
ISOBUTANE	---	0.4	2.4
N-PENTANE	---	0.2	1.2
ISOPENTANE	---	0.2	2.1
CYCLOPENTANE	---	0.1	0.2
HEXANES PLUS	---	0.2	1.7
NITROGEN	0.0	2.5	1.4
OXYGEN	0.2	0.2	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	5.1	0.0
CARBON DIOXIDE	0.6	1.0	1.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1034	1082	1771
SPECIFIC GRAVITY	0.580	0.687	1.062

	INDEX 10798 SAMPLE 8966	INDEX 10799 SAMPLE 8967	INDEX 10800 SAMPLE 8968
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	BEAVER CREEK	BEAVER CREEK	BEAVER CREEK
WELL NAME	TENSLEEP NO. 22	FRONTIER NO. 6	NO. 18
LOCATION	SEC. 14, T33N, R96W	SEC. 15, T33N, R96W	SEC. 10, T33N, R96W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/04/54	01/19/47	--/--/52
SAMPLED	05/23/63	05/23/63	05/23/63
FORMATION	PENN-	CRET-	CRET-
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	10817	6770	3706
WELLHEAD PRESSURE,PSIG	100	2300	NOT GIVEN
OPEN FLOW, MCFD	20	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.3	92.1	82.4
ETHANE	16.3	4.6	5.1
PROPANE	5.6	1.5	8.1
N-BUTANE	2.4	0.4	1.4
ISOBUTANE	1.4	0.3	0.7
N-PENTANE	0.6	TRACE	0.2
ISOPENTANE	0.6	0.2	0.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	1.2	0.5	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	1.7	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1343	1092	1267
SPECIFIC GRAVITY	0.805	0.613	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10801 SAMPLE 912		INDEX 10802 SAMPLE 12400		INDEX 10803 SAMPLE 8695	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	BUFFALO ANTICLINE		CASTLE GARDEN		CONANT CREEK	
WELL NAME	NO. 1		BRUNEL FEDERAL NO. 1		UNIT NO. 33-16	
LOCATION	SEC. 17, T27N, R95W		SEC. 13, T34N, R91W		SEC. 16, T35N, R90W	
OWNER	KASOMING OIL CO.		EL PASO OIL & GAS CO.		SHELL OIL CO.	
COMPLETED	06/09/20		06/10/70		08/02/62	
SAMPLED	08/13/20		08/30/70		10/04/62	
FORMATION	NOT GIVEN		CRET-SHANNON		CRET-LANCE	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	NOT GIVEN		3000		5600	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1105		1300	
OPEN FLOW, MCFD	NOT GIVEN		3306		625000	
COMPONENT, MOLE PCT						
METHANE	87.9		96.4		98.6	
ETHANE	6.9		1.9		0.1	
PROPANE	---		0.5		0.1	
N-BUTANE	---		0.2		0.1	
ISOBUTANE	---		0.0		TRACE	
N-PENTANE	---		0.0		TRACE	
ISOPENTANE	---		0.0		0.0	
CYCLOPENTANE	---		0.0		TRACE	
HEXANES PLUS	---		0.0		0.0	
NITROGEN	2.1		0.5		0.9	
OXYGEN	0.2		0.1		0.0	
ARGON	---		TRACE		0.0	
HYDROGEN	---		0.1		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	2.7		0.4		0.1	
HELIUM	0.00		0.01		0.01	
HEATING VALUE*	1019		1031		1007	
SPECIFIC GRAVITY	0.629		0.578		0.562	

	INDEX 10804 SAMPLE 8414		INDEX 10805 SAMPLE 7603		INDEX 10806 SAMPLE 8251	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	DINTY MOORE RESERVOIR		DOLIS HILLS		FRENCHIE DRAW	
WELL NAME	UNIT NO. 23-3		DOLIS HILL FED. UNIT NO. 1		FRENCHIE DRAW NO. 1	
LOCATION	SEC. 3, T37N, R92W		SEC. 21, T30N, R91W		SEC. 21, T37N, R89W	
OWNER	SHELL OIL CO.		GULF OIL CORP.		HUMBLE OIL & REFINING CO.	
COMPLETED	05/12/61		10/31/59		08/18/61	
SAMPLED	02/17/62		07/13/60		10/19/61	
FORMATION	EOCE-FORT UNION		CRET-LANCE		EOCE-FORT UNION L	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	7877		6780		9885	
WELLHEAD PRESSURE,PSIG	1400		2800		3490	
OPEN FLOW, MCFD	2591		21000		5074	
COMPONENT, MOLE PCT						
METHANE	78.7		50.3		85.7	
ETHANE	9.9		7.6		7.1	
PROPANE	5.3		14.2		2.3	
N-BUTANE	1.6		11.6		0.4	
ISOBUTANE	1.5		3.7		0.7	
N-PENTANE	0.6		4.1		0.1	
ISOPENTANE	0.6		4.8		0.2	
CYCLOPENTANE	TRACE		0.8		0.3	
HEXANES PLUS	0.2		2.9		0.5	
NITROGEN	0.3		0.0		0.2	
OXYGEN	TRACE		0.1		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		0.3		2.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1270		2073		1144	
SPECIFIC GRAVITY	0.742		1.221		0.678	

	INDEX 10807 SAMPLE 8835		INDEX 10808 SAMPLE 8415		INDEX 10809 SAMPLE 5645	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	FRENCHIE DRAW		HOWARD RANCH		KIRBY DRAW	
WELL NAME	UNIT NO. 2-B		UNIT NO. 23-15		UNIT NO. 1	
LOCATION	SEC. 21, T37N, R90W		SEC. 15, T39N, R93W		SEC. 27, T33N, R95W	
OWNER	HUMBLE OIL & REFINING CO.		SHELL OIL CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	06/25/62		01/04/61		06/10/54	
SAMPLED	01/04/63		02/17/62		06/22/54	
FORMATION	EOCE-FORT UNION		CRET-LANCE		CRET-LAKOTA	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	10115		7610		5500	
WELLHEAD PRESSURE,PSIG	3838		3800		2140	
OPEN FLOW, MCFD	2900		2163		10000	
COMPONENT, MOLE PCT						
METHANE	98.4		84.7		94.5	
ETHANE	2.8		8.9		2.3	
PROPANE	0.7		3.3		0.6	
N-BUTANE	0.3		0.6		0.2	
ISOBUTANE	TRACE		0.8		TRACE	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.3		0.4		0.2	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.4		0.4		0.1	
NITROGEN	0.2		0.4		1.7	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.3		0.2	
HELIUM	0.01		0.01		0.04	
HEATING VALUE*	1076		1196		1039	
SPECIFIC GRAVITY	0.607		0.679		0.592	

	INDEX 10810 SAMPLE 10379		INDEX 10811 SAMPLE 6850		INDEX 10812 SAMPLE 5057	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	KIRK		LITTLE DOME		LONG CREEK	
WELL NAME	GOVERNMENT-PADON NO. 1		TRIBAL NO. 1		GOVT. HEANEY NO. 1	
LOCATION	SEC. 6, T2AN, R92W		SEC. 15, T5N, R1W		SEC. 5, T31N, R94W	
OWNER	BOBBY W. BURNS, ET AL.		PETROLEUM, INC.		BRITISH-AMERICAN OIL CO.	
COMPLETED	05/31/65		07/04/58		10/16/50	
SAMPLED	02/22/66		10/30/58		06/26/51	
FORMATION	CRET-CLOVERLY		TRIA-CROW MOUNTAIN		PERM-PHOSPHORIA	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	2568		1300		5186	
WELLHEAD PRESSURE,PSIG	914		1100		2259	
OPEN FLOW, MCFD	13500		5		10250	
COMPONENT, MOLE PCT						
METHANE	96.8		83.9		81.3	
ETHANE	0.6		6.2		9.5	
PROPANE	0.9		1.3		3.0	
N-BUTANE	0.0		0.4		0.8	
ISOBUTANE	0.0		0.4		0.7	
N-PENTANE	0.0		0.0		0.3	
ISOPENTANE	0.0		0.2		0.0	
CYCLOPENTANE	0.0		TRACE		0.1	
HEXANES PLUS	0.0		0.1		0.5	
NITROGEN	1.5		7.2		3.0	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.2		---	
CARBON DIOXIDE	0.1		TRACE		0.7	
HELIUM	TRACE		0.20		0.03	
HEATING VALUE*	1015		1149		1161	
SPECIFIC GRAVITY	0.573		0.647		0.694	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10813 SAMPLE 16074	INDEX 10814 SAMPLE 12343	INDEX 10815 SAMPLE 15284
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	LYSITE	MADDEN	MADDEN DEEP
WELL NAME	LONG BUTTE NO. 1	MADDEN DEEP UNIT NO. 1	CHEVRON NO. 1-1
LOCATION	SEC. 32, T39N, R91W	SEC. 2, T38N, R90W	SEC. 1, T38N, R91W
OWNER	MONSANTO CO.	SOHIO PETROLEUM CO.	MONSANTO CO.
COMPLETED	NOT GIVEN	01/07/70	12/10/77
SAMPLED	09/16/80	07/28/70	05/25/78
FORMATION	CRET-MESAVERDE	EOCE-FORT UNION	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	10020	14709
WELLHEAD PRESSURE,PSIG	7250	3750	6025
OPEN FLOW, MCFD	NOT GIVEN	14000	12400
COMPONENT, MOLE PCT			
METHANE	95.7	93.3	94.2
ETHANE	0.2	1.9	0.2
PROPANE	TRACE	0.5	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	0.1	0.7	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.9	2.8	5.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	973	1026	958
SPECIFIC GRAVITY	0.593	0.615	0.605

	INDEX 10816 SAMPLE 15614	INDEX 10817 SAMPLE 16152	INDEX 10818 SAMPLE 15590
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MADDEN DEEP	MONETA HILLS	MUDDY RIDGE
WELL NAME	FLATT NO. 1	MONETA NO. 1-29	TRIBAL-CHEVRON NO. 30-11
LOCATION	SEC. 28, T39N, R91W	SEC. 29, T38N, R90W	SEC. 30, T4N, R3E
OWNER	MONSANTO CO.	COLUMBIA GAS DEVELOPMENT	TOM BROWN, INC.
COMPLETED	02/18/79	01/25/80	12/15/78
SAMPLED	05/03/79	12/12/80	03/21/79
FORMATION	CRET-CODY	CRET-SHANNON	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	17859	20065	12435
WELLHEAD PRESSURE,PSIG	10432	10000	4200
OPEN FLOW, MCFD	2103	1000	1700
COMPONENT, MOLE PCT			
METHANE	96.9	95.8	90.4
ETHANE	0.1	0.2	5.5
PROPANE	TRACE	TRACE	1.2
N-BUTANE	0.0	TRACE	0.3
ISOBUTANE	0.0	TRACE	0.3
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.3	0.3	0.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	3.4	1.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	983	983	1087
SPECIFIC GRAVITY	0.581	0.595	0.629

	INDEX 10819 SAMPLE 15591	INDEX 10820 SAMPLE 1814	INDEX 10821 SAMPLE 2112
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MUDDY RIDGE	MUSKRAT	MUSKRAT
WELL NAME	TRIBAL-CHEVRON NO. 30-11	NO. 1	CONNOGHAN NO. 1
LOCATION	SEC. 30, T4N, R3E	SEC. 34, T34N, R92W	SEC. 34, T34N, R92W
OWNER	TOM BROWN, INC.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	12/15/78	12/--/28	10/07/28
SAMPLED	03/21/79	07/15/29	09/10/30
FORMATION	CRET-MESAVERDE	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	11880	4340	4387
WELLHEAD PRESSURE,PSIG	3600	1625	1410
OPEN FLOW, MCFD	1200	47682	47682
COMPONENT, MOLE PCT			
METHANE	85.8	97.6	97.5
ETHANE	8.2	1.6	0.2
PROPANE	2.9	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.3	0.4	2.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.0	0.5	0.2
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	1154	1017	991
SPECIFIC GRAVITY	0.663	0.569	0.567

	INDEX 10822 SAMPLE 3044	INDEX 10823 SAMPLE 6424	INDEX 10824 SAMPLE 6804
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MUSKRAT	MUSKRAT	MUSKRAT
WELL NAME	NO. B-2	UNIT NO. B-3	FEDERAL-TRAVIS NO. 1
LOCATION	SEC. 4, T33N, R92W	SEC. 7, T33N, R91W	SEC. 13, T34N, R91W
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	07/--/38	07/10/57	06/09/58
SAMPLED	12/09/41	10/25/57	09/17/58
FORMATION	CRET-LAKOTA	CRET-FRONTIER	CRET-SHANNON
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	5306	4304	2784
WELLHEAD PRESSURE,PSIG	2150	1767	1298
OPEN FLOW, MCFD	40000	5950	4
COMPONENT, MOLE PCT			
METHANE	94.7	97.1	93.3
ETHANE	4.7	0.7	4.1
PROPANE	---	0.0	1.2
N-BUTANE	---	0.1	0.4
ISOBUTANE	---	0.0	0.2
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	0.2	0.6	0.2
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	1.3	0.2
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1044	1004	1084
SPECIFIC GRAVITY	0.582	0.576	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10825 SAMPLE 9096		INDEX 10826 SAMPLE 4373		INDEX 10827 SAMPLE 4706	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	MUSKRAT		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. 7		EAST ANTELOPE NO. 1		UNIT NO. 8	
LOCATION	SEC. 1, T33N, R92W		SEC. 26, T27N, R93W		NOT GIVEN	
OWNER	SINCLAIR OIL & GAS CO.		CONTINENTAL OIL CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	04/26/63		NOT GIVEN		NOT GIVEN	
SAMPLED	10/--/63		11/18/47		NOT GIVEN	
FORMATION	PERM-PHOSPHORIA		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	7342		2015		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1090		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	68.1		94.0		67.7	
ETHANE	9.6		0.4		30.6	
PROPANE	3.0		---		---	
N-BUTANE	1.5		---		---	
ISOBUTANE	0.6		---		---	
N-PENTANE	0.5		---		---	
ISOPENTANE	0.6		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.6		---		---	
NITROGEN	13.8		5.1		1.2	
OXYGEN	1.7		0.3		0.1	
ARGON	0.1		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.2		0.2		0.4	
HELIUM	0.05		0.01		0.03	
HEATING VALUE*	1085		1059		1234	
SPECIFIC GRAVITY	0.769		0.581		0.715	

	INDEX 10828 SAMPLE 4707		INDEX 10829 SAMPLE 7844		INDEX 10830 SAMPLE 9095	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. C-7		UNIT 14-12		FEDERAL TRAVIS NO. 1	
LOCATION	NOT GIVEN		SEC. 12, T3N, R2E		SEC. 13, T34N, R91W	
OWNER	BRITISH AMERICAN OIL CO.		SHELL OIL CO.		SINCLAIR OIL & GAS CO.	
COMPLETED	NOT GIVEN		08/07/60		06/09/58	
SAMPLED	NOT GIVEN		02/0A/61		09/05/63	
FORMATION	NOT GIVEN		EOCE-FORT UNION		CRET-SHANNON	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	NOT GIVEN		3938		2784	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1450		1298	
OPEN FLOW, MCFD	NOT GIVEN		1949		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	83.9		96.1		92.6	
ETHANE	15.7		3.0		4.4	
PROPANE	---		TRACE		1.5	
N-BUTANE	---		TRACE		0.3	
ISOBUTANE	---		0.2		0.3	
N-PENTANE	---		TRACE		TRACE	
ISOPENTANE	---		TRACE		0.2	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.1		TRACE	
NITROGEN	0.4		0.4		0.3	
OXYGEN	---		0.0		TRACE	
ARGON	---		TRACE		0.0	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	---		0.2		0.3	
HELIUM	0.02		0.02		0.01	
HEATING VALUE*	1141		1039		1085	
SPECIFIC GRAVITY	0.634		0.578		0.608	

	INDEX 10831 SAMPLE 12309		INDEX 10832 SAMPLE 15977		INDEX 10833 SAMPLE 16035	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	NOT GIVEN		PAVILLION		PAVILLION	
WELL NAME	SHOSHONI NO. 1		USA-TRIBAL NO. 22-10		SHELL TRIBAL NO. 22-10	
LOCATION	SEC. 21, T3AN, R93W		SEC. 10, T3N, R2E		SEC. 10, T3N, R2E	
OWNER	DIAMOND SHAMROCK CORP.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	10/17/69		12/05/79		12/05/79	
SAMPLED	06/30/70		05/29/80		08/11/80	
FORMATION	EOCE-FORT UNION		EOCE-FORT UNION		EOCE-WIND RIVER	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	12385		4819		3274	
WELLHEAD PRESSURE,PSIG	3550		1801		461	
OPEN FLOW, MCFD	4750		2431		2431	
COMPONENT, MOLE PCT						
METHANE	80.8		94.9		96.2	
ETHANE	10.6		3.7		2.9	
PROPANE	3.3		0.3		0.2	
N-BUTANE	0.5		0.1		0.1	
ISOBUTANE	0.9		0.1		0.1	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.2		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.2		0.5		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.2		0.3		TRACE	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1164		1056		1044	
SPECIFIC GRAVITY	0.704		0.591		0.578	

	INDEX 10834 SAMPLE 1955		INDEX 10835 SAMPLE 9192		INDEX 10836 SAMPLE 13395	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	PILOT BUTTE		PILOT BUTTE		POISON CREEK	
WELL NAME	DYKEMON NO. 1		TRIBAL D NO. 2		DAVISON NO. 6-1	
LOCATION	SEC. 22, T3N, R1W-IND.RES.		SEC. 15, T3N, R1W		SEC. 6, T36N, R93W	
OWNER	KINNEY COASTAL OIL CO.		BRITISH AMERICAN OIL CO.		J. M. HUBER CORP.	
COMPLETED	DRILL STEM TEST		04/13/61		07/21/72	
SAMPLED	03/11/30		11/29/63		09/25/72	
FORMATION	CRET-MUDDY		CRET-MUDDY		EOCE-FORT UNION	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	3340		3330		6713	
WELLHEAD PRESSURE,PSIG	1000		690		2465	
OPEN FLOW, MCFD	80000		NOT GIVEN		5600	
COMPONENT, MOLE PCT						
METHANE	72.6		83.3		92.6	
ETHANE	14.9		10.1		4.3	
PROPANE	---		2.8		1.4	
N-BUTANE	---		0.9		0.3	
ISOBUTANE	---		0.2		0.5	
N-PENTANE	---		TRACE		TRACE	
ISOPENTANE	---		0.6		0.1	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.1		0.1	
NITROGEN	10.3		1.9		0.2	
OXYGEN	0.2		0.0		TRACE	
ARGON	---		0.0		0.0	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.4	
HELIUM	0.36		0.06		0.01	
HEATING VALUE*	1022		1165		1088	
SPECIFIC GRAVITY	0.681		0.671		0.610	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10837 SAMPLE 11791	INDEX 10838 SAMPLE 11831	INDEX 10839 SAMPLE 8723
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	PONY CREEK	PONY CREEK	RIVERTON DOME
WELL NAME	PONY CREEK UNIT NO. 1	PONY CREEK NO. 1	TRIBAL NO. 8
LOCATION	SEC. 1, T37N, R91W	SEC. 1, T37N, R91W	SEC. 31, T1S, R5E
OWNER	BUTTES GAS & OIL CO.	BUTTES GAS & OIL CO.	ATLANTIC REFINING CO.
COMPLETED	10/17/68	10/17/68	NOT GIVEN
SAMPLED	03/11/69	04/16/69	10/13/62
FORMATION	EOCE-FORT UNION	EOCE-FORT UNION	CRET-CODY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	8842	8842	4669
WELLHEAD PRESSURE,PSIG	2600	2600	6
OPEN FLOW, MCFD	1000	1648	3
COMPONENT, MOLE PCT			
METHANE	61.3	77.1	88.8
ETHANE	19.5	11.1	4.7
PROPANE	8.8	3.8	1.7
N-BUTANE	1.6	0.9	0.4
ISOBUTANE	2.3	0.7	0.3
N-PENTANE	0.5	0.2	TRACE
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.4	0.4	TRACE
NITROGEN	0.0	0.3	2.7
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.0	4.7	1.1
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1184	1190	1056
SPECIFIC GRAVITY	0.671	0.745	0.628

	INDEX 10840 SAMPLE 8724	INDEX 10841 SAMPLE 8757	INDEX 10842 SAMPLE 8765
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 8	TRIBAL NO. 8	TRIBAL 1-96 NO. 8
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	DRILL STEM TEST
SAMPLED	10/12/62	11/06/62	11/16/62
FORMATION	CRET-CODY	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4606	9307	9517
WELLHEAD PRESSURE,PSIG	778	NOT GIVEN	745
OPEN FLOW, MCFD	2400	35	7260
COMPONENT, MOLE PCT			
METHANE	89.1	94.7	93.3
ETHANE	5.3	3.6	3.4
PROPANE	2.4	0.5	1.0
N-BUTANE	0.9	TRACE	0.3
ISOBUTANE	0.6	TRACE	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	0.5	0.5	0.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1141	1041	1077
SPECIFIC GRAVITY	0.644	0.584	0.609

	INDEX 10843 SAMPLE 8778	INDEX 10844 SAMPLE 8816	INDEX 10845 SAMPLE 9025
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 8	TRIBAL NO. 8	TRIBAL NO. 10
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 25, T1S, R4E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	07/31/63
SAMPLED	11/23/62	NOT GIVEN	07/31/63
FORMATION	CRET-LAKOTA	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9631	NOT GIVEN	9444
WELLHEAD PRESSURE,PSIG	7	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	93.8	97.1
ETHANE	2.0	3.3	1.7
PROPANE	0.4	0.9	0.4
N-BUTANE	0.1	0.3	0.2
ISOBUTANE	TRACE	0.3	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	TRACE	0.5	0.0
NITROGEN	0.7	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1027	1095	1031
SPECIFIC GRAVITY	0.579	0.611	0.573

	INDEX 10846 SAMPLE 9040	INDEX 10847 SAMPLE 9054	INDEX 10848 SAMPLE 9057
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 9	TRIBAL NO. 9	TRIBAL NO. 9
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	07/12/63	07/21/63	DRILL STEM TEST
SAMPLED	07/12/63	07/21/63	07/31/63
FORMATION	CRET-FRONTIER 1ST	CRET-FRONTIER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	8374	8971	9716
WELLHEAD PRESSURE,PSIG	3531	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	183	2750	80
COMPONENT, MOLE PCT			
METHANE	94.3	91.4	95.1
ETHANE	3.8	5.0	3.5
PROPANE	0.9	1.6	0.6
N-BUTANE	0.3	0.6	0.1
ISOBUTANE	TRACE	0.2	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.6	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1065	1102	1045
SPECIFIC GRAVITY	0.593	0.620	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10849 SAMPLE 9064	INDEX 10850 SAMPLE 9179	INDEX 10851 SAMPLE 10617
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 9	TRIBAL NO. 9	TRIBAL 1-96 NO. 14
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 36, T1S, R4E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC RICHFIELD CO.
COMPLETED	NOT GIVEN	08/05/63	06/15/66
SAMPLED	08/11/63	08/05/63	06/15/66
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-CODY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9170	9934	4652
WELLHEAD PRESSURE,PSIG	1642	NOT GIVEN	1825
OPEN FLOW, MCFD	6	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.8	95.3	90.7
ETHANE	5.8	3.6	5.2
PROPANE	2.3	0.2	2.0
N-BUTANE	0.4	0.0	0.6
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	13.0	0.8	0.4
OXYGEN	2.2	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	945	1034	1124
SPECIFIC GRAVITY	0.683	0.577	0.631

	INDEX 10852 SAMPLE 10618	INDEX 10853 SAMPLE 10905	INDEX 10854 SAMPLE 10907
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL 1-96 NO. 14	TRIBAL NO. 15	TRIBAL NO. 15
LOCATION	SEC. 36, T1S, R4E	SEC. 25, T1S, R4E	SEC. 25, T1S, R4E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	06/15/66	NOT GIVEN	NOT GIVEN
SAMPLED	06/15/66	03/22/67	03/21/67
FORMATION	CRET-MESAVERDE	CRET-CODY	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4160	4632	2374
WELLHEAD PRESSURE,PSIG	1690	2140	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	81.4	79.9
ETHANE	1.6	5.4	8.3
PROPANE	0.1	2.4	3.2
N-BUTANE	TRACE	0.5	0.3
ISOBUTANE	TRACE	0.5	0.6
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.9	7.7	6.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	1.1	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1011	1035	1077
SPECIFIC GRAVITY	0.588	0.666	0.676

	INDEX 10855 SAMPLE 10912	INDEX 10856 SAMPLE 11135	INDEX 10857 SAMPLE 11136
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 15	TRIBAL NO. 16	TRIBAL NO. 16
LOCATION	SEC. 25, T1S, R4E	SEC. 30, T1S, R5E	SEC. 30, T1S, R5E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	04/06/67	09/19/67	09/19/67
FORMATION	CRET-SHANNON	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	5935	2259	2276
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	85.7	61.4
ETHANE	3.2	3.3	11.7
PROPANE	0.5	0.7	3.6
N-BUTANE	0.0	0.2	1.5
ISOBUTANE	0.0	0.4	2.9
N-PENTANE	0.0	TRACE	0.9
ISOPENTANE	0.0	0.3	0.6
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.0	0.2	1.0
NITROGEN	1.2	7.1	12.1
OXYGEN	0.0	1.5	2.8
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.2	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.3
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1038	993	1202
SPECIFIC GRAVITY	0.580	0.640	0.839

	INDEX 10858 SAMPLE 12229	INDEX 10859 SAMPLE 9939	INDEX 10860 SAMPLE 12645
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME E	RIVERTON E
WELL NAME	TRIBAL NO. 18	TRIBAL 1 NO. 1	TRIBAL 32 NO. 6
LOCATION	SEC. 30, T1S, R5E	SEC. 1, T1S, R5E	SEC. 32, T1N, R6E
OWNER	ATLANTIC RICHFIELD CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/27/70	03/08/65	11/16/70
SAMPLED	04/--/70	06/15/65	01/30/71
FORMATION	EOCE-WINDRIVER	CRET-FRONTIER	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2172	9548	13666
WELLHEAD PRESSURE,PSIG	1392	4700	2650
OPEN FLOW, MCFD	3155	15300	10700
COMPONENT, MOLE PCT			
METHANE	87.0	96.3	78.9
ETHANE	4.4	1.3	0.2
PROPANE	1.4	0.3	0.1
N-BUTANE	0.3	TRACE	TRACE
ISOBUTANE	0.8	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.7	TRACE	0.0
CYCLOPENTANE	0.7	TRACE	0.1
HEXANES PLUS	1.9	0.1	0.2
NITROGEN	2.6	1.0	14.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	5.4
CARBON DIOXIDE	1.2	0.7	0.5
HELIUM	0.01	0.01	0.22
HEATING VALUE*	1161	1019	865
SPECIFIC GRAVITY	0.666	0.580	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10861 SAMPLE 14190	INDEX 10862 SAMPLE 227	INDEX 10863 SAMPLE 1300
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON E	SAND DRAW	SAND DRAW
WELL NAME	TRIBAL NO. 41-20	NO. 1	NO. 3
LOCATION	SEC. 20, T1S, R6E	SEC. 10, T32N, R95W	SEC. 15, T32N, R95W
OWNER	ENERGETICS, INC.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	03/26/74	03/06/18	10/27/24
SAMPLED	10/24/74	03/11/20	09/17/26
FORMATION	CRET-CLOVERLY&JURA-MORRISON	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	8860	2427	2295
WELLHEAD PRESSURE,PSIG	5071	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	95.3	93.3
ETHANE	2.3	3.0	4.9
PROPANE	0.8	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.5	1.0	0.7
OXYGEN	0.0	0.3	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	0.3	1.1
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1047	1019	1033
SPECIFIC GRAVITY	0.589	0.577	0.592

	INDEX 10864 SAMPLE 2095	INDEX 10865 SAMPLE 2117	INDEX 10866 SAMPLE 2550
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	SAND DRAW	SAND DRAW
WELL NAME	NO. 9	NO. 3	NO. 10
LOCATION	SEC. 15, T32, R95	SEC. 15, T32N, R95W	SEC. 14, T32N, R95W
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	11/05/29	01/01/24	10/04/31
SAMPLED	08/21/30	09/09/30	09/20/32
FORMATION	CRET-FRONTIER	CRET-FRONTIER	JURA-MORRISON
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2880	2422	4290
WELLHEAD PRESSURE,PSIG	935	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	45241	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	98.5	84.0
ETHANE	1.6	1.1	11.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	3.6
OXYGEN	0.1	0.1	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.4	0.3
HELIUM	0.03	0.01	0.03
HEATING VALUE*	1013	1018	1055
SPECIFIC GRAVITY	0.574	0.565	0.633

	INDEX 10867 SAMPLE 9091	INDEX 10868 SAMPLE 9092	INDEX 10869 SAMPLE 9093
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	SAND DRAW	SAND DRAW
WELL NAME	NO. 1-23	NO. 11-15	NO. 2
LOCATION	SEC. 23, T32N, R95W	SEC. 15, T32N, R95W	SEC. 10, T32N, R95W
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	08/22/55	NOT GIVEN	06/18/54
SAMPLED	09/10/63	09/10/63	09/10/63
FORMATION	CRET-FRONTIER	JURA-MORRISON	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2588	4284 510	7266 1926
WELLHEAD PRESSURE,PSIG	381	4000	5800
OPEN FLOW, MCFD	1350		
COMPONENT, MOLE PCT			
METHANE	97.1	94.8	82.5
ETHANE	1.5	2.4	6.7
PROPANE	0.4	0.4	2.1
N-BUTANE	0.1	0.2	1.0
ISOBUTANE	0.1	0.1	0.6
N-PENTANE	TRACE	TRACE	0.3
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.4	1.5	5.0
OXYGEN	TRACE	TRACE	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.3
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.01	0.03	0.03
HEATING VALUE*	1037	1042	1113
SPECIFIC GRAVITY	0.577	0.590	0.683

	INDEX 10870 SAMPLE 9094	INDEX 10871 SAMPLE 4184	INDEX 10872 SAMPLE 9190
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	STEAMBOAT BUTTE	STEAMBOAT BUTTE
WELL NAME	NO. 13-10	TRIBAL E LEASE NO. 6	TRIBAL C NO. 7
LOCATION	SEC. 10, T32N, R95W	SEC. 5, T3N, R1W	SEC. 32, T4N, R1W
OWNER	SINCLAIR OIL & GAS CO.	BRITISH AMERICAN OIL CO.	BRITISH AMERICAN OIL CO.
COMPLETED	10/17/42	NOT GIVEN	09/06/63
SAMPLED	09/10/63	11/10/46	11/29/63
FORMATION	CRET-LAKOTA	PENN-	CRET-FRONTIER 1ST
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4310	7233	2816
WELLHEAD PRESSURE,PSIG	352	NOT GIVEN	970
OPEN FLOW, MCFD	NOT GIVEN	13000	9500
COMPONENT, MOLE PCT			
METHANE	91.7	0.0	96.8
ETHANE	1.8	4.1	1.5
PROPANE	0.4	---	0.3
N-BUTANE	0.1	---	0.1
ISOBUTANE	0.1	---	0.1
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	TRACE
NITROGEN	4.9	95.2	0.8
OXYGEN	0.3	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.03	0.43	0.02
HEATING VALUE*	991	73	1030
SPECIFIC GRAVITY	0.601	0.969	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10873 SAMPLE 9191		INDEX 10874 SAMPLE 8227		INDEX 10875 SAMPLE 8252	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	STEAMBOAT BUTTE		WILDCAT		WILDCAT	
WELL NAME	TRIBAL E NO. 20		POISON CREEK UNIT NO. 1		FRENCHIE DRAW NO. 1	
LOCATION	SEC. 5, T3N, R1W		SEC. 32, T37N, R93W		SEC. 21, T37N, R89W	
OWNER	BRITISH AMERICAN OIL CO.		HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	07/03/62		08/22/61		08/18/61	
SAMPLED	11/29/63		10/05/61		10/19/61	
FORMATION	CRET-FRONTIER 1ST		EOCE-FORT UNION		EOCE-FORT UNION L	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	2820		5432		9150	
WELLHEAD PRESSURE,PSIG	900		2500		3100	
OPEN FLOW, MCFD	2900		2447		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	97.0		86.6		86.2	
ETHANE	1.5		7.1		7.8	
PROPANE	0.2		2.8		2.3	
N-BUTANE	TRACE		0.6		0.5	
ISOBUTANE	TRACE		0.6		0.6	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	TRACE		0.2		0.2	
NITROGEN	0.8		0.3		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		1.2		1.5	
HELIUM	0.02		0.01		0.02	
HEATING VALUE*	1023		1149		1136	
SPECIFIC GRAVITY	0.572		0.663		0.660	

	INDEX 10876 SAMPLE 8979		INDEX 10877 SAMPLE 8985		INDEX 10878 SAMPLE 8987	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	OCEAN LAKE GOVT. NO. 1		OCEAN LAKE GOVT. NO. 1		OCEAN LAKE GOVT. NO. 1	
LOCATION	SEC. 9, T3N, R3E		SEC. 9, T3N, R3E		SEC. 9, T3N, R3E	
OWNER	ATLANTIC REFINING CO.		ATLANTIC REFINING CO.		ATLANTIC REFINING CO.	
COMPLETED	05/23/63		05/23/63		05/23/63	
SAMPLED	05/28/63		05/24/63		05/24/63	
FORMATION	EOCE-WIND RIVER		EOCE-WIND RIVER		EOCE-WIND RIVER	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	2508		3858		3179	
WELLHEAD PRESSURE,PSIG	1008		510		1310	
OPEN FLOW, MCFD	4000		2		2000	
COMPONENT, MOLE PCT						
METHANE	90.4		78.1		91.5	
ETHANE	4.6		0.1		2.7	
PROPANE	1.3		0.1		0.7	
N-BUTANE	0.2		0.0		0.1	
ISOBUTANE	0.3		0.0		0.1	
N-PENTANE	TRACE		0.0		TRACE	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	2.8		17.4		4.2	
OXYGEN	0.0		2.6		0.4	
ARGON	TRACE		0.2		TRACE	
HYDROGEN	0.0		0.8		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.7		0.2	
HELIUM	0.04		0.02		0.02	
HEATING VALUE*	1053		798		1000	
SPECIFIC GRAVITY	0.613		0.647		0.599	

	INDEX 10879 SAMPLE 8988		INDEX 10880 SAMPLE 8990		INDEX 10881 SAMPLE 10229	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	OCEAN LAKE GOVT. NO. 1		OCEAN LAKE GOVT. NO. 1		TRIBAL M-2	
LOCATION	SEC. 9, T3N, R3E		SEC. 9, T3N, R3E		SEC. 32, T1S, R6E	
OWNER	ATLANTIC REFINING CO.		ATLANTIC REFINING CO.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	05/23/63		05/23/63		10/18/65	
SAMPLED	05/24/63		05/24/63		10/15/65	
FORMATION	EOCE-WIND RIVER		EOCE-FORT UNION		CRET-MUDDY	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	2747		5899		6510	
WELLHEAD PRESSURE,PSIG	890		NOT GIVEN		2500	
OPEN FLOW, MCFD	2		NOT GIVEN		9000	
COMPONENT, MOLE PCT						
METHANE	75.6		55.4		95.3	
ETHANE	1.2		1.6		2.3	
PROPANE	0.2		0.3		0.7	
N-BUTANE	0.0		0.0		0.8	
ISOBUTANE	0.0		0.0		TRACE	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		0.3	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	17.3		31.1		0.1	
OXYGEN	0.6		2.2		0.0	
ARGON	0.1		0.1		0.0	
HYDROGEN	3.7		6.4		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.3		2.8		0.4	
HELIUM	0.04		0.04		0.01	
HEATING VALUE*	804		618		10700	
SPECIFIC GRAVITY	0.633		0.702		0.598	

	INDEX 10882 SAMPLE 13409		INDEX 10883 SAMPLE 14569		INDEX 10884 SAMPLE 9428	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	FREMONT		FREMONT		FREMONT	
FIELD	WILDCAT		WILDCAT		WINKLEMAN DOME	
WELL NAME	FEDERAL NO. 1-8		FEDERAL NO. 1-33		NOT GIVEN	
LOCATION	SEC. 8, T27N, R95W		SEC. 33, T27N, R93W		SEC. 19, T2N, R1W	
OWNER	MOUNTAIN PETROLEUM LTD.		MAY PETROLEUM INC.		PAN AMERICAN PETROLEUM CO.	
COMPLETED	10/02/72		09/26/75		NOT GIVEN	
SAMPLED	10/02/72		01/24/76		07/07/64	
FORMATION	CRET-MUDDY		EOCE-FORT UNION		PERM-PHOSPHORIA	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	895		2850		3200	
WELLHEAD PRESSURE,PSIG	175		1176		NOT GIVEN	
OPEN FLOW, MCFD	1200		22000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.6		98.6		54.1	
ETHANE	0.1		0.1		19.5	
PROPANE	0.1		0.1		8.0	
N-BUTANE	TRACE		0.0		2.9	
ISOBUTANE	0.0		0.0		5.1	
N-PENTANE	0.0		0.0		0.8	
ISOPENTANE	0.0		0.0		1.3	
CYCLOPENTANE	0.0		0.0		0.3	
HEXANES PLUS	0.0		0.0		1.2	
NITROGEN	2.7		0.4		6.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.1	
CARBON DIOXIDE	0.1		0.4		2.5	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	987		1003		1470	
SPECIFIC GRAVITY	0.569		0.583		0.948	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10885 SAMPLE 2187	INDEX 10886 SAMPLE 2113	INDEX 10887 SAMPLE 1232
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	BLACK MOUNTAIN	ENOS CREEK DOME	GOLDEN EAGLE
WELL NAME	WELLER NO. 2	NO. 1	NO. 1
LOCATION	SEC. 35, T43N, R91W	SEC. 26, T46N, R100W	SEC. 12, T45N, R97W
OWNER	UTAH OIL & REFINING CO.	OHIO OIL CO.	MIDWEST REFINING CO.
COMPLETED	08/01/27	NOT GIVEN	12/07/23
SAMPLED	10/01/30	09/10/30	09/06/25
FORMATION	PERM-EMBAR	PERM-EMBAR	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2915	3540	2455
WELLHEAD PRESSURE,PSIG	NOT GIVEN	725	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	8000	100
COMPONENT, MOLE PCT			
METHANE	86.1	99.6	94.9
ETHANE	5.5	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.6	0.3	4.4
OXYGEN	0.7	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.2	0.1	0.2
HELIUM	0.00	0.06	TRACE
HEATING VALUE*	971	1009	961
SPECIFIC GRAVITY	0.653	0.557	0.577

	INDEX 10888 SAMPLE 1233	INDEX 10889 SAMPLE 8478	INDEX 10890 SAMPLE 9113
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	GOLDEN EAGLE	GOLDEN EAGLE	GOLDEN EAGLE
WELL NAME	NO. 3	ON TIME FOUR NO. 2	ON TIME 4 NO. 1
LOCATION	SEC. 12, T45N, R97W	SEC. 12, T45N, R97W	SEC. 12, T45N, R97W
OWNER	MIDWEST REFINING CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/20	01/10/62	NOT GIVEN
SAMPLED	09/06/25	03/20/62	10/15/63
FORMATION	CRET-MESAVERDE	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2606	6780	5766
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	1000
OPEN FLOW, MCFD	NOT GIVEN	5000	600
COMPONENT, MOLE PCT			
METHANE	97.3	72.5	92.0
ETHANE	0.0	15.5	4.4
PROPANE	---	7.0	1.0
N-BUTANE	---	1.4	0.3
ISOBUTANE	---	0.8	TRACE
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	1.5	2.1	0.4
OXYGEN	0.5	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	1.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	986	1294	1074
SPECIFIC GRAVITY	0.570	0.758	0.618

	INDEX 10891 SAMPLE 9524	INDEX 10892 SAMPLE 9525	INDEX 10893 SAMPLE 9526
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	HAMILTON DOME	HAMILTON DOME	HAMILTON DOME
WELL NAME	PLACER NO. 18	NOT GIVEN	RATHVON NO. 9T
LOCATION	SEC. 14, T44N, R98W	SEC. 13&14, T44N, R98W	SEC. 24, T44N, R98W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	07/--/44	NOT GIVEN	01/21/56
SAMPLED	07/31/64	07/31/64	07/31/64
FORMATION	JURA-CHUGWATER 4TH	MISS-MADISON	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1701	3400	2590
WELLHEAD PRESSURE,PSIG	50	NOT GIVEN	30
OPEN FLOW, MCFD	30	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	91.3	0.1	47.6
ETHANE	1.0	0.2	14.4
PROPANE	0.9	TRACE	10.8
N-BUTANE	0.8	0.2	3.6
ISOBUTANE	0.4	TRACE	1.6
N-PENTANE	0.3	0.3	1.4
ISOPENTANE	0.5	TRACE	0.2
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.5	0.5	1.6
NITROGEN	3.9	1.6	11.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.2	96.4	6.5
HELIUM	0.11	0.06	0.12
HEATING VALUE*	1070	59	1358
SPECIFIC GRAVITY	0.634	1.526	1.001

	INDEX 10894 SAMPLE 9527	INDEX 10895 SAMPLE 2136	INDEX 10896 SAMPLE 9112
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	HAMILTON DOME	LITTLE DOME	LITTLE GRASS CREEK
WELL NAME	PLACER NO. 4E	NO. 1	NO. 1
LOCATION	SEC. 13, T44N, R98W	SEC. 11, T46N, R99W	SEC. 11, T46N, R99W
OWNER	ATLANTIC REFINING CO.	MOUNTAIN STATES POWER CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/17	04/26/17	06/09/44
SAMPLED	07/31/64	09/13/30	10/11/63
FORMATION	PERM-EMBAR	CRET-FRONTIER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2345	2562	3568
WELLHEAD PRESSURE,PSIG	15	710	808
OPEN FLOW, MCFD	4	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	38.8	88.7	86.7
ETHANE	19.6	1.5	7.7
PROPANE	15.4	---	1.8
N-BUTANE	6.2	---	0.4
ISOBUTANE	2.9	---	0.3
N-PENTANE	1.6	---	0.1
ISOPENTANE	1.6	---	0.3
CYCLOPENTANE	0.5	---	0.1
HEXANES PLUS	2.0	---	0.2
NITROGEN	7.4	9.4	2.0
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	3.8	0.1	0.4
HELIUM	0.07	0.05	0.04
HEATING VALUE*	1709	925	1118
SPECIFIC GRAVITY	1.132	0.602	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10897 SAMPLE 8242	INDEX 10898 SAMPLE 879	INDEX 10899 SAMPLE 2118
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	JOHNSON	JOHNSON
FIELD	WALKER DOME	BILLY CREEK	BILLY CREEK
WELL NAME	J. E. SMITH NO. 7	FIRST NATIONAL BANK NO. 1	FIRST NATIONAL BANK NO. 1
LOCATION	SEC. 9, T46N, R99W	SEC. 17, T48N, R82W	SEC. 17, T48N, R82W
OWNER	OHIO OIL CO.	CARTER OIL CO.	CARTER OIL CO.
COMPLETED	08/30/61	01/01/23	01/01/23
SAMPLED	10/11/61	05/07/24	09/09/30
FORMATION	CRET-PEAY	CRET-WALL CREEK 2ND	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	515	515
DEPTH, FEET	5480	3182	3098
WELLHEAD PRESSURE,PSIG	763	1175	1150
OPEN FLOW, MCFD	3400	NOT GIVEN	70000
COMPONENT, MOLE PCT			
METHANE	98.5	93.4	97.5
ETHANE	2.1	4.8	0.0
PROPANE	TRACE	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	2.9	1.5	2.0
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.06	0.04	0.05
HEATING VALUE*	995	1032	988
SPECIFIC GRAVITY	0.577	0.585	0.565

	INDEX 10900 SAMPLE 8878	INDEX 10901 SAMPLE 9012	INDEX 10902 SAMPLE 16081
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BILLY CREEK	DUGOUT	LITTLE BUGHER DRAW
WELL NAME	HESSE NO. 2	GOVT. JAFFA NO. 4	LITTLE BUGHER DRAW NO. 1
LOCATION	SEC. 17, T48N, R82W	SEC. 33, T43N, R80W	SEC. 12, T49N, R78W
OWNER	MONTANA-DAKOTA UTILITIES CO.	TEXACO INC.	ELF AQUITAINE OIL & GAS
COMPLETED	10/30/62	02/25/54	09/23/80
SAMPLED	02/27/63	06/14/63	09/24/80
FORMATION	CRET-FRONTIER	CRET-SHANNON	CRET-MOWRY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3252	2014	11039
WELLHEAD PRESSURE,PSIG	1065	48	4400
OPEN FLOW, MCFD	42000	40	2500
COMPONENT, MOLE PCT			
METHANE	90.4	88.7	78.5
ETHANE	5.8	1.7	12.5
PROPANE	1.7	3.8	4.7
N-BUTANE	0.8	2.2	1.1
ISOBUTANE	0.1	0.7	0.6
N-PENTANE	TRACE	0.5	0.2
ISOPENTANE	0.2	0.9	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	TRACE	0.6	0.2
NITROGEN	1.0	0.3	0.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	1.6
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	1089	1227	1230
SPECIFIC GRAVITY	0.617	0.693	0.719

	INDEX 10903 SAMPLE 8044	INDEX 10904 SAMPLE 10685	INDEX 10905 SAMPLE 15457
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	BIG PINEY-LABARGE	BIG PINEY-LABARGE	BRUFF AREA
WELL NAME	BNG NO. 39	S HOGSBACK NO. 3-16	STATE LAND NO. 36-1
LOCATION	SEC. 4, T26N, R113W	SEC. 16, T26N, R113W	SEC. 36, T19N, R113W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	02/04/61	06/20/66	02/11/78
SAMPLED	06/26/61	07/27/66	10/24/78
FORMATION	CRET-MUDDY&BEAR RIVER	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7950	7982	11367
WELLHEAD PRESSURE,PSIG	2520	3243	3700
OPEN FLOW, MCFD	2321	10098	2674
COMPONENT, MOLE PCT			
METHANE	84.4	86.7	71.5
ETHANE	6.9	0.1	11.2
PROPANE	2.9	0.1	4.1
N-BUTANE	0.6	0.2	0.7
ISOBUTANE	0.6	0.1	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.9	11.7	8.5
OXYGEN	0.1	0.2	2.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	TRACE	0.5
HELIUM	TRACE	0.17	0.01
HEATING VALUE*	1133	920	1111
SPECIFIC GRAVITY	0.653	0.620	0.739

	INDEX 10906 SAMPLE 6967	INDEX 10907 SAMPLE 2401	INDEX 10908 SAMPLE 13981
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	EMIGRANT SPRINGS	FOSSIL	GREEN RIVER BEND
WELL NAME	EMIGRANT SPRINGS UNIT NO. 1	NO. 1	ROCKING CHAIR NO. 43-22
LOCATION	SEC. 21, T22N, R112W	SEC. 14, T21N, R117W	SEC. 22, T26N, R113W
OWNER	BELCO PETROLEUM CORP. ET AL.	EMERALD OIL CO.	WESTRANS PETROLEUM, INC.
COMPLETED	09/22/58	DRILL STEM TEST	NOT GIVEN
SAMPLED	01/02/59	09/15/31	04/--/79
FORMATION	CRET-FRONTIER	TERT-L	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	10490	407	7860
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3117
OPEN FLOW, MCFD	1481	NOT GIVEN	2941
COMPONENT, MOLE PCT			
METHANE	88.2	78.8	94.4
ETHANE	10.4	17.6	3.6
PROPANE	2.9	---	0.2
N-BUTANE	0.5	---	TRACE
ISOBUTANE	0.8	---	0.1
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.6	---	TRACE
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.8	4.2	1.5
OXYGEN	0.0	0.8	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	2.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	3.9	TRACE
HELIUM	0.01	0.00	0.03
HEATING VALUE*	1171	1273	1034
SPECIFIC GRAVITY	0.667	0.690	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10909 SAMPLE 12419	INDEX 10910 SAMPLE 7308	INDEX 10911 SAMPLE 8976
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	HOGSBACK	HOGSBACK S	LA BARGE
WELL NAME	HOGSBACK NO. 84-6	TROJAN 22X-17	C-P NO. 1
LOCATION	SEC. 6, T26N, R113W	SEC. 17, T26N, R113W	SEC. 7, T26N, R112W
OWNER	MOBIL OIL CORP.	MOBIL OIL CO.	BELCO PETROLEUM CORP.
COMPLETED	NOT GIVEN	01/19/58	12/06/58
SAMPLED	09/11/70	12/05/59	05/29/63
FORMATION	CRET-FRONTIER	CRET-MUDDY-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6383	7302	7015
WELLHEAD PRESSURE,PSIG	2550	3100	1970
OPEN FLOW, MCFD	5408	2250	6423
COMPONENT, MOLE PCT			
METHANE	79.2	87.6	90.2
ETHANE	6.0	6.9	4.8
PROPANE	2.7	2.4	1.6
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.4	0.4	0.1
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	8.7	1.2	1.9
OXYGEN	1.7	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.04	0.00	0.02
HEATING VALUE*	1031	1135	1084
SPECIFIC GRAVITY	0.681	0.646	0.627

	INDEX 10912 SAMPLE 8983	INDEX 10913 SAMPLE 15029	INDEX 10914 SAMPLE 6426
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	LA BARGE	MOXA	WILDCAT
WELL NAME	BNG NO. 45-B	BRUFF UNIT NO. 3	WILLOW CREEK UNIT NO. 1
LOCATION	SEC. 4, T26N, R113W	SEC. 16, T19N, R112W	SEC. 3, T24N, R114W
OWNER	BELCO PETROLEUM CORP.	MOUNTAIN FUEL SUPPLY CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	10/14/60	03/--/77	06/25/57
SAMPLED	05/29/63	06/14/77	10/25/57
FORMATION	CRET-BAXTER	CRET-FRONTIER	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3751	12111	2370
WELLHEAD PRESSURE,PSIG	973	4910	1175
OPEN FLOW, MCFD	746	4000	3600
COMPONENT, MOLE PCT			
METHANE	64.9	86.3	82.5
ETHANE	4.3	7.4	10.2
PROPANE	1.7	1.7	3.3
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.2	0.6	0.7
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.8	0.1
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.8	0.2
NITROGEN	22.6	0.8	1.9
OXYGEN	5.0	0.0	TRACE
ARGON	0.2	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.05	0.01	0.10
HEATING VALUE*	820	1187	1170
SPECIFIC GRAVITY	0.735	0.679	0.676

	INDEX 10915 SAMPLE 13579	INDEX 10916 SAMPLE 13591	INDEX 10917 SAMPLE 13606
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BRUFF UNIT NO. 1	BRUFF UNIT NO. 1	BRUFF UNIT NO. 1
LOCATION	SEC. 22, T19N, R112W	SEC. 22, T19N, R112W	SEC. 22, T19N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	04/17/73	04/27/73	06/01/73
FORMATION	MISS-MADISON	MISS-MADISON	PENN-MORGAN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	18004	17562	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	70	39	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.3	1.9	45.5
ETHANE	TRACE	0.0	16.9
PROPANE	TRACE	TRACE	15.9
N-BUTANE	0.0	0.0	6.5
ISOBUTANE	0.0	0.0	5.7
N-PENTANE	0.0	0.0	2.9
ISOPENTANE	0.0	0.0	2.0
CYCLOPENTANE	0.0	0.0	0.3
HEXANES PLUS	0.0	0.0	1.6
NITROGEN	17.3	5.6	2.2
OXYGEN	0.2	0.0	0.0
ARGON	0.3	0.1	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	74.2	92.1	0.5
HELIUM	1.52	0.27	0.06
HEATING VALUE*	64	19	1890
SPECIFIC GRAVITY	1.345	1.475	1.136

	INDEX 10918 SAMPLE 14689	INDEX 10919 SAMPLE 14551	INDEX 10920 SAMPLE 14902
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	WILDCAT	WILLOW CREEK	WILLOW CREEK
WELL NAME	WHISKY BUTTE NO. 2	ARNOLD LARSON NO. 1	FEDERAL NO. 4-11
LOCATION	SEC. 11, T21N, R112W	SEC. 2, T24N, R114W	SEC. 11, T24N, R114W
OWNER	AMOCO PRODUCTION CO.	RAINBOW RESOURCES, INC.	RAINBOW RESOURCES, INC.
COMPLETED	NOT GIVEN	07/09/75	07/--/76
SAMPLED	06/07/76	11/04/75	02/10/77
FORMATION	CRET-FRONTIER 2ND	CRET-HILLIARD	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11072	2430	1450
WELLHEAD PRESSURE,PSIG	5745	1250	696
OPEN FLOW, MCFD	3290	2000	3800
COMPONENT, MOLE PCT			
METHANE	85.4	81.3	74.7
ETHANE	9.2	11.0	14.5
PROPANE	2.5	4.4	6.3
N-BUTANE	0.4	0.7	1.1
ISOBUTANE	0.3	0.7	0.9
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	1.7	1.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1149	1196	1269
SPECIFIC GRAVITY	0.657	0.688	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10921 SAMPLE 16019	INDEX 10922 SAMPLE 877	INDEX 10923 SAMPLE 7978
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	NATRONA	NATRONA
FIELD	WILSON RANCH	BOONE DOME	BOONE DOME
WELL NAME	CHRISMAN, ET.AL NO. 1	NO. 3 BOONE DOME	BOONE DOME UNIT NO. 6
LOCATION	SEC. 18, T20N, R112W	SEC. 15, T35N, R85W	SEC. 14, T35N, R85W
OWNER	C & K PETROLEUM INC.	NEW YORK OIL CO.	RICHFIELD OIL CORP.
COMPLETED	08/14/78	05/17/23	08/30/60
SAMPLED	07/24/80	05/16/24	05/18/61
FORMATION	CRET-FRONTIER, 2ND	CRET-SHANNON	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	530	530
DEPTH, FEET	11147	1530	7590
WELLHEAD PRESSURE,PSIG	2300	760	1650
OPEN FLOW, MCFD	2833	4000	20000
COMPONENT, MOLE PCT			
METHANE	81.0	84.1	67.7
ETHANE	11.8	15.7	8.7
PROPANE	4.0	---	6.6
N-BUTANE	0.7	---	6.2
ISOBUTANE	0.6	---	4.4
N-PENTANE	0.1	---	2.0
ISOPENTANE	0.1	---	1.3
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	1.0
NITROGEN	0.4	0.2	1.4
OXYGEN	TRACE	0.0	0.4
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.0	0.2
HELIUM	0.01	0.04	0.02
HEATING VALUE*	1302	1133	1557
SPECIFIC GRAVITY	0.690	0.633	0.925

	INDEX 10924 SAMPLE 7979	INDEX 10925 SAMPLE 2185	INDEX 10926 SAMPLE 2166
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	BOONE DOME	CASPER CREEK N	CASPER CREEK S
WELL NAME	BOONE DOME UNIT NO. 6	YOUNG NO. 2	NO. 4
LOCATION	SEC. 14, T35N, R85W	SEC. 1, T36N, R82W	SEC. 34, T34N, R83W
OWNER	RICHFIELD OIL CORP.	LAKOTA OIL & GAS CO.	EMPIRE STATE OIL CO.
COMPLETED	08/30/60	NOT GIVEN	07/27/20
SAMPLED	05/18/61	10/02/30	09/23/30
FORMATION	CRET-FRONTIER	CRET-MUDDY	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	7590	997	1447
WELLHEAD PRESSURE,PSIG	2500	NOT GIVEN	450
OPEN FLOW, MCFD	8500	100	18000
COMPONENT, MOLE PCT			
METHANE	67.9	65.6	90.2
ETHANE	8.7	15.6	6.3
PROPANE	5.8	---	---
N-BUTANE	6.1	---	---
ISOBUTANE	4.2	---	---
N-PENTANE	2.2	---	---
ISOPENTANE	1.4	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	1.2	---	---
NITROGEN	1.7	18.5	1.7
OXYGEN	0.4	0.1	0.5
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	1.2
HELIUM	0.10	0.03	0.00
HEATING VALUE*	1565	944	1027
SPECIFIC GRAVITY	0.926	0.711	0.607

	INDEX 10927 SAMPLE 5988	INDEX 10928 SAMPLE 8994	INDEX 10929 SAMPLE 9222
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	CLARK RANCH	CLARK RANCH	CLARK RANCH
WELL NAME	UNIT NO. 3	WELL NO. 3	NO. 2-C
LOCATION	SEC. 6, T35N, R84W	SEC. 6, T35N, R84W	SEC. 6, T35N, R84W
OWNER	HOUSTON OIL CO. OF TEXAS	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	08/30/55	08/30/55	10/08/63
SAMPLED	01/05/56	05/31/63	01/13/64
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	903	910	2463
WELLHEAD PRESSURE,PSIG	490	200	915
OPEN FLOW, MCFD	2300	31	2500
COMPONENT, MOLE PCT			
METHANE	91.2	92.6	95.9
ETHANE	4.7	4.5	0.7
PROPANE	1.6	1.0	0.1
N-BUTANE	0.5	0.2	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.4	1.2	3.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1047	1066	987
SPECIFIC GRAVITY	0.617	0.601	0.572

	INDEX 10930 SAMPLE 5142	INDEX 10931 SAMPLE 2162	INDEX 10932 SAMPLE 5611
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	FISH CREEK	IRON CREEK	LANCE CREEK
WELL NAME	GOVERNMENT NO. 2	NO. 5	GOVERNMENT NO. 1
LOCATION	NOT GIVEN	SEC. 11, T32N, R82W	SEC. 13, T40N, R80W
OWNER	ATLANTIC REFINING CO.	EMPIRE STATE OIL CO.	ARGO-ANSCHUTZ
COMPLETED	NOT GIVEN	04/17/21	--/--/54
SAMPLED	11/21/51	09/24/30	04/26/54
FORMATION	CRET-LAKOTA	CRET-DAKOTA	CRET-L
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	995	653	2045
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	730
OPEN FLOW, MCFD	NOT GIVEN	3500	70
COMPONENT, MOLE PCT			
METHANE	98.7	85.5	96.2
ETHANE	0.9	8.8	0.4
PROPANE	0.4	---	0.3
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.2	---	0.1
N-PENTANE	0.1	---	TRACE
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.1	0.1	2.2
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	5.5	0.6
HELIUM	0.01	0.00	0.04
HEATING VALUE*	1042	1024	1018
SPECIFIC GRAVITY	0.594	0.693	0.581

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10933 SAMPLE 6636	INDEX 10934 SAMPLE 2163	INDEX 10935 SAMPLE 2105
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	NOT GIVEN	PINE DOME	POISON SPIDER
WELL NAME	BADWATER UNIT NO. 1	NO. 5	NO. 1
LOCATION	SEC. 35, T39N, R89W	SEC. 26, T35N, R84W	SEC. 12, T33N, R83W
OWNER	PURE OIL CO.	DILLARD BAKER	EMPIRE STATE OIL CO.
COMPLETED	NOT GIVEN	04/19/26	12/29/17
SAMPLED	06/--/58	09/24/30	09/04/30
FORMATION	CRET-U	PERM-EMBAR	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	1791	1242
WELLHEAD PRESSURE, PSIG	NOT GIVEN	420	50
OPEN FLOW, MCFD	NOT GIVEN	10000	4500
COMPONENT, MOLE PCT			
METHANE	92.6	94.0	74.1
ETHANE	4.0	1.3	24.0
PROPANE	0.3	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	0.1	3.7	1.5
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.8	0.3	0.3
HELIUM	0.01	0.66	0.04
HEATING VALUE*	1021	976	1161
SPECIFIC GRAVITY	0.607	0.577	0.683

	INDEX 10936 SAMPLE 2165	INDEX 10937 SAMPLE 2249	INDEX 10938 SAMPLE 967
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	POISON SPIDER	POWDER RIVER	SALT CREEK
WELL NAME	NO. 4	CUYLER NO. 1	NO. 33X
LOCATION	SEC. 12, T33N, R83W	SEC. 24, T36N, R83W	SEC. 33, T40N, R79W
OWNER	EMPIRE STATE OIL CO.	CUYLER OIL CO.	WYOMING ASSOCIATED OIL CORP.
COMPLETED	01/01/23	10/29/30	DRILL STEM TEST
SAMPLED	09/23/30	12/18/30	01/01/25
FORMATION	JURA-SUNDANCE	CRET-WALL CREEK	CRET-DAKOTA & LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	1365	1314	2200
WELLHEAD PRESSURE, PSIG	NOT GIVEN	530	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	10000	21000
COMPONENT, MOLE PCT			
METHANE	67.6	99.5	75.3
ETHANE	29.8	0.0	21.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.4	0.4	1.0
OXYGEN	0.0	0.0	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	1.4
HELIUM	0.05	0.00	TRACE
HEATING VALUE*	1219	1008	1150
SPECIFIC GRAVITY	0.714	0.557	0.683

	INDEX 10939 SAMPLE 968	INDEX 10940 SAMPLE 8971	INDEX 10941 SAMPLE 8973
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	SALT CREEK	SHERWOOD	SHERWOOD
WELL NAME	NO. 33X	NO. 1	NO. 2
LOCATION	SEC. 33, T40N, R79W	SEC. 3, T40N, R77W	SEC. 40, T40N, R77W
OWNER	WYOMING ASSOCIATED OIL CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	DRILL STEM TEST	08/12/56	11/01/57
SAMPLED	01/14/25	05/25/63	05/25/63
FORMATION	CRET-DAKOTA & LAKOTA	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2262	10735	9531
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	4000	265	5000
COMPONENT, MOLE PCT			
METHANE	49.0	77.8	77.9
ETHANE	48.0	10.2	11.9
PROPANE	---	4.7	5.4
N-BUTANE	---	1.6	1.5
ISOBUTANE	---	0.8	0.8
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.6	0.5
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.6	0.2
NITROGEN	0.1	2.0	0.8
OXYGEN	0.5	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	1.2	0.8
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	1357	1255	1260
SPECIFIC GRAVITY	0.819	0.747	0.732

	INDEX 10942 SAMPLE 878	INDEX 10943 SAMPLE 9789	INDEX 10944 SAMPLE 7304
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	TEAPOT	WALLACE CREEK	WALTMAN
WELL NAME	NO. 301A	UNIT NO. 4	UNIT NO. 2
LOCATION	SEC. 3, T38N, R78W	SEC. 23, T34N, R87W	SEC. 1, T36N, R87W
OWNER	PRODUCERS MAMMOTH OIL CO.	NATL. COOP. REFINERY ASSN.	CALIFORNIA CO.
COMPLETED	12/14/22	12/21/64	08/20/59
SAMPLED	05/12/24	03/08/65	12/09/59
FORMATION	CRET-WALL CREEK 2ND	CRET-MUDDY	CRET-LANCE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2914	11017	6140
WELLHEAD PRESSURE, PSIG	960	3300	1845
OPEN FLOW, MCFD	24000	15100	4
COMPONENT, MOLE PCT			
METHANE	76.5	97.7	81.0
ETHANE	21.3	0.1	9.5
PROPANE	---	0.1	5.0
N-BUTANE	---	0.0	1.1
ISOBUTANE	---	0.0	1.3
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.7	2.0	1.7
OXYGEN	0.6	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.1
HELIUM	0.05	0.05	0.02
HEATING VALUE*	1157	9940	1211
SPECIFIC GRAVITY	0.672	0.564	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10945 SAMPLE 10076	INDEX 10946 SAMPLE 15625	INDEX 10947 SAMPLE 370
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NIOBRARA	NIOBRARA
FIELD	WALTMAN	BUCK CREEK	LANCE CREEK
WELL NAME	UNIT NO. 9	MAYNARD FEDERAL NO. 43-18	BUCK CREEK WELL NO. 1
LOCATION	SEC. 24, T36N, R87W	SEC. 18, T36N, R63W	SEC. 34, T36N, R65W
OWNER	CHEVRON OIL CO.	BURLINGTON NORTHERN ET AL	BUCK CREEK OIL CO.
COMPLETED	08/17/65	03/23/78	01/--/19
SAMPLED	08/17/65	05/23/79	06/01/20
FORMATION	EOCE-FORT UNION	PENN-LEO	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	530	515	515
DEPTH, FEET	4278	6180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1630	1800	440
OPEN FLOW, MCFD	20000	1599	12000
COMPONENT, MOLE PCT			
METHANE	93.7	32.7	69.0
ETHANE	2.2	5.7	29.1
PROPANE	0.7	3.3	---
N-BUTANE	0.1	1.4	---
ISOBUTANE	0.2	0.6	---
N-PENTANE	0.1	0.5	---
ISOPENTANE	TRACE	0.5	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	1.2	39.6	0.9
OXYGEN	0.0	TRACE	0.6
ARGON	0.0	0.1	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.5	14.3	0.2
HELIUM	0.01	0.76	TRACE
HEATING VALUE*	1035	648	1220
SPECIFIC GRAVITY	0.605	0.974	0.706

	INDEX 10948 SAMPLE 371	INDEX 10949 SAMPLE 2102	INDEX 10950 SAMPLE 2145
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK
WELL NAME	OHIO NO. 4	SCHURICHT NO. 1	ROHLF NO. 2
LOCATION	SEC. 7, T35N, R65W	SEC. 15, T35N, R65W	SEC. 32, T36N, R65W
OWNER	OHIO OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	11/20/28	09/26/23
SAMPLED	06/24/20	09/02/30	09/15/30
FORMATION	NOT GIVEN	CRET-LAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	NOT GIVEN	3135	3030
WELLHEAD PRESSURE,PSIG	400	575	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	20000	35000
COMPONENT, MOLE PCT			
METHANE	74.2	71.1	69.1
ETHANE	25.0	28.3	25.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	5.1
OXYGEN	0.4	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.7
HELIUM	0.10	0.03	0.03
HEATING VALUE*	1200	1227	1148
SPECIFIC GRAVITY	0.686	0.701	0.707

	INDEX 10951 SAMPLE 2164	INDEX 10952 SAMPLE 3059	INDEX 10953 SAMPLE 3061
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK
WELL NAME	DIELMAN NO. 1	ELIZABETH LAMB NO. 17	ELIZABETH LAMB NO. 8
LOCATION	SEC. 7, T35N, R65W	SEC. 5, T35N, R65W	SEC. 5, T35N, R65E
OWNER	CONTINENTAL OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	08/23/27	NOT GIVEN	07/--/36
SAMPLED	09/23/30	12/19/41	12/19/41
FORMATION	CRET-MUDDY	PENN-MINNELUSA	JURA-SUNDANCE BASAL
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3420	5004	3951
WELLHEAD PRESSURE,PSIG	NOT GIVEN	185	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.9	66.4	16.3
ETHANE	56.6	31.0	83.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	2.0	0.2
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.3	0.3
HELIUM	0.02	0.09	0.00
HEATING VALUE*	1439	1228	1652
SPECIFIC GRAVITY	0.848	0.720	0.970

	INDEX 10954 SAMPLE 3717	INDEX 10955 SAMPLE 3739	INDEX 10956 SAMPLE 3060
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK E
WELL NAME	WILLITT B NO. 3	O. ROHLFF NO. 2 LEASE NO. 15	O. C. LEACH NO. 1
LOCATION	SEC. 6, T35N, R65W	SEC. 32, T36N, R65W	SEC. 29, T36N, R64W
OWNER	ARGO OIL CORP.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	07/07/43	01/13/44	12/--/38
SAMPLED	02/04/44	03/26/44	12/22/41
FORMATION	PENN-CONVERSE 1ST	PENN-CONVERSE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	4435	4425	3808
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	9.3	5.2	59.9
ETHANE	18.6	65.0	38.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	70.0	28.7	1.7
OXYGEN	0.3	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.3	0.2
HELIUM	1.01	0.26	0.03
HEATING VALUE*	428	1217	1268
SPECIFIC GRAVITY	0.961	0.739	0.753

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10957 SAMPLE 9111	INDEX 10958 SAMPLE 2660	INDEX 10959 SAMPLE 2669
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LITTLE BUCK CREEK	MULE CREEK W	MULE CREEK W
WELL NAME	METER SAMPLE	NO. C-1	NO. C-1
LOCATION	SEC. 26, T36N, R64W	SEC. 2, T39N, R61W	SEC. 2, T39N, R61W
OWNER	CONTINENTAL OIL CO.	FALL RIVER ROYALTY & PROD.	FALL RIVER ROYALTY & PROD.
COMPLETED	NOT GIVEN	10/22/33	NOT GIVEN
SAMPLED	10/07/63	11/21/33	04/20/34
FORMATION	PENN-LEO	PENN-AMSDEN	PENN-AMSDEN
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	5750	2242	2525
WELLHEAD PRESSURE,PSIG	NOT GIVEN	250	300
OPEN FLOW, MCFD	NOT GIVEN	528	200
COMPONENT, MOLE PCT			
METHANE	32.3	17.5	22.6
ETHANE	8.6	11.1	16.9
PROPANE	6.9	---	---
N-BUTANE	2.8	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	1.2	---	---
ISOPENTANE	0.7	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	1.4	---	---
NITROGEN	36.2	69.4	59.0
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	8.1	0.1	0.0
HELIUM	0.60	1.02	1.40
HEATING VALUE*	946	376	532
SPECIFIC GRAVITY	1.024	0.890	0.876

	INDEX 10960 SAMPLE 7194	INDEX 10961 SAMPLE 14874	INDEX 10962 SAMPLE 2402
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	PARK
FIELD	MULE CREEK W	YOUNG WOMAN CREEK	BADGER BASIN
WELL NAME	NO. 3	MKM FEDERAL NO. 3	NO. 1
LOCATION	SEC. 2, T40N, R61W	SEC. 26, T35N, R64W	SEC. 17, T57N, R101W
OWNER	WEST MULE CREEK UNIT, INC.	SIMASKO PRODUCTION CO.	RESOLUTE OIL CO.
COMPLETED	11/09/56	10/19/76	07/27/31
SAMPLED	09/01/59	12/17/76	09/19/31
FORMATION	PENN-MINNELUSA	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	515	515	520
DEPTH, FEET	2332	3576	8250
WELLHEAD PRESSURE,PSIG	750	1000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2163	350
COMPONENT, MOLE PCT			
METHANE	29.3	94.3	36.8
ETHANE	6.7	0.5	59.2
PROPANE	0.2	0.9	---
N-BUTANE	0.1	0.3	---
ISOBUTANE	0.1	0.6	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	60.9	0.5	3.2
OXYGEN	TRACE	0.0	0.4
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.1	0.0	---
CARBON DIOXIDE	0.7	2.4	0.4
HELIUM	1.50	TRACE	0.00
HEATING VALUE*	447	1041	1434
SPECIFIC GRAVITY	0.855	0.616	0.867

	INDEX 10963 SAMPLE 14316	INDEX 10964 SAMPLE 2139	INDEX 10965 SAMPLE 9010
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	BADGER BASIN W	BIG POLECAT	BIG POLECAT
WELL NAME	GPE 23-58-102 BN NO. 1	DANIEL J. DANKER	GOVT. SEDGWICK NO. 1
LOCATION	SEC. 23, T58N, R102W	SEC. , T57N, R98W	SEC. 34, T57N, R98W
OWNER	GAS PROD. ENTERPRISES INC.	DANIEL J. DANKER	SOHIO PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	04/--/74	09/13/30	06/12/63
FORMATION	CRET-DAKOTA	CRET-FRONTIER	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	11398	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2810	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.2	70.6	92.7
ETHANE	8.1	18.0	0.8
PROPANE	2.6	---	0.1
N-BUTANE	0.4	---	TRACE
ISOBUTANE	0.3	---	TRACE
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	TRACE
NITROGEN	26.0	10.0	5.1
OXYGEN	63.0	1.0	0.9
ARGON	0.3	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	0.3	0.2
HELIUM	0.02	0.19	0.03
HEATING VALUE*	799	1038	956
SPECIFIC GRAVITY	1.411	0.693	0.586

	INDEX 10966 SAMPLE 1253	INDEX 10967 SAMPLE 1254	INDEX 10968 SAMPLE 2189
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	DANKER ANTICLINE	DANKER ANTICLINE	ELK BASIN
WELL NAME	MCMAHON NO. 4	MCMAHON NO. 1	NO. 2
LOCATION	SEC. 26, T57N, R98W	SEC. 27, T57N, R98W	SEC. 30, T58N, R99W
OWNER	MCMAHON OIL & GAS CO.	MCMAHON OIL & GAS CO.	MIDWEST REFINING CO.
COMPLETED	NOT GIVEN	NOT GIVEN	05/23/17
SAMPLED	10/19/25	10/19/25	10/02/30
FORMATION	NOT GIVEN	NOT GIVEN	CRET-FRONTIER 1ST
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2490	2232	1420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	81.8	10.4
ETHANE	10.0	17.2	88.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.7	0.5	0.5
OXYGEN	0.6	0.4	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1076	1137	1695
SPECIFIC GRAVITY	0.612	0.646	0.999

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10969 SAMPLE 2190		INDEX 10970 SAMPLE 2191		INDEX 10971 SAMPLE 3707	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	ELK BASIN		ELK BASIN		ELK BASIN	
WELL NAME	NO. 17		NO. 23, ELK NO. 3		MACK 4, NO. 4	
LOCATION	SEC. 19, T58N, R99W		SEC. 24, T58N, R99W		SEC. 30, T58N, R99W	
OWNER	MIDWEST REFINING CO.		OHIO OIL CO.		OHIO OIL CO.	
COMPLETED	10/09/19		02/24/22		03/09/43	
SAMPLED	09/30/30		10/01/30		11/05/43	
FORMATION	-SECOND SAND		CRET-DAKOTA		PENN-TENSLEEP	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	1550		2532		4338	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		800		2082	
OPEN FLOW, MCFD	NOT GIVEN		36000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	---		77.5		44.4	
ETHANE	84.9		19.7		45.9	
PROPANE	10.7		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	4.1		2.5		3.3	
OXYGEN	0.1		0.1		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.3		6.1	
HELIUM	0.02		0.07		TRACE	
HEATING VALUE*	1798		1138		1272	
SPECIFIC GRAVITY	1.099		0.666		0.856	

	INDEX 10972 SAMPLE 3708		INDEX 10973 SAMPLE 3709		INDEX 10974 SAMPLE 9018	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	ELK BASIN		ELK BASIN		ELK BASIN	
WELL NAME	N. P. R. NO. 2		ELK 2, NO. 101		UNIT NO. 189	
LOCATION	SEC. 4, T57N, R99W		SEC. 24, T58N, R100W		SEC. 19, T58N, R99W	
OWNER	MACKINNIE OIL & DRLG. CO.		CONTINENTAL OIL CO.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	07/06/43		09/08/43		08/22/61	
SAMPLED	10/05/43		11/04/43		06/09/63	
FORMATION	PENN-TENSLEEP		PENN-TENSLEEP		DEVO-JEFFERSON	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	4711		3938		8307	
WELLHEAD PRESSURE,PSIG	1906		1660		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		157	
COMPONENT, MOLE PCT						
METHANE	43.3		37.7		59.0	
ETHANE	42.4		43.9		14.3	
PROPANE	---		---		6.8	
N-BUTANE	---		---		5.7	
ISOBUTANE	---		---		1.6	
N-PENTANE	---		---		2.5	
ISOPENTANE	---		---		2.0	
CYCLOPENTANE	---		---		0.5	
HEXANES PLUS	---		---		2.7	
NITROGEN	0.1		1.7		2.0	
OXYGEN	0.3		0.4		0.1	
ARGON	---		---		0.0	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.1	
CARBON DIOXIDE	13.9		16.3		2.8	
HELIUM	TRACE		TRACE		0.04	
HEATING VALUE*	1198		1169		1626	
SPECIFIC GRAVITY	0.902		0.940		1.004	

	INDEX 10975 SAMPLE 9019		INDEX 10976 SAMPLE 9020		INDEX 10977 SAMPLE 9021	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	ELK BASIN		ELK BASIN		ELK BASIN	
WELL NAME	UNIT NO. 153		UNIT NO. 189		UNIT NO. 58	
LOCATION	SEC. 25, T58N, R100W		SEC. 19, T58N, R99W		SEC. 25, T58N, R100W	
OWNER	PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	07/26/43		08/22/61		06/14/61	
SAMPLED	06/07/63		06/09/63		06/09/63	
FORMATION	PENN-TENSLEEP		ORDO-BIG HORN		MISS-MADISON	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	5400		5529		4844	
WELLHEAD PRESSURE,PSIG	55		5		18	
OPEN FLOW, MCFD	154		44		15	
COMPONENT, MOLE PCT						
METHANE	47.3		63.3		54.4	
ETHANE	19.4		12.9		19.8	
PROPANE	7.1		6.5		9.8	
N-BUTANE	3.2		5.6		5.2	
ISOBUTANE	1.5		1.6		2.1	
N-PENTANE	0.9		2.4		1.5	
ISOPENTANE	0.8		2.2		1.4	
CYCLOPENTANE	0.2		0.5		0.2	
HEXANES PLUS	0.9		2.6		1.3	
NITROGEN	2.5		1.5		4.0	
OXYGEN	0.2		TRACE		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	11.7		TRACE		0.0	
CARBON DIOXIDE	4.2		0.7		0.2	
HELIUM	0.05		0.01		0.02	
HEATING VALUE*	1296		1643		1605	
SPECIFIC GRAVITY	0.978		0.972		0.971	

	INDEX 10978 SAMPLE 9119		INDEX 10979 SAMPLE 9120		INDEX 10980 SAMPLE 1314	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	ELK BASIN S		ELK BASIN S		GARLAND	
WELL NAME	NO. 7		NOT GIVEN		HARRIMAN NO. 1	
LOCATION	SEC. 20, T57N, R99W		SEC. 19, T57N, R99W		SEC. 10, T56N, R98W	
OWNER	CONTINENTAL OIL CO.		CONTINENTAL OIL CO.		HENRY R. HARRIMAN	
COMPLETED	07/14/60		07/--/53		08/18/26	
SAMPLED	10/10/63		10/10/63		10/01/26	
FORMATION	CRET-DAKOTA		CRET-PEAY & FRONTIER		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	5276		4944		2040	
WELLHEAD PRESSURE,PSIG	160		800		785	
OPEN FLOW, MCFD	1000		1000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	84.9		91.4		79.2	
ETHANE	7.6		4.7		14.3	
PROPANE	3.0		1.7		---	
N-BUTANE	1.1		0.6		---	
ISOBUTANE	0.5		0.2		---	
N-PENTANE	0.3		0.1		---	
ISOPENTANE	0.6		0.3		---	
CYCLOPENTANE	0.1		TRACE		---	
HEXANES PLUS	0.5		0.1		---	
NITROGEN	1.5		0.6		5.1	
OXYGEN	0.0		TRACE		1.1	
ARGON	0.0		0.0		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		0.2		0.4	
HELIUM	0.03		0.02		TRACE	
HEATING VALUE*	1122		1103		1059	
SPECIFIC GRAVITY	0.687		0.621		0.657	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10981 SAMPLE 6119	INDEX 10982 SAMPLE 9563	INDEX 10983 SAMPLE 9566
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	HEART MOUNTAIN	HEART MOUNTAIN	HEART MOUNTAIN
WELL NAME	T-25-8-P	NO. 1	NO. 25-8-P
LOCATION	SEC. 8, T54N, R102W	SEC. 8, T54N, R102W	SEC. 8, T54N, R102W
OWNER	MOBIL OIL CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	02/03/56	--/--/49	--/--/53
SAMPLED	08/03/56	09/15/64	09/15/64
FORMATION	CRET-DAKOTA	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4213	2300	4200
WELLHEAD PRESSURE,PSIG	1760	480	1710
OPEN FLOW, MCFD	1350	20000	2500
COMPONENT, MOLE PCT			
METHANE	81.3	85.4	22.9
ETHANE	9.8	7.8	20.9
PROPANE	3.9	3.1	29.3
N-BUTANE	1.1	0.5	12.2
ISOBUTANE	0.7	0.8	8.9
N-PENTANE	0.3	0.1	1.4
ISOPENTANE	0.3	0.3	2.0
CYCLOPENTANE	TRACE	TRACE	0.6
HEXANES PLUS	0.2	0.1	1.5
NITROGEN	2.1	1.5	0.2
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.0
HELIUM	0.03	0.02	TRACE
HEATING VALUE*	1197	1151	2323
SPECIFIC GRAVITY	0.697	0.663	1.387

	INDEX 10984 SAMPLE 13387	INDEX 10985 SAMPLE 897	INDEX 10986 SAMPLE 2119
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	HEART MOUNTAIN	HORSE CENTER	LITTLE BUFFALO BASIN
WELL NAME	TAGGART NO. 5-8	NO. 1	NO. 2
LOCATION	SEC. 8,T54N,R102W	NOT GIVEN	SEC. 3, T47N, R100W
OWNER	MONTANA POWER CO.	NOT GIVEN	OHIO OIL CO.
COMPLETED	02/05/72	NOT GIVEN	01/01/29
SAMPLED	09/19/72	06/20/24	09/10/30
FORMATION	CRET-DAKOTA	TRIA-CHUGWATER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4475	NOT GIVEN	1146
WELLHEAD PRESSURE,PSIG	1680	NOT GIVEN	540
OPEN FLOW, MCFD	3000	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	78.5	0.0	81.7
ETHANE	11.1	0.0	14.5
PROPANE	5.1	---	---
N-BUTANE	1.3	---	---
ISOBUTANE	1.0	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	2.3	2.0	3.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	98.0	0.1
HELIUM	0.03	TRACE	0.04
HEATING VALUE*	1240	0	1087
SPECIFIC GRAVITY	0.723	1.518	0.643

	INDEX 10987 SAMPLE 2138	INDEX 10988 SAMPLE 9011	INDEX 10989 SAMPLE 9014
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	LITTLE BUFFALO BASIN	LITTLE BUFFALO BASIN	LITTLE BUFFALO BASIN
WELL NAME	NO. 19	NO. 29	NO. 29
LOCATION	SEC. 12, T47N, R100W	SEC. 12, T47N, R100W	SEC. 12, T47N, R100W
OWNER	MIDWEST REFINING CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	NOT GIVEN	06/28/59	10/12/56
SAMPLED	09/15/30	06/10/63	06/10/63
FORMATION	CRET-FRONTIER	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	NOT GIVEN	2041	2305
WELLHEAD PRESSURE,PSIG	540	410	230
OPEN FLOW, MCFD	60000	1340	2400
COMPONENT, MOLE PCT			
METHANE	86.3	89.7	87.9
ETHANE	10.7	5.6	5.9
PROPANE	---	1.7	2.2
N-BUTANE	---	0.5	0.4
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.3	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	2.7	1.6	2.5
OXYGEN	0.1	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1066	1098	1103
SPECIFIC GRAVITY	0.621	0.627	0.638

	INDEX 10990 SAMPLE 1255	INDEX 10991 SAMPLE 1256	INDEX 10992 SAMPLE 2110
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	LITTLE POLECAT DOME	LITTLE POLECAT DOME	OREGON BASIN
WELL NAME	WHITESIDE NO. 1	WHITESIDE NO. 1	CACTUS NO. 1
LOCATION	SEC. 30, T57N, R98W	SEC. 30, T57N, R98W	SEC. 5, T51N, R100W
OWNER	TRANSCONTINENTAL OIL CO.	TRANSCONTINENTAL OIL CO.	OHIO OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	08/15/28
SAMPLED	10/19/25	11/01/25	09/10/30
FORMATION	NOT GIVEN	NOT GIVEN	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4182	4182	3480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	95.4	87.0
ETHANE	3.4	2.5	11.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	1.0	0.0
OXYGEN	0.6	0.6	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.6	1.5
HELIUM	TRACE	TRACE	0.06
HEATING VALUE*	1017	1011	1084
SPECIFIC GRAVITY	0.583	0.581	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10993 SAMPLE 2111	INDEX 10994 SAMPLE 2127	INDEX 10995 SAMPLE 2129
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	OREGON BASIN	OREGON BASIN	OREGON BASIN
WELL NAME	SIDNEY NO. 1	WILSON NO. 2	HALENE NO. 1
LOCATION	SEC. 5, T51N, R100W	SEC. 4 NW, T50N, R100W	SEC. 29, T51N, R100W
OWNER	OHIO OIL CO.	OHIO OIL CO.	ENALPAC OIL CO.
COMPLETED	12/03/16	07/03/20	01/01/--
SAMPLED	09/10/30	09/11/30	09/11/
FORMATION	JURA-MORRISON	PERM-EMBAR	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1320	3572	1368
WELLHEAD PRESSURE,PSIG	705	150	225
OPEN FLOW, MCFD	25000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	78.4	82.7
ETHANE	10.1	17.2	2.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.2	4.1	13.2
OXYGEN	0.0	0.1	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.05	0.12	0.07
HEATING VALUE*	1056	1102	890
SPECIFIC GRAVITY	0.619	0.658	0.630

	INDEX 10996 SAMPLE 7930	INDEX 10997 SAMPLE 11046	INDEX 10998 SAMPLE 11047
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	OREGON BASIN	OREGON BASIN	OREGON BASIN
WELL NAME	SIDNEY NO. 6	CUSTER NO. 17	CUSTER NO. 17
LOCATION	SEC. 5, T51N, R100W	SEC. 32, T52N, R100W	SEC. 32, T52N, R100W
OWNER	OHIO OIL CO.	MARATHON OIL CO., ET AL.	MARATHON OIL CO., ET AL.
COMPLETED	02/01/61	07/24/67	07/24/67
SAMPLED	02/17/61	07/27/67	07/26/67
FORMATION	TRIA-CHUGWATER	CAMB-FLATHEAD	CAMB-FLATHEAD
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2308	5983	6035
WELLHEAD PRESSURE,PSIG	1013	2510	NOT GIVEN
OPEN FLOW, MCFD	3008	532	3
COMPONENT, MOLE PCT			
METHANE	90.5	87.9	84.6
ETHANE	4.4	5.8	6.8
PROPANE	1.3	2.1	2.8
N-BUTANE	0.4	0.7	0.8
ISOBUTANE	0.3	0.6	0.8
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.4	0.5
NITROGEN	2.1	1.7	2.7
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.16	0.25
HEATING VALUE*	1070	1070	1081
SPECIFIC GRAVITY	0.617	0.650	0.677

	INDEX 10999 SAMPLE 9433	INDEX 11000 SAMPLE 9032	INDEX 11001 SAMPLE 9034
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	OREGON BASIN SE	SILVERTIP	SILVERTIP
WELL NAME	GOVT. SIMMONS NO. 1	NO. 68-28	NO. 31-33
LOCATION	SEC. 13, T50N, R100W	SEC. 28, T57N, R100W	SEC. 33, T58N, R100W
OWNER	SOHIO PETROLEUM CO.	TEXACO INC.	TEXACO INC.
COMPLETED	12/08/55	--/--/48	--/--/49
SAMPLED	07/14/64	07/03/63	07/03/63
FORMATION	CRET-MUDDY	CRET-PEAY	PERM-EMBAR&PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	5771	6000	8800
WELLHEAD PRESSURE,PSIG	1200	700	1400
OPEN FLOW, MCFD	5000	200	600
COMPONENT, MOLE PCT			
METHANE	91.8	51.2	58.3
ETHANE	5.6	16.5	12.0
PROPANE	1.1	8.8	3.9
N-BUTANE	0.3	6.5	1.9
ISOBUTANE	0.2	2.7	0.6
N-PENTANE	0.1	1.2	0.6
ISOPENTANE	0.1	3.3	0.7
CYCLOPENTANE	TRACE	0.4	0.2
HEXANES PLUS	0.1	2.0	0.7
NITROGEN	0.8	6.5	0.3
OXYGEN	TRACE	0.3	0.2
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	16.2
CARBON DIOXIDE	0.2	0.4	4.3
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1047	1663	1194
SPECIFIC GRAVITY	0.612	1.040	0.883

	INDEX 11002 SAMPLE 9035	INDEX 11003 SAMPLE 10424	INDEX 11004 SAMPLE 9029
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	SILVERTIP	SILVERTIP	WHISTLE CREEK
WELL NAME	NO. 55-33	74-A-33	NO. 4-16
LOCATION	SEC. 33, T58N, R100W	SEC. 33, T58N, R100W	SEC. 45, T56N, R98W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	07/--/61	07/23/65	06/17/52
SAMPLED	07/03/63	02/24/66	07/03/63
FORMATION	MISS-MADISON	CRET-LANCE	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9037	1723	5832
WELLHEAD PRESSURE,PSIG	40	625	0
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	33
COMPONENT, MOLE PCT			
METHANE	37.0	80.6	64.7
ETHANE	24.2	4.3	13.0
PROPANE	11.7	4.8	7.2
N-BUTANE	8.3	1.2	5.8
ISOBUTANE	2.8	1.0	1.9
N-PENTANE	2.8	0.3	1.6
ISOPENTANE	2.8	0.3	2.2
CYCLOPENTANE	2.6	TRACE	0.3
HEXANES PLUS	5.5	0.1	1.8
NITROGEN	2.2	3.2	1.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.8	0.1	0.1
HELIUM	0.08	0.06	0.01
HEATING VALUE*	1446	1195	1601
SPECIFIC GRAVITY	1.200	0.705	0.938

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11005 SAMPLE 9030		INDEX 11006 SAMPLE 13988		INDEX 11007 SAMPLE 8231	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	WHISTLE CREEK		WHISTLE CREEK S		WILDCAT	
WELL NAME	NO. 45-16		GOVERNMENT-SEABOARD NO. 1		MCCULLOCH PEAKS GOVT. NO. 1	
LOCATION	LOT 45, T56N, R98W		SEC. 35, T56N, R98W		SEC. 21, T54N, R100W	
OWNER	TEXACO INC.		PHILLIPS PETROLEUM CO.		ATLANTIC REFINING CO.	
COMPLETED	09/12/52		02/01/73		NOT GIVEN	
SAMPLED	07/03/63		04/30/74		10/06/61	
FORMATION	JURA-MORRISON		CRET-PEAY		EOCE-FORT UNION	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	4373		3112		3486	
WELLHEAD PRESSURE,PSIG	0		800		NOT GIVEN	
OPEN FLOW, MCFD	8		7000		300	
COMPONENT, MOLE PCT						
METHANE	47.5		91.2		79.8	
ETHANE	6.9		5.1		8.6	
PROPANE	9.7		1.3		5.0	
N-BUTANE	12.6		0.2		1.3	
ISOBUTANE	3.0		0.4		1.6	
N-PENTANE	5.8		TRACE		0.3	
ISOPENTANE	5.9		0.1		0.6	
CYCLOPENTANE	0.8		0.1		0.1	
HEXANES PLUS	6.5		0.1		0.4	
NITROGEN	1.1		0.5		2.3	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.8		TRACE	
HELIUM	0.03		0.01		0.04	
HEATING VALUE*	2247		1182		1249	
SPECIFIC GRAVITY	1.330		0.617		0.730	

	INDEX 11008 SAMPLE 8246		INDEX 11009 SAMPLE 8263		INDEX 11010 SAMPLE 15465	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	MCCULLOCH PEAKS GOVT. NO. 1		MCCULLOCH PEAKS GOVT. NO. 1		SELLER DRAW UNIT NO. 1	
LOCATION	SEC. 21, T54N, R100W		SEC. 21, T54N, R100W		SEC. 21, T48N, R98W	
OWNER	ATLANTIC REFINING CO.		ATLANTIC REFINING CO.		AMERICAN QUASAR PET. CO.	
COMPLETED	NOT GIVEN		NOT GIVEN		NOT GIVEN	
SAMPLED	10/13/61		11/01/61		10/26/78	
FORMATION	EOCE-FORT UNION		CRET-MEETEETSE		CRET-MUDDY	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	4750		7230		19580	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		10280	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	80.6		67.0		93.5	
ETHANE	7.8		12.2		1.9	
PROPANE	4.9		10.0		0.2	
N-BUTANE	1.3		3.5		0.1	
ISOBUTANE	1.5		3.3		TRACE	
N-PENTANE	0.3		0.8		TRACE	
ISOPENTANE	0.6		1.2		TRACE	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.4		0.6		0.1	
NITROGEN	2.4		1.2		2.0	
OXYGEN	TRACE		TRACE		0.4	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		1.6	
HELIUM	0.15		0.02		0.01	
HEATING VALUE*	1244		1506		995	
SPECIFIC GRAVITY	0.726		0.879		0.595	

	INDEX 11011 SAMPLE 2856		INDEX 11012 SAMPLE 2204		INDEX 11013 SAMPLE 3032	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SHERIDAN		SUBLETTE		SUBLETTE	
FIELD	WILDCAT		BIG PINEY		BIG PINEY	
WELL NAME	ANNA KESTER		NO. 1		CRISMAN NO. 1	
LOCATION	SEC. 24, T58N, R85W		SEC. 5, T29N, R111W		SEC. 10, T29N, R113W	
OWNER	ANNA KESTER		BENEFICIAL OIL CO.		SUNSET OIL & GAS CO.	
COMPLETED	12/--/40		09/28/27		09/--/41	
SAMPLED	02/02/41		10/03/30		11/29/41	
FORMATION	EOCE-WASATCH BASAL		EOCE-WASATCH		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	515		535		535	
DEPTH, FEET	434		2582		944	
WELLHEAD PRESSURE,PSIG	50		NOT GIVEN		393	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		13400	
COMPONENT, MOLE PCT						
METHANE	90.0		88.6		83.5	
ETHANE	0.0		0.0		15.1	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	9.2		10.9		0.9	
OXYGEN	0.3		0.1		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.5		0.5		0.2	
HELIUM	TRACE		0.00		0.05	
HEATING VALUE*	912		898		1116	
SPECIFIC GRAVITY	0.599		0.605		0.635	

	INDEX 11014 SAMPLE 6752		INDEX 11015 SAMPLE 8984		INDEX 11016 SAMPLE 8991	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	BIG PINEY		BIG PINEY		BIG PINEY	
WELL NAME	TRESNER STATE NO. 9		C-8		B-35	
LOCATION	SEC. 36, T29N, R113W		SEC. 14, T28N, R113W		SEC. 35, T29N, R113W	
OWNER	GULF OIL CORP.		BELCO PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	04/28/58		06/29/55		12/03/59	
SAMPLED	07/16/58		05/29/63		05/28/63	
FORMATION	PALE-ALMY		PALE-ALMY		CRET-MESAVERDE	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	2684		2261		3050	
WELLHEAD PRESSURE,PSIG	1025		140		1100	
OPEN FLOW, MCFD	58000		16514		1500	
COMPONENT, MOLE PCT						
METHANE	89.2		80.9		88.7	
ETHANE	7.0		3.1		6.4	
PROPANE	2.2		0.3		2.1	
N-BUTANE	0.4		0.1		0.5	
ISOBUTANE	0.5		0.1		0.4	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	0.3		0.1		0.3	
CYCLOPENTANE	0.0		0.1		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.2		12.0		0.6	
OXYGEN	TRACE		2.6		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.3		0.7	
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1134		903		1120	
SPECIFIC GRAVITY	0.633		0.649		0.640	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11017 SAMPLE 8992		INDEX 11018 SAMPLE 6764		INDEX 11019 SAMPLE 8418	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	BIG PINEY		BIRCH CREEK		BIRCH CREEK	
WELL NAME	E-29		BIRCH CREEK UNIT NO. 1		BIRCH CREEK UNIT NO. 13	
LOCATION	SEC. 31, T29N, R112W		SEC. 14, T27N, R113W		SEC. 22, T27N, R113W	
OWNER	PAN AMERICAN PETROLEUM CORP.		CALIFORNIA CO.		CALIFORNIA CO.	
COMPLETED	12/00/59		04/10/57		12/14/61	
SAMPLED	05/28/63		07/29/58		02/24/62	
FORMATION	PALE-ALMY		CRET-BEAR RIVER		CRET-BEAR RIVER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	NOT GIVEN		7543		7940	
WELLHEAD PRESSURE,PSIG	600		NOT GIVEN		3250	
OPEN FLOW, MCFD	300		1440		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	91.1		88.2		87.7	
ETHANE	5.7		6.6		6.8	
PROPANE	1.5		2.5		2.9	
N-BUTANE	0.4		0.6		0.7	
ISOBUTANE	0.3		0.2		0.4	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.2		0.9		0.4	
CYCLOPENTANE	0.1		0.0		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.5		0.5		0.9	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.0	
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1105		1152		1149	
SPECIFIC GRAVITY	0.620		0.648		0.650	

	INDEX 11020 SAMPLE 8419		INDEX 11021 SAMPLE 14787		INDEX 11022 SAMPLE 13213	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	BIRCH CREEK		BIRCH CREEK		BIRD CANYON	
WELL NAME	BIRCH CREEK UNIT NO. 13		BIRCH CREEK UNIT 94		FEDERAL NO. 22-25	
LOCATION	SEC. 22, T27N, R113W		SEC. 11, T27N, R113W		SEC. 25, T27N, R112W	
OWNER	CALIFORNIA CO.		CHEVRON OIL CO.		WESTRANS PETROLEUM INC.	
COMPLETED	12/14/61		09/28/76		01/--/72	
SAMPLED	02/24/62		09/27/76		05/12/72	
FORMATION	CRET-FRONTIER		CRET-FRONTIER & BEAR RIVER		CRET-BEAR RIVER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	7068		7779		8822	
WELLHEAD PRESSURE,PSIG	3150		2250		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		7000		435	
COMPONENT, MOLE PCT						
METHANE	92.1		90.7		92.3	
ETHANE	4.3		5.1		4.1	
PROPANE	1.1		2.0		1.3	
N-BUTANE	0.2		0.5		0.2	
ISOBUTANE	TRACE		0.2		0.2	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.6		0.3		0.1	
CYCLOPENTANE	0.3		0.1		TRACE	
HEXANES PLUS	0.3		0.1		0.1	
NITROGEN	0.8		0.7		1.2	
OXYGEN	0.1		0.0		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1098		1112		1069	
SPECIFIC GRAVITY	0.620		0.626		0.607	

	INDEX 11023 SAMPLE 13214		INDEX 11024 SAMPLE 13982		INDEX 11025 SAMPLE 8779	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	BIRD CANYON		BIRD CANYON		CHIMNEY BUTTE	
WELL NAME	FEDERAL NO. 22-25		BIRD CANYON NO. 41-36		C. B. UNIT NO. 17	
LOCATION	SEC. 25, T27N, R112W		SEC. 36, T27N, R112W		SEC. 35, T28N, R113W	
OWNER	WESTRANS PETROLEUM INC.		WESTRANS PETROLEUM, INC.		BELCO PETROLEUM CORP.	
COMPLETED	01/--/72		07/06/72		10/04/62	
SAMPLED	05/12/72		NOT GIVEN		11/27/62	
FORMATION	CRET-FRONTIER		CRET-FRONTIER		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	9142		8542		6720	
WELLHEAD PRESSURE,PSIG	3700		4000		2725	
OPEN FLOW, MCFD	1000		3190		17195	
COMPONENT, MOLE PCT						
METHANE	92.0		90.5		92.4	
ETHANE	4.3		5.6		2.9	
PROPANE	1.4		1.8		1.2	
N-BUTANE	0.2		0.3		0.4	
ISOBUTANE	0.2		0.4		0.2	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		TRACE	
NITROGEN	0.7		0.5		2.0	
OXYGEN	TRACE		0.6		0.4	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.1	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1079		1111		1048	
SPECIFIC GRAVITY	0.606		0.626		0.604	

	INDEX 11026 SAMPLE 12280		INDEX 11027 SAMPLE 2202		INDEX 11028 SAMPLE 6625	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	DEER HILL UNIT		DRY PINEY		DRY PINEY	
WELL NAME	DEER HILL UNIT NO. 2-23		NO. 2		DRY PINEY UNIT NO. 3	
LOCATION	SEC. 23, T30N, R113W		SEC. 12, T28N, R114W		SEC. 4, T27N, R114W	
OWNER	CHANDLER & ASSOCIATES, INC.		CHARLES LACKEY		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	11/27/69		04/30/28		02/12/58	
SAMPLED	06/02/70		10/10/30		05/04/58	
FORMATION	PALE-ALMY		CRET-ADAVILLE		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	2946		510		7641	
WELLHEAD PRESSURE,PSIG	3900		*		2677	
OPEN FLOW, MCFD	2235		NOT GIVEN		5080	
COMPONENT, MOLE PCT						
METHANE	91.7		80.0		92.6	
ETHANE	2.7		17.9		5.5	
PROPANE	1.4		---		1.6	
N-BUTANE	0.1		---		0.5	
ISOBUTANE	0.2		---		0.3	
N-PENTANE	TRACE		---		0.1	
ISOPENTANE	0.1		---		0.2	
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.1		---		0.2	
NITROGEN	3.5		1.5		0.6	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.0		0.3		0.1	
HELIUM	0.06		0.8		TRACE	
HEATING VALUE*	1020		1171		1112	
SPECIFIC GRAVITY	0.599		0.654		0.626	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11029 SAMPLE 13612	INDEX 11030 SAMPLE 13613	INDEX 11031 SAMPLE 7191
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	DRY PINEY	DRY PINEY	FIGURE FOUR
WELL NAME	DRY PINEY UNIT NO. 22	DRY PINEY UNIT NO. 22	FIGURE FOUR CANYON NO. 1
LOCATION	SEC. 10, T27N, R114W	SEC. 10, T27N, R114W	SEC. 15, T27N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	CARTER OIL CO.
COMPLETED	09/07/72	09/07/72	07/13/59
SAMPLED	04/06/73	04/06/73	08/--/59
FORMATION	CRET-FRONTIER	CRET-BEAR RIVER	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6450	8143	7626
WELLHEAD PRESSURE,PSIG	1400	1800	NOT GIVEN
OPEN FLOW, MCFD	2040	1210	18000
COMPONENT, MOLE PCT			
METHANE	88.4	87.0	95.4
ETHANE	5.6	6.3	2.7
PROPANE	2.5	3.1	0.8
N-BUTANE	0.5	0.8	0.1
ISOBUTANE	0.5	0.6	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.0	1.6	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.03	0.01
HEATING VALUE*	1108	1144	1052
SPECIFIC GRAVITY	0.637	0.656	0.589

	INDEX 11032 SAMPLE 15714	INDEX 11033 SAMPLE 8982	INDEX 11034 SAMPLE 7129
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	FOGARTY CREEK	GOAT HILL	GREEN RIVER BEND
WELL NAME	FOGARTY CREEK UNIT 7-9	GOAT HILL NO. 3	GREEN RIVER BEND UNIT NO. 1
LOCATION	SEC. 9, T28N, R114W	SEC. 32, T31N, R113W	SEC. 19, T27N, R112W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/14/77	06/06/62	02/20/59
SAMPLED	07/27/79	05/27/63	06/25/59
FORMATION	CRET-FRONTIER	PALE-ALMY	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7166	2229	6728
WELLHEAD PRESSURE,PSIG	1475	745	2500
OPEN FLOW, MCFD	2328	41441	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.9	85.8	94.1
ETHANE	5.4	5.9	3.6
PROPANE	3.7	3.2	0.9
N-BUTANE	1.2	0.8	0.2
ISOBUTANE	1.1	0.9	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.6	2.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.03	0.10	0.00
HEATING VALUE*	1189	1138	1060
SPECIFIC GRAVITY	0.684	0.664	0.594

	INDEX 11035 SAMPLE 8977	INDEX 11036 SAMPLE 12154	INDEX 11037 SAMPLE 6055
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	GREEN RIVER BEND	GREEN RIVER BEND	HOGSBACK
WELL NAME	T-5	GRB UNIT NO. T-79-7	HOGSBACK UNIT 87-19
LOCATION	SEC. 36, T27N, R113W	SEC. 7, T27N, R112W	SEC. 19, T27N, R113W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	GENERAL PETROLEUM CORP.
COMPLETED	11/24/62	09/25/69	10/31/55
SAMPLED	05/29/63	12/13/67	05/09/56
FORMATION	PALE-ALMY	PALE-ALMY&BIRCH CREEK	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2458	2771	6448
WELLHEAD PRESSURE,PSIG	920	1157	2900
OPEN FLOW, MCFD	NOT GIVEN	2443	19500
COMPONENT, MOLE PCT			
METHANE	82.2	90.7	36.5
ETHANE	7.2	4.0	4.1
PROPANE	3.0	1.9	42.0
N-BUTANE	1.1	0.4	0.0
ISOBUTANE	1.0	0.6	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.7	0.2	4.8
CYCLOPENTANE	0.3	0.1	0.3
HEXANES PLUS	0.7	0.1	0.1
NITROGEN	3.0	1.9	9.2
OXYGEN	0.2	TRACE	1.3
ARGON	0.0	TRACE	0.6
HYDROGEN	0.0	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.8
HELIUM	0.01	0.05	0.01
HEATING VALUE*	1196	1091	1752
SPECIFIC GRAVITY	0.708	0.625	1.152

	INDEX 11038 SAMPLE 8818	INDEX 11039 SAMPLE 15709	INDEX 11040 SAMPLE 2200
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	HOGSBACK	JOHNSON RIDGE	LA BARGE
WELL NAME	HOGSBACK NO. 76-36	S 27-33	NO. 5H-1
LOCATION	SEC. 36, T27N, R114W	SEC. 33, T30N, R113W	SEC. 34, T27N, R113W
OWNER	MOBIL OIL CO.	BELCO PETROLEUM CORP.	CALIFORNIA CO.
COMPLETED	08/--/62	12/17/78	04/01/27
SAMPLED	01/03/63	07/27/79	10/09/30
FORMATION	CRET-FRONTIER	EOCE-FORT UNION	CRET-FRONTIER 1ST
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7543	2150	660
WELLHEAD PRESSURE,PSIG	2300	NOT GIVEN	5
OPEN FLOW, MCFD	1950	2229	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.5	85.9	69.6
ETHANE	6.7	7.3	28.6
PROPANE	3.0	2.9	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.7	0.8	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.4	0.8	0.6
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	1.2	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1147	1149	1218
SPECIFIC GRAVITY	0.656	0.668	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11041 SAMPLE 2201	INDEX 11042 SAMPLE 8980	INDEX 11043 SAMPLE 11238
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	LA BARGE	LA BARGE	LA BARGE E
WELL NAME	NO. 5 M-2	BNG NO. 34	EAST LABARGE NO. 20-21
LOCATION	SEC. 34, T27N, R113W	SEC. 4, T26N, R113W	SEC. 21, T27N, R112W
OWNER	CALIFORNIA CO.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	06/18/27	05/20/60	09/12/67
SAMPLED	10/10/30	05/29/63	12/05/67
FORMATION	-SECOND SAND	CRET-FRONTIER & MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	790	6928	7038
WELLHEAD PRESSURE,PSIG	5	3031	2106
OPEN FLOW, MCFD	NOT GIVEN	5976	9558
COMPONENT, MOLE PCT			
METHANE	64.1	85.4	95.5
ETHANE	34.1	6.8	2.9
PROPANE	---	2.9	0.5
N-BUTANE	---	0.8	0.1
ISOBUTANE	---	0.5	TRACE
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.7	2.7	0.4
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.3
HELIUM	0.03	0.04	0.01
HEATING VALUE*	1260	1128	1050
SPECIFIC GRAVITY	0.734	0.661	0.586

	INDEX 11044 SAMPLE 10096	INDEX 11045 SAMPLE 8978	INDEX 11046 SAMPLE 5599
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	PINEDALE	STAR CORRAL	TIP TOP
WELL NAME	PINEDALE UNIT NO. 8	STAR CORRAL NO. 1	TIP TOP 18-20
LOCATION	SEC. 20, T33N, R109W	SEC. 16, T30N, R113W	SEC. 20, T28N, R113W
OWNER	MOUNTAIN FUEL SUPPLY CO.	BELCO PETROLEUM CORP.	GENERAL PETROLEUM CORP.
COMPLETED	01/06/64	08/18/61	03/01/54
SAMPLED	08/27/65	05/29/63	02/27/54
FORMATION	EOCE-FORT UNION	PALE-ALMY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7275	4505	6660
WELLHEAD PRESSURE,PSIG	5250	409	3150
OPEN FLOW, MCFD	NOT GIVEN	1204	1900
COMPONENT, MOLE PCT			
METHANE	93.8	86.4	87.1
ETHANE	4.4	5.0	7.2
PROPANE	0.8	2.6	3.0
N-BUTANE	0.1	0.7	0.5
ISOBUTANE	0.3	0.9	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.7	3.5	0.9
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.10	0.02
HEATING VALUE*	1063	1104	1155
SPECIFIC GRAVITY	0.596	0.653	0.655

	INDEX 11047 SAMPLE 8208	INDEX 11048 SAMPLE 8349	INDEX 11049 SAMPLE 15343
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	TIP TOP	TIP TOP	TIP TOP
WELL NAME	TIP TOP 22-19G	TIP TOP 22-19G	TIP TOP F44-7G
LOCATION	SEC. 19, T28N, R113W	SEC. 19, T28N, R113W	SEC. 7, T28N, R113W
OWNER	MOBIL OIL CO.	MOBIL OIL CO.	MOBIL OIL CORP.
COMPLETED	12/04/61	NOT GIVEN	06/10/78
SAMPLED	09/13/61	12/28/61	08/10/78
FORMATION	PENN-TENSLEEP	ORDO-BIG HORN	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12478	15095	6372
WELLHEAD PRESSURE,PSIG	5098	6790	2640
OPEN FLOW, MCFD	336	9800	9707
COMPONENT, MOLE PCT			
METHANE	26.3	6.7	77.3
ETHANE	0.1	0.1	7.5
PROPANE	TRACE	0.2	5.7
N-BUTANE	TRACE	0.1	3.4
ISOBUTANE	TRACE	0.0	2.0
N-PENTANE	TRACE	0.0	0.7
ISOPENTANE	TRACE	0.0	1.6
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	TRACE	0.0	0.5
NITROGEN	8.4	6.5	1.0
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	64.2	85.5	TRACE
HELIUM	0.75	0.80	0.01
HEATING VALUE*	268	78	1379
SPECIFIC GRAVITY	1.213	1.416	0.795

	INDEX 11050 SAMPLE 16100	INDEX 11051 SAMPLE 12296	INDEX 11052 SAMPLE 12337
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	TIP TOP	WILDCAT	WILDCAT
WELL NAME	TIP TOP T58-2G	HOBACK II UNIT, NO. 2	HOBACK II UNIT, NO. 2
LOCATION	SEC. 2, T28N, R114W	SEC. 15, T28N, R115W	SEC. 15, T28N, R115W
OWNER	MOBIL OIL CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	NOT GIVEN	06/11/70	DRILL STEM TEST
SAMPLED	10/13/80	06/14/70	07/08/70
FORMATION	MISS-MADISON	MISS-MADISON	CRET-MOWRY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	18427	15750	8687
WELLHEAD PRESSURE,PSIG	2910	1500	2580
OPEN FLOW, MCFD	NOT GIVEN	70	660
COMPONENT, MOLE PCT			
METHANE	18.7	25.8	82.0
ETHANE	0.3	9.2	7.0
PROPANE	.1	6.2	4.1
N-BUTANE	0.0	2.0	1.1
ISOBUTANE	0.0	2.0	0.9
N-PENTANE	0.0	0.9	0.3
ISOPENTANE	.0	0.9	0.9
CYCLOPENTANE	.0	0.0	0.4
HEXANES PLUS	0.0	0.3	0.8
NITROGEN	9.3	9.8	2.3
OXYGEN	0.1	TRACE	TRACE
ARGON	.1	1.3	1.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	1.5	1.3	0.0
CARBON DIOXIDE	69.7	60.4	0.1
HELIUM	0.59	0.64	0.05
HEATING VALUE*	216	390	1237
SPECIFIC GRAVITY	1.288	1.224	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11053 SAMPLE 16082	INDEX 11054 SAMPLE 16083	INDEX 11055 SAMPLE 13083
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SWEETWATER
FIELD	WILDCAT	WILDCAT	ANTELOPE
WELL NAME	RILEY RIDGE FEDERAL NO.8-24	RILEY RIDGE FEDERAL NO.8-24	FEDERAL A NO. 1
LOCATION	SEC. 8, T29N, R114W	SEC. 8, T29N, R114W	SEC. 24, T17N, R100W
OWNER	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.	SKELLY OIL CO. ETAL
COMPLETED	NOT GIVEN	NOT GIVEN	06/16/71
SAMPLED	09/24/80	09/24/80	10/10/71
FORMATION	MISS-MADISON	MISS-MADISON	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14437	14437	5963
WELLHEAD PRESSURE,PSIG	3050	3050	1950
OPEN FLOW, MCFD	150000	150000	15000
COMPONENT, MOLE PCT			
METHANE	19.4	18.8	98.3
ETHANE	0.1	0.1	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.3	7.4	1.5
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	4.2	3.7	0.0
CARBON DIOXIDE	68.4	69.4	0.1
HELIUM	0.54	0.56	0.04
HEATING VALUE*	225	216	996
SPECIFIC GRAVITY	1.277	1.284	0.562

	INDEX 11056 SAMPLE 9413	INDEX 11057 SAMPLE 8407	INDEX 11058 SAMPLE 8470
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN M	BAXTER BASIN N	BAXTER BASIN N
WELL NAME	UPRR NO. 1-7	UNION PACIFIC 11-19-104 NO.4	UNION PACIFIC NO. 4
LOCATION	SEC. 7, T18N, R103W	SEC. 11, T19N, R104W	SEC. 11, T19N, R104W
OWNER	UNION PACIFIC RAILROAD CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	10/19/59	NOT GIVEN	NOT GIVEN
SAMPLED	01/17/73	02/05/62	03/19/62
FORMATION	CRET-FRONTIER & DAKOTA	PENN-WEBER	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2481	6214	7507
WELLHEAD PRESSURE,PSIG	350	2770	3346
OPEN FLOW, MCFD	800	8170	5862
COMPONENT, MOLE PCT			
METHANE	94.8	1.5	1.6
ETHANE	1.9	0.1	0.1
PROPANE	0.4	0.1	0.1
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.2
NITROGEN	1.3	21.8	14.2
OXYGEN	0.0	3.6	0.1
ARGON	TRACE	0.2	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.7
CARBON DIOXIDE	1.5	72.1	82.0
HELIUM	0.10	0.36	0.64
HEATING VALUE*	1005	20	39
SPECIFIC GRAVITY	0.587	1.370	1.423

	INDEX 11059 SAMPLE 13516	INDEX 11060 SAMPLE 15023	INDEX 11061 SAMPLE 918
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN N	BAXTER BASIN N	BAXTER BASIN S
WELL NAME	CHAMPLIN NO. 104 NO. 1	CHAMPLIN NO. 4-11	NO. 1
LOCATION	SEC. 7, T20N, R103W	SEC. 11, T19N, R103W	SEC. NW1/4-36, T17N, R104W
OWNER	AMOCO PRODUCTION CO.	CHANDLER & ASSOCIATES, INC.	PRODUCERS & REFINERS CORP.
COMPLETED	12/01/71	NOT GIVEN	NOT GIVEN
SAMPLED	01/-/73	06/14/77	08/12/24
FORMATION	JURA-MORRISON	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4158	NOT GIVEN	3422
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7800	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	95.4	97.3	69.0
ETHANE	2.6	1.8	3.6
PROPANE	0.6	0.1	---
N-BUTANE	0.1	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	0.8	0.4	23.8
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.4	2.4
HELIUM	0.03	0.03	0.87
HEATING VALUE*	1040	1020	763
SPECIFIC GRAVITY	0.581	0.570	0.691

	INDEX 11062 SAMPLE 951	INDEX 11063 SAMPLE 1143	INDEX 11064 SAMPLE 3034
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	NO. 29	NO. 2	U P R R NO. 1
LOCATION	SEC. 36, T18, R104	SEC. 13, T17N, R104W	SEC. 11, T17N, R104W
OWNER	MIDWEST REFINING CO.	PRODUCERS & REFINERS CORP.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	04/--/25	--/-/25
SAMPLED	12/24/24	08/26/25	12/02/41
FORMATION	CRET-FRONTIER	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	1728	19	2418
WELLHEAD PRESSURE,PSIG	800	735	490
OPEN FLOW, MCFD	4000	22500	23500
COMPONENT, MOLE PCT			
METHANE	92.4	68.2	88.5
ETHANE	3.5	6.4	1.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	21.1	7.1
OXYGEN	0.3	0.8	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.5	2.8	2.6
HELIUM	0.09	0.77	0.26
HEATING VALUE*	999	806	922
SPECIFIC GRAVITY	0.601	0.702	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11065 SAMPLE 3035	INDEX 11066 SAMPLE 3036	INDEX 11067 SAMPLE 3037
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	U P R R NO. 1	POSTEN NO. 2	STATE NO. 1
LOCATION	SEC. 23, T17N, R104W	SEC. 22, T16N, R104W	SEC. 16, T16N, R104W
OWNER	WYOMING CALIFORNIA PET. CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	--/--/28	--/--/22
SAMPLED	12/02/41	12/02/41	12/02/41
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3203	2805	2475
WELLHEAD PRESSURE,PSIG	665	540	625
OPEN FLOW, MCFD	7300	60000	18000
COMPONENT, MOLE PCT			
METHANE	76.0	75.1	76.7
ETHANE	1.7	0.9	1.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.2	20.7	18.9
OXYGEN	0.3	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.1	2.3	2.3
HELIUM	0.71	0.79	0.74
HEATING VALUE*	800	777	800
SPECIFIC GRAVITY	0.661	0.664	0.659

	INDEX 11068 SAMPLE 3038	INDEX 11069 SAMPLE 3039	INDEX 11070 SAMPLE 3040
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	JOE HAY NO. 1	HALLETT NO. 2	U P R R NO. 2
LOCATION	SEC. 26, T17N, R104W	SEC. 24, T17N, R104W	SEC. 23, T17N, R104W
OWNER	MOUNTAIN FUEL SUPPLY CO.	WYOMING CALIFORNIA PET. CO.	WYOMING CALIFORNIA PET. CO.
COMPLETED	08/--/30	--/--/39	11/--/33
SAMPLED	12/02/41	12/02/41	12/02/41
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3540	3098	3570
WELLHEAD PRESSURE,PSIG	737	735	655
OPEN FLOW, MCFD	15000	6800	23600
COMPONENT, MOLE PCT			
METHANE	76.6	76.4	73.5
ETHANE	0.6	0.5	1.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.9	20.6	21.2
OXYGEN	0.0	0.5	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.2	1.3	2.5
HELIUM	0.72	0.72	0.76
HEATING VALUE*	787	783	770
SPECIFIC GRAVITY	0.658	0.654	0.673

	INDEX 11071 SAMPLE 3041	INDEX 11072 SAMPLE 3042	INDEX 11073 SAMPLE 3769
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	U P R R NO. 1	PAT SULLIVAN NO. 1	UNIT WELL NO. 1
LOCATION	SEC. 21, T16N, R104W	SEC. 10, T16N, R104W	SEC. 21, T16N, R104W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	04/--/23	06/--/30	11/01/43
SAMPLED	12/02/41	12/02/41	04/01/44
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2905	2620	2818
WELLHEAD PRESSURE,PSIG	650	500	640
OPEN FLOW, MCFD	65000	12000	3000
COMPONENT, MOLE PCT			
METHANE	75.6	74.7	76.6
ETHANE	1.3	0.6	1.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.6	21.5	18.3
OXYGEN	0.2	0.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.7	2.3	2.2
HELIUM	0.75	0.83	0.73
HEATING VALUE*	789	767	806
SPECIFIC GRAVITY	0.665	0.666	0.660

	INDEX 11074 SAMPLE 6779	INDEX 11075 SAMPLE 2108	INDEX 11076 SAMPLE 2123
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER N	BAXTER N
WELL NAME	FEDERAL NO. 9-8	ARNOLD NO. 1	UNION PACIFIC NO. 1
LOCATION	SEC. 8, T15N, 104W	SEC. 24, T19N, R104W	SEC. 11, T19N, R104W
OWNER	CAULKINS OIL CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	08/26/29	11/01/26
SAMPLED	08/07/58	09/02/30	09/06/30
FORMATION	CRET-LAKOTA	JURA-SUNDANCE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	3504	2920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	200	1325
OPEN FLOW, MCFD	NOT GIVEN	3800	19000
COMPONENT, MOLE PCT			
METHANE	91.6	98.4	96.2
ETHANE	3.9	0.0	0.3
PROPANE	1.3	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.4	0.0	2.3
OXYGEN	TRACE	0.0	0.7
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.0	1.5	0.5
HELIUM	0.09	0.09	0.06
HEATING VALUE*	1065	997	980
SPECIFIC GRAVITY	0.623	0.569	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11077 SAMPLE 2146	INDEX 11078 SAMPLE 2147	INDEX 11079 SAMPLE 2148
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER N	BAXTER S	BAXTER S
WELL NAME	UNION PACIFIC NO. 1	POSTEN NO. 2	MURPHY NO. 1
LOCATION	SEC. 11, T19N, R104W	SEC. 22, T16N, R104W	SEC. 26, T17N, R104W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/01/26	11/02/28	11/04/29
SAMPLED	09/12/30	09/16/30	09/15/30
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2391	2365	3410
WELLHEAD PRESSURE,PSIG	NOT GIVEN	810	810
OPEN FLOW, MCFD	10000	7000	33000
COMPONENT, MOLE PCT			
METHANE	89.8	92.8	70.9
ETHANE	0.7	4.2	1.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	2.0	26.0
OXYGEN	0.1	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.8	1.1
HELIUM	0.04	0.08	0.90
HEATING VALUE*	922	1015	738
SPECIFIC GRAVITY	0.598	0.591	0.674

	INDEX 11080 SAMPLE 8826	INDEX 11081 SAMPLE 14601	INDEX 11082 SAMPLE 14595
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BITTER CREEK	BRADY	BRADY DEEP
WELL NAME	BITTER CREEK 36 NO. 3	BRADY NO. 20D	BRADY NO. 3W
LOCATION	SEC. 36, T17N, R99W	NOT GIVEN	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	01/09/63	NOT GIVEN	NOT GIVEN
SAMPLED	01/05/63	02/26/76	02/26/76
FORMATION	CRET-LANCE	CRET-DAKOTA	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7844	11400	14400
WELLHEAD PRESSURE,PSIG	1526	3000	2800
OPEN FLOW, MCFD	17	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.5	92.4	57.0
ETHANE	9.5	5.2	5.8
PROPANE	4.4	0.9	2.3
N-BUTANE	1.3	0.2	0.5
ISOBUTANE	1.2	0.2	0.5
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.8	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	0.6	0.3	6.9
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.6	26.4
HELIUM	0.01	0.02	0.15
HEATING VALUE*	1245	1075	793
SPECIFIC GRAVITY	0.736	0.607	0.916

	INDEX 11083 SAMPLE 14596	INDEX 11084 SAMPLE 14597	INDEX 11085 SAMPLE 14598
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP	BRADY DEEP	BRADY DEEP
WELL NAME	BRADY NO. 9N	BRADY NO. 5N	BRADY NO. 2W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/27/76	02/27/76	02/26/76
FORMATION	JURA-NUGGET	JURA-NUGGET	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12600	12000	14400
WELLHEAD PRESSURE,PSIG	1000	1000	2800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.1	6.6	57.3
ETHANE	0.6	0.5	6.0
PROPANE	2.6	2.8	2.8
N-BUTANE	2.5	2.4	0.8
ISOBUTANE	1.9	1.9	0.6
N-PENTANE	0.9	0.5	0.1
ISOPENTANE	1.2	1.6	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.9	0.5	0.2
NITROGEN	8.4	8.9	5.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.3	0.1	1.5
CARBON DIOXIDE	74.2	73.9	24.8
HELIUM	0.23	0.25	0.14
HEATING VALUE*	430	413	849
SPECIFIC GRAVITY	1.474	1.463	0.920

	INDEX 11086 SAMPLE 14599	INDEX 11087 SAMPLE 14600	INDEX 11088 SAMPLE 14602
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP	BRADY DEEP	BRADY DEEP
WELL NAME	BRADY NO. 16W	BRADY NO. 13W	BRADY NO. 31N
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/26/76	02/26/76	02/26/76
FORMATION	PENN-WEBER	PENN-WEBER	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14400	14400	12600
WELLHEAD PRESSURE,PSIG	2800	2800	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.3	57.3	7.8
ETHANE	6.2	6.2	0.6
PROPANE	2.8	2.8	2.8
N-BUTANE	0.8	0.8	2.5
ISOBUTANE	0.7	0.6	1.7
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.4	1.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	5.2	5.6	12.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.5	1.1	0.0
CARBON DIOXIDE	27.6	24.7	69.6
HELIUM	0.15	0.15	0.34
HEATING VALUE*	820	845	410
SPECIFIC GRAVITY	0.938	0.916	1.427

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11089 SAMPLE 14603	INDEX 11090 SAMPLE 14606	INDEX 11091 SAMPLE 14607
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP	BRADY DEEP	BRADY DEEP
WELL NAME	BRADY NO. 11W	BRADY NO. 8N	BRADY NO. 1W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/26/76	02/27/76	02/26/76
FORMATION	PENN-WEBER	JURA-NUGGET	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14400	12600	14400
WELLHEAD PRESSURE,PSIG	2800	1000	2800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.6	7.6	55.4
ETHANE	6.0	0.7	6.2
PROPANE	2.9	2.7	2.8
N-BUTANE	0.7	2.1	1.0
ISOBUTANE	0.8	1.5	0.8
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.3	1.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	5.7	10.7	6.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.2	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	1.1	0.1	0.9
CARBON DIOXIDE	27.5	72.3	25.8
HELIUM	0.27	0.27	0.14
HEATING VALUE*	414	361	439
SPECIFIC GRAVITY	0.943	1.426	0.935

	INDEX 11092 SAMPLE 13552	INDEX 11093 SAMPLE 14110	INDEX 11094 SAMPLE 16151
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP UNIT	BRADY DEEP UNIT	BRUFF
WELL NAME	BRADY UNIT 41-2 NO. 2	BRADY UNIT NO. 6 D	GOVT. R. M. DONLEY NO. 1
LOCATION	SEC. 2, T16N, R101W	SEC. 2, T16N, R101W	SEC. 2, T18N, R112W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	TEXACO INC.
COMPLETED	DRILL STEM TEST NO. 7	NOT GIVEN	08/18/80
SAMPLED	03/01/73	NOT GIVEN	12/15/80
FORMATION	PENN-WEBER	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	13825	11116	12030
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3291	5400
OPEN FLOW, MCFD	NOT GIVEN	2500	10240
COMPONENT, MOLE PCT			
METHANE	76.2	92.4	88.1
ETHANE	8.4	3.2	6.7
PROPANE	4.2	0.8	2.1
N-BUTANE	1.5	0.2	0.4
ISOBUTANE	1.2	0.2	0.4
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	6.9	2.0	0.8
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.7	0.7
HELIUM	0.20	0.02	0.01
HEATING VALUE*	1185	1045	1121
SPECIFIC GRAVITY	0.736	0.608	0.642

	INDEX 11095 SAMPLE 15870	INDEX 11096 SAMPLE 15901	INDEX 11097 SAMPLE 3048
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BUSH LAKE	CAMEL ROCK	CANYON CREEK
WELL NAME	FEDERAL Q NO. 1	AMOCO-CHAMPLIN NO. 33-34	NO. 1
LOCATION	SEC. 28, T25N, R96W	SEC. 33, T18N, R102W	SEC. 10, T12N, R101W
OWNER	TEXAS OIL & GAS CORP.	HOUSTON OIL & MINERALS CORP.	WEST STATES OIL CO.
COMPLETED	06/25/78	11/07/79	08/-/41
SAMPLED	12/18/79	02/08/80	11/27/41
FORMATION	CRET-ALMOND	CRET-FRONTIER	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12750	5138	2680
WELLHEAD PRESSURE,PSIG	7700	1750	1075
OPEN FLOW, MCFD	2100	7062	750
COMPONENT, MOLE PCT			
METHANE	92.9	87.1	88.4
ETHANE	0.8	5.3	10.8
PROPANE	0.1	1.3	---
N-BUTANE	0.0	0.2	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	TRACE	---
NITROGEN	0.4	5.0	0.6
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	5.7	0.3	0.1
HELIUM	TRACE	0.43	0.04
HEATING VALUE*	958	1021	1089
SPECIFIC GRAVITY	0.617	0.618	0.612

	INDEX 11098 SAMPLE 8993	INDEX 11099 SAMPLE 6062	INDEX 11100 SAMPLE 14561
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	CANYON CREEK	CHIMNEY ROCK	DEADMAN WASH
WELL NAME	UNIT NO. 3	GOVERNMENT NO. 1	CHAMPLIN 195 AMOCO NO. A-1
LOCATION	SEC. 3, T12N, R101W	SEC. 12, T18N, R102W	SEC. 5, T20N, R101W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	AMOCO PRODUCTION CO.
COMPLETED	07/24/62	01/10/56	05/01/74
SAMPLED	05/31/63	05/16/56	01/15/76
FORMATION	CRET-MESAVERDE	CRET-ROCK SPRINGS	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5831	895	7800
WELLHEAD PRESSURE,PSIG	1453	264	NOT GIVEN
OPEN FLOW, MCFD	6760	3900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	97.2	97.9
ETHANE	5.7	1.7	1.0
PROPANE	2.1	0.2	0.1
N-BUTANE	0.6	0.1	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	0.2	0.4	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.1	0.0
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1115	1013	1012
SPECIFIC GRAVITY	0.653	0.573	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11101 SAMPLE 8821	INDEX 11102 SAMPLE 14504	INDEX 11103 SAMPLE 15117
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	DESERT SPRINGS	DESERT SPRINGS	HAY RESERVOIR
WELL NAME	DESERT SPRINGS T66-16-S	PLAYA UNIT NO. 2	HAY RESERVOIR NO. 3
LOCATION	SEC. 16, T20N, R98W	SEC. 5, T20N, R98W	SEC. 27, T24N, R97W
OWNER	MOBIL OIL CO.	MESA PETROLEUM CO.	DAVIS OIL CO.
COMPLETED	08/23/62	05/01/75	08/23/76
SAMPLED	12/21/62	10/15/75	09/30/77
FORMATION	CRET-ALMOND	CRET-LEWIS	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5615	5466	9970
WELLHEAD PRESSURE, PSIG	1900	1150	5800
OPEN FLOW, MCFD	54000	3050	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.0	88.2	80.4
ETHANE	5.7	6.1	11.0
PROPANE	1.6	1.9	4.6
N-BUTANE	0.5	0.3	1.2
ISOBUTANE	0.4	0.5	0.7
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.7	0.5	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	2.0	1.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1105	1101	1230
SPECIFIC GRAVITY	0.640	0.647	0.711

	INDEX 11104 SAMPLE 15118	INDEX 11105 SAMPLE 1894	INDEX 11106 SAMPLE 7217
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	HAY RESERVOIR	HIAWATHA	HIAWATHA W
WELL NAME	HAY RESERVOIR NO. 5	NEWBERGER NO. 1	HIAWATHA B NO. 1
LOCATION	SEC. 22, T24N, R97W	SEC. 13, T12N, R100W	SEC. 24, T12N, R101W
OWNER	DAVIS OIL CO.	MOUNTAIN FUEL SUPPLY CO.	SKELLY OIL CO.
COMPLETED	04/08/77	09/19/29	03/25/56
SAMPLED	09/30/77	11/13/29	09/--/59
FORMATION	CRET-LEWIS	TERT-	CRET-LANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	10152	2375	4555
WELLHEAD PRESSURE, PSIG	5400	60	1675
OPEN FLOW, MCFD	NOT GIVEN	20000	3200
COMPONENT, MOLE PCT			
METHANE	85.8	70.8	93.6
ETHANE	9.1	18.2	3.8
PROPANE	2.7	---	0.8
N-BUTANE	0.6	---	0.1
ISOBUTANE	0.3	---	0.2
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.1	10.2	0.2
OXYGEN	0.0	0.8	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	0.1	0.7
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1151	1043	1065
SPECIFIC GRAVITY	0.657	0.693	0.601

	INDEX 11107 SAMPLE 15613	INDEX 11108 SAMPLE 14377	INDEX 11109 SAMPLE 14616
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	HIGGINS	KINNEY	KINNEY
WELL NAME	HIGGINS NO. 7	KINNEY UNIT NO. 1	KINNEY UNIT NO. 2
LOCATION	SEC. 33, T18N, R98W	SEC. 18, T13N, R99W	SEC. 18, T13N, R99W
OWNER	CHAMPLIN PETROLEUM CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	05/06/78	03/29/75	10/01/75
SAMPLED	04/30/78	05/22/75	02/25/76
FORMATION	JURA-NUGGET	JURA-NUGGET	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	16030	14722	14015
WELLHEAD PRESSURE, PSIG	4200	4100	8745
OPEN FLOW, MCFD	6000	4000	2915
COMPONENT, MOLE PCT			
METHANE	93.5	93.1	96.0
ETHANE	2.6	0.4	0.3
PROPANE	0.5	TRACE	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	4.0	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.5	3.2
HELIUM	0.04	0.08	0.01
HEATING VALUE*	1027	950	978
SPECIFIC GRAVITY	0.605	0.597	0.589

	INDEX 11110 SAMPLE 15001	INDEX 11111 SAMPLE 15002	INDEX 11112 SAMPLE 15205
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	LEUCITE HILLS	LEUCITE HILLS	LINCOLN ROAD UNIT
WELL NAME	AMOCO CHAMPLIN NO. 1-1	AMOCO CHAMPLIN NO. 1-5	LINCOLN ROAD UNIT NO. 1
LOCATION	SEC. 1, T21N, R104W	SEC. 5, T21N, R103W	SEC. 9, T24N, R111W
OWNER	KENNETH D. LUFF	KENNETH D. LUFF	C & K PETROLEUM, INC.
COMPLETED	02/25/77	01/20/77	03/03/77
SAMPLED	05/19/77	05/19/77	02/06/78
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5594	6387	9681
WELLHEAD PRESSURE, PSIG	2400	2000	3614
OPEN FLOW, MCFD	2800	1559	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.9	93.7	90.6
ETHANE	5.8	3.8	6.2
PROPANE	2.0	1.1	1.4
N-BUTANE	0.6	0.3	0.3
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.6	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1119	1069	1096
SPECIFIC GRAVITY	0.631	0.599	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11113 SAMPLE 15743	INDEX 11114 SAMPLE 2160	INDEX 11115 SAMPLE 2161
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD NAME	LOST CREEK	LOST SOLDIER	LOST SOLDIER
WELL NAME	RED DESERT NO. 1	NO. 32	NO. 66
LOCATION	SEC. 9, T23N, R99W	SEC. 10, T26N, R90W	SEC. 11, T26N, R90W
OWNER	MICHIGAN WISCONSIN PL CO.	PRAIRIE OIL & GAS CO.	PRAIRIE OIL & GAS CO.
COMPLETION DATE	08/10/78	10/07/20	06/11/26
SAMPLE	09/05/79	09/25/30	09/24/30
FORMATION NAME	CRET-LEWIS	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11799	301	1510
WELLHEAD PRESSURE,PSIG	4900	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1825	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.7	76.4	91.1
ETHANE	8.1	8.6	3.1
PROPANE	2.8	---	---
N-BUTANE	1.5	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.2	5.7	0.0
OXYGEN	0.0	1.2	0.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE*	0.0	---	---
CARBON DIOXIDE	1.6	8.1	5.7
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1141	928	978
SPECIFIC GRAVITY	0.663	0.706	0.626

	INDEX 11116 SAMPLE 9568	INDEX 11117 SAMPLE 12939	INDEX 11118 SAMPLE 5648
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD NAME	LOST SOLDIER	MASTERSON	MIDDLE MOUNTAIN
WELL NAME	WEST WERTZ NO. 2	GOVERNMENT-O'CONNELL B NO. 1	MIDDLE MOUNTAIN UNIT NO. 3
LOCATION	SEC. 2, T26N, R90W	SEC. 30, T20N, R101W	SEC. 10, T22N, R103W
OWNER	SINCLAIR OIL & GAS CO.	TEXACO INC.	STANOLIND OIL & GAS CO.
COMPLETION DATE	09/09/63	05/30/71	12/14/53
SAMPLE	10/--/69	07/24/71	07/15/54
FORMATION NAME	PENN-TENSLEEP	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6990	6749	6469
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2180	1702
OPEN FLOW, MCFD	NOT GIVEN	5050	5900
COMPONENT, MOLE PCT			
METHANE	17.7	97.4	84.9
ETHANE	6.2	1.0	7.1
PROPANE	13.0	0.2	2.8
N-BUTANE	5.6	0.1	0.7
ISOBUTANE	0.5	0.0	0.8
N-PENTANE	2.7	0.1	0.3
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	1.4	0.1	0.3
NITROGEN	19.1	0.5	2.5
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	31.7	0.4	0.5
HELIUM	1.30	0.02	0.02
HEATING VALUE*	1046	1031	1147
SPECIFIC GRAVITY	1.290	0.577	0.673

	INDEX 11119 SAMPLE 8630	INDEX 11120 SAMPLE 6160	INDEX 11121 SAMPLE 9749
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD NAME	MOXA	MUD FLAT	NITCHIE GULCH
WELL NAME	MOXA UNIT NO. 1	UNION PACIFIC NO. 1	UNIT NO. 4
LOCATION	SEC. 22, T19N, R112W	SEC. 23, T20N, R104W	SEC. 17, T25N, R103W
OWNER	TEXACO INC.	MOUNTAIN FUEL SUPPLY CO.	AMAX PETROLEUM CORP.
COMPLETION DATE	09/22/61	08/30/56	10/03/63
SAMPLE	09/--/62	10/10/56	02/17/65
FORMATION NAME	CRET-FRONTIER	CRET-DAKOTA	CRET-DAKOTA & FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11416	3454	7892
WELLHEAD PRESSURE,PSIG	5700	1462	2900
OPEN FLOW, MCFD	1300	7000	14000
COMPONENT, MOLE PCT			
METHANE	91.6	96.1	95.1
ETHANE	4.7	1.4	2.5
PROPANE	1.5	0.0	1.3
N-BUTANE	0.2	TRACE	0.2
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.2	1.1	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.2	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1039	1003	1054
SPECIFIC GRAVITY	0.611	0.576	0.590

	INDEX 11122 SAMPLE 9795	INDEX 11123 SAMPLE 6734	INDEX 11124 SAMPLE 6738
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD NAME	NITCHIE GULCH	NOT GIVEN	NOT GIVEN
WELL NAME	UNIT NO. 6-7	DESERT SPRINGS NO. 1	DESERT SPRINGS NO. 2
LOCATION	SEC. 7, T25N, R103W	SEC. 24, T21N, R99W	SEC. 22, T21N, R98W
OWNER	AMAX PETROLEUM CORP.	FEE & NATURAL GAS CO.	FEE & NATURAL GAS CO.
COMPLETION DATE	11/--/65	01/21/58	12/--/58
SAMPLE	12/--/65	07/05/58	07/06/58
FORMATION NAME	CRET-DAKOTA	CRET-ALMOND	CRET-LEWIS F
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8628	5887	7000
WELLHEAD PRESSURE,PSIG	---	1900	2400
OPEN FLOW, MCFD	NOT GIVEN	7700	21000
METHANE	91.9	84.7	84.6
ETHANE	1.9	6.1	6.1
PROPANE	1.4	2.2	1.7
N-BUTANE	0.2	0.5	1.0
ISOBUTANE	TRACE	0.3	1.1
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.7	5.0	3.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.3	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1039	1034	1047
SPECIFIC GRAVITY	0.643	0.647	0.647

* AT 14.73 PSIA AND 60 DEG. F. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE IMPOSSIBILITY OF AVOID DURING SAMPLING, THE RESULTS SHOWN MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11125 SAMPLE 13354	INDEX 11126 SAMPLE 15098	INDEX 11127 SAMPLE 9168
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	NOT GIVEN	NOT GIVEN	PATRICK DRAW
WELL NAME	CONTINENTAL DIVIDE NO. 16-1	FIVE MILE GULCH UNIT NO. 1	ARCH UNIT NO. 71
LOCATION	SEC. 16, T21N, R99W	SEC. 27, T21W, R93W	SEC. 11, T19N, R99W
OWNER	TERRA RESOURCES, INC.	AMOCO PRODUCTION CO.	FOREST OIL CORP.
COMPLETED	06/23/72	01/09/77	05/14/63
SAMPLED	08/16/72	09/17/77	11/11/63
FORMATION	CRET-LEWIS	CRET-ALMOND	CRET-ALMOND NO. 6
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3513	10796	4294
WELLHEAD PRESSURE,PSIG	1280	4600	250
OPEN FLOW, MCFD	16500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.7	86.3	81.9
ETHANE	2.7	6.9	10.0
PROPANE	2.0	1.8	3.9
N-BUTANE	0.8	0.4	0.9
ISOBUTANE	0.6	0.3	0.8
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.6	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.2	0.0	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.8	1.3
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1097	1086	1198
SPECIFIC GRAVITY	0.634	0.662	0.698

	INDEX 11128 SAMPLE 15642	INDEX 11129 SAMPLE 9405	INDEX 11130 SAMPLE 8799
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	PICKETT LAKE UNIT	PINE CANYON	PIONEER
WELL NAME	PICKETT LAKE NO. 1	PINE CANYON UNIT NO. 1	UNIT NO. 4
LOCATION	SEC. 24, T26N, R97W	SEC. 32, T23N, R103W	SEC. 12, T13N, R100W
OWNER	DAVIS OIL CO.	SOHIO PETROLEUM CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	02/09/79	02/--/64	09/23/62
SAMPLED	06/12/79	06/16/64	11/28/62
FORMATION	CRET-LEWIS	CRET-DAKOTA	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	13142	8342	4660
WELLHEAD PRESSURE,PSIG	6275	2800	1615
OPEN FLOW, MCFD	8198	1400	4630
COMPONENT, MOLE PCT			
METHANE	88.0	86.5	90.1
ETHANE	6.7	5.2	4.2
PROPANE	1.4	3.2	1.6
N-BUTANE	0.2	1.1	0.4
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	1.2	0.4
CYCLOPENTANE	0.1	0.3	0.3
HEXANES PLUS	0.3	0.4	0.4
NITROGEN	0.5	1.0	0.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.3	1.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1108	1204	1110
SPECIFIC GRAVITY	0.648	0.687	0.643

	INDEX 11131 SAMPLE 10434	INDEX 11132 SAMPLE 9403	INDEX 11133 SAMPLE 12346
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	PIONEER	POINT OF ROCKS	POWDER SPRINGS
WELL NAME	UNIT NO. 7	UPRR NO. 44-25	GOVERNMENT POLLY NO. 1
LOCATION	SEC. 5, T13N, R99W	SEC. 25, T20N, R101W	SEC. 23, T12N, R97W
OWNER	MOUNTAIN FUEL SUPPLY CO.	UNION PACIFIC RAILROAD CO.	INEXCO OIL CO.
COMPLETED	07/04/65	09/27/63	02/--/70
SAMPLED	03/04/66	06/17/64	07/20/70
FORMATION	EOCE-WASATCH	CRET-BLAIR	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2324	3446	5400
WELLHEAD PRESSURE,PSIG	780	1455	1950
OPEN FLOW, MCFD	2930	2069	5600
COMPONENT, MOLE PCT			
METHANE	98.3	98.3	79.8
ETHANE	0.2	0.8	9.1
PROPANE	0.3	0.3	6.3
N-BUTANE	0.0	0.0	1.6
ISOBUTANE	0.0	0.0	1.3
N-PENTANE	0.0	0.0	0.4
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.5	0.3	1.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.2
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1007	1017	1264
SPECIFIC GRAVITY	0.567	0.566	0.727

	INDEX 11134 SAMPLE 15195	INDEX 11135 SAMPLE 13162	INDEX 11136 SAMPLE 14981
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	RED LAKES	ROBINS	SALT WELLS S
WELL NAME	CHAMPLIN 337 AMOCO A NO. 1	GOVERNMENT UNION NO. 2	SOUTH SALT WELLS UNIT NO. 1
LOCATION	SEC. 5, T18N, R94W	SEC. 8, T19N, R97W	SEC. 14, T14N, R103W
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	RESERVE OIL, INC.
COMPLETED	10/14/77	04/17/72	07/15/75
SAMPLED	01/10/78	02/29/72	04/21/77
FORMATION	CRET-ALMOND	CRET-MESAVERDE & ERICSON	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9734	7018	6658
WELLHEAD PRESSURE,PSIG	3275	NOT GIVEN	1200
OPEN FLOW, MCFD	2130	352	900
COMPONENT, MOLE PCT			
METHANE	80.6	88.6	93.9
ETHANE	9.4	5.4	4.1
PROPANE	3.9	1.9	0.5
N-BUTANE	0.8	0.5	0.2
ISOBUTANE	0.7	0.4	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.5	0.1	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	2.5	0.3
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1163	1101	1062
SPECIFIC GRAVITY	0.708	0.651	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11137 SAMPLE 7649	INDEX 11138 SAMPLE 13964	INDEX 11139 SAMPLE 13152
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	SAND BUTTE	SIX MILE	STAGE STOP
WELL NAME	NO. 2	GOVERNMENT NO. 30-1	STAGE STOP UNIT NO. 15
LOCATION	SEC. 5, T17N, R99W	SEC. 30, T18N, R104W	SEC. 27, T18N, R99W
OWNER	CONTINENTAL OIL CO.	POLUMBUS CORP.	ODESSA NATURAL CORP.
COMPLETED	02/04/60	02/20/74	06/27/71
SAMPLED	08/17/60	03/01/74	02/20/72
FORMATION	CRET-ALMOND	CRET-FRONTIER	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4816	4632	5450
WELLHEAD PRESSURE,PSIG	1810	1650	1780
OPEN FLOW, MCFD	15800	3000	3500
COMPONENT, MOLE PCT			
METHANE	88.4	86.3	90.6
ETHANE	6.0	6.6	4.9
PROPANE	2.2	1.3	1.4
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.5	0.3
NITROGEN	0.4	2.9	0.3
OXYGEN	0.1	0.6	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.1	1.1
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1109	1112	1098
SPECIFIC GRAVITY	0.646	0.655	0.630

	INDEX 11140 SAMPLE 12259	INDEX 11141 SAMPLE 8188	INDEX 11142 SAMPLE 15125
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	STAGE STOP UNIT	STATE LINE	STORM SHELTER
WELL NAME	STAGE STOP UNIT NO. 7	STATE LINE UNIT FED. NO. 14	STORM SHELTER UNIT NO.6
LOCATION	SEC. 24, T18N, R99W	SEC. 6, T12N, R93W	SEC. 20, T23N, R111W
OWNER	EL PASO OIL & GAS CO.	GULF OIL CORP.	DAVIS OIL CO.
COMPLETED	10/18/69	03/17/61	NOT GIVEN
SAMPLED	05/12/70	11/02/61	10/18/77
FORMATION	CRET-ALMOND	EOCE-WASATCH	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6540	2074	10486
WELLHEAD PRESSURE,PSIG	2034	460	4000
OPEN FLOW, MCFD	2875	2390	3117
COMPONENT, MOLE PCT			
METHANE	80.2	94.6	77.9
ETHANE	6.4	3.4	12.2
PROPANE	3.5	0.3	4.0
N-BUTANE	1.4	TRACE	0.6
ISOBUTANE	1.6	0.2	0.6
N-PENTANE	1.3	TRACE	0.1
ISOPENTANE	0.9	TRACE	0.5
CYCLOPENTANE	0.4	TRACE	0.2
HEXANES PLUS	1.7	TRACE	0.6
NITROGEN	1.3	1.2	2.4
OXYGEN	0.0	TRACE	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	TRACE	0.5
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1315	1034	1216
SPECIFIC GRAVITY	0.777	0.581	0.719

	INDEX 11143 SAMPLE 4578	INDEX 11144 SAMPLE 4579	INDEX 11145 SAMPLE 5618
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK NO. 3	TABLE ROCK NO. 1	TABLE ROCK UNIT NO. 5
LOCATION	SEC. 2, T18N, R98W	SEC. 1, T18N, R98W	SEC. 2, T18N, R98W
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	08/09/47	04/13/46	01/16/54
SAMPLED	09/30/48	09/30/48	05/08/54
FORMATION	EOCE-WASATCH	EOCE-WASATCH	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3770	3308	5764
WELLHEAD PRESSURE,PSIG	1250	1250	1985
OPEN FLOW, MCFD	9500	5692	13800
COMPONENT, MOLE PCT			
METHANE	83.0	90.0	87.6
ETHANE	15.9	7.2	6.1
PROPANE	---	---	2.4
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.7	2.5	2.0
OXYGEN	0.2	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	2.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1126	1041	1117
SPECIFIC GRAVITY	0.639	0.602	0.657

	INDEX 11146 SAMPLE 8047	INDEX 11147 SAMPLE 10879	INDEX 11148 SAMPLE 14425
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	GOVERNMENT MORRISON NO. 1	TABLE ROCK UNIT NO. 15	TABLE ROCK UNIT NO. 19
LOCATION	SEC. 26, T19N, R98W	SEC. 2, T19N, R98W	SEC. 35, T19N, R98W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	03/06/61	09/08/65	07/30/75
SAMPLED	06/29/61	02/28/67	07/30/75
FORMATION	CRET-ALMOND	JURA-NUGGET	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6328	15213	18620
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5008	5210
OPEN FLOW, MCFD	NOT GIVEN	6800	20000
COMPONENT, MOLE PCT			
METHANE	85.8	95.4	75.0
ETHANE	7.8	0.5	2.9
PROPANE	2.6	0.1	0.6
N-BUTANE	0.5	0.0	0.2
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	TRACE	1.2	4.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.8
CARBON DIOXIDE	2.5	2.8	15.0
HELIUM	0.01	0.03	0.28
HEATING VALUE*	1138	978	857
SPECIFIC GRAVITY	0.674	0.590	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11149 SAMPLE 14511	INDEX 11150 SAMPLE 15119	INDEX 11151 SAMPLE 15157
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK UNIT NO. 19	TABLE ROCK UNIT NO. 21	DELANEY RIM NO. 2
LOCATION	SEC. 35, T19N, R98W	SEC. 10, T18N, R98W	SEC. 7, T18N, R97W
OWNER	NEUMIN PRODUCTION CO.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	12/09/76	08/30/75
SAMPLED	10/24/75	09/23/77	11/28/77
FORMATION	MISS-MADISON	MISS-MADISON	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	19000	18287	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5200	5400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	9923	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	72.4	89.5
ETHANE	2.0	2.0	5.3
PROPANE	0.5	0.4	2.7
N-BUTANE	0.3	0.3	0.8
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.8	5.2	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	2.2	1.7	0.0
CARBON DIOXIDE	15.8	17.0	0.2
HELIUM	0.29	0.33	0.01
HEATING VALUE*	936	827	1131
SPECIFIC GRAVITY	0.768	0.783	0.637

	INDEX 11152 SAMPLE 15158	INDEX 11153 SAMPLE 15159	INDEX 11154 SAMPLE 15187
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK NO. 15	CHAMPLIN NO. 21-15	TABLE ROCK UNIT NO. 22
LOCATION	SEC. 2, T18N, R98W	SEC. 15, T18N, R98W	SEC. 2, T18N, R98W
OWNER	TEXACO INC.	CHAMPLIN PETROLEUM CO.	TEXACO INC.
COMPLETED	--/--/68	11/23/66	11/01/77
SAMPLED	11/28/77	11/28/77	01/10/78
FORMATION	JURA-NUGGET	CRET-ALMOND	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	18116
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	91.0	74.0
ETHANE	0.5	4.6	2.1
PROPANE	TRACE	1.4	0.5
N-BUTANE	TRACE	0.4	0.2
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.9	0.1	4.6
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	1.4
CARBON DIOXIDE	3.1	2.0	16.5
HELIUM	0.03	TRACE	0.30
HEATING VALUE*	965	1074	829
SPECIFIC GRAVITY	0.597	0.627	0.768

	INDEX 11155 SAMPLE 15188	INDEX 11156 SAMPLE 8629	INDEX 11157 SAMPLE 15790
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TEN MILE DRAW	TIERNEY
WELL NAME	TABLE ROCK UNIT NO. 22	UNIT NO. 4	TIERNEY II UNIT NO. 4-22
LOCATION	SEC. 2, T18N, R98W	SEC. 33, T21N, R99W	SEC. 22, T19N, R94W
OWNER	TEXACO INC.	JOHN L. KEMMERER, JR.	MARATHON OIL CO.
COMPLETED	11/01/77	07/26/62	05/20/79
SAMPLED	01/10/78	07/24/62	09/27/79
FORMATION	MISS-MADISON	CRET-LANCE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	18116	2134	9567
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4220	2109
COMPONENT, MOLE PCT			
METHANE	75.1	95.2	80.3
ETHANE	2.0	1.1	9.1
PROPANE	0.4	0.6	4.3
N-BUTANE	0.2	TRACE	0.9
ISOBUTANE	TRACE	0.0	0.9
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	4.5	2.5	0.3
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	1.3	0.0	0.0
CARBON DIOXIDE	15.8	0.2	3.5
HELIUM	0.30	0.03	0.01
HEATING VALUE*	836	1004	1171
SPECIFIC GRAVITY	0.758	0.581	0.714

	INDEX 11158 SAMPLE 6778	INDEX 11159 SAMPLE 9556	INDEX 11160 SAMPLE 10481
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TRAIL UNIT AREA	WAMSUTTER	WAMSUTTER
WELL NAME	UNIT WELL NO. 2	WAMSUTTER A NO. 4	WAMSUTTER UNIT A NO. 6
LOCATION	SEC. 10, T13N, R100W	SEC. 1, T20N, R95W	SEC. 29, T21S, R94W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MARATHON OIL CO.	MARATHON OIL CO.
COMPLETED	08/01/58	10/23/63	09/16/65
SAMPLED	07/31/58	09/07/64	03/28/66
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE & ALMOND	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6870	9646	9869
WELLHEAD PRESSURE,PSIG	2349	5000	4900
OPEN FLOW, MCFD	45500	11100	1080
COMPONENT, MOLE PCT			
METHANE	85.9	90.4	86.7
ETHANE	6.5	5.6	6.2
PROPANE	2.6	1.9	2.0
N-BUTANE	0.7	0.4	0.4
ISOBUTANE	0.7	0.1	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.6	TRACE	0.1
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	0.9	0.1	0.2
NITROGEN	0.1	0.1	2.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.2	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1197	1092	1095
SPECIFIC GRAVITY	0.691	0.625	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11161 SAMPLE 15102	INDEX 11162 SAMPLE 8087	INDEX 11163 SAMPLE 8716
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WAMSUTTER UNIT	WILDCAT	WILDCAT
WELL NAME	CHAMPLIN UPRR4-31 NO. 2	PLUNGE UNIT NO. 2	GOVT. ROWLAND NO. 1
LOCATION	NOT GIVEN	SEC. 17, T25N, R102W	SEC. 2, T19N, R100W
OWNER	CHAMPLIN PETROLEUM CO.	ATLANTIC REFINING CO.	CHANDLER & AYLESBY, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	09/18/77	07/17/61	10/02/62
FORMATION	CRET-LEWIS	CRET-MESAVERDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	8317	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1925	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.2	73.9	96.1
ETHANE	4.7	9.7	0.4
PROPANE	1.6	7.2	0.3
N-BUTANE	0.9	1.2	0.1
ISOBUTANE	0.2	1.8	0.1
N-PENTANE	0.2	0.4	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.0	0.0	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	5.4	2.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1102	1242	1001
SPECIFIC GRAVITY	0.617	0.787	0.588

	INDEX 11164 SAMPLE 12107	INDEX 11165 SAMPLE 13202	INDEX 11166 SAMPLE 14627
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LEUCITE HILLS UNIT NO. 1	ROSEN FEDERAL NO. 1	FEDERAL NO. 1-18
LOCATION	SEC. 29, T22N, R103W	SEC. 14, T21N, R100W	SEC. 18, T17N, R94W
OWNER	MOUNTAIN FUEL SUPPLY CO.	DAVIS OIL CO.	LADD PETROLEUM CORP.
COMPLETED	09/30/69	10/07/71	10/16/75
SAMPLED	11/06/69	05/03/72	03/29/76
FORMATION	CRET-DAKOTA	CRET-ALMOND	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7277	3505	10690
WELLHEAD PRESSURE,PSIG	2146	975	5052
OPEN FLOW, MCFD	7016	2000	1626
COMPONENT, MOLE PCT			
METHANE	94.8	90.3	73.0
ETHANE	2.3	3.4	10.1
PROPANE	0.5	1.7	6.1
N-BUTANE	0.1	0.8	2.7
ISOBUTANE	0.1	0.6	1.9
N-PENTANE	0.0	TRACE	1.8
ISOPENTANE	0.3	0.2	1.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.1	0.8
NITROGEN	0.7	0.8	0.0
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	2.4	1.9
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1068	1067	1419
SPECIFIC GRAVITY	0.600	0.637	0.839

	INDEX 11167 SAMPLE 14669	INDEX 11168 SAMPLE 9680	INDEX 11169 SAMPLE 4726
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	TETON
FIELD	WILDCAT	WINDMILL	RAMSHORN
WELL NAME	BLACK ROCK FEDERAL NO. A-1	WELL NO. 1	G. G. TRAVIS NO. 1
LOCATION	SEC. 14, T23N, R99W	SEC. 33, T23N, R106W	SEC. 5, T43N, R114W
OWNER	AMARADKO PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.	U.S. GEOLOGICAL SURVEY
COMPLETED	03/08/73	12/25/64	09/22/49
SAMPLED	05/07/76	12/19/64	NOT GIVEN
FORMATION	CRET-LEWIS	EOCE-FORT UNION	PERM-DINWOODY
GEOLOGIC PROVINCE CODE	535	535	525
DEPTH, FEET	6425	7168	190
WELLHEAD PRESSURE,PSIG	1933	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4800	400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	92.0	0.1
ETHANE	6.6	3.7	TRACE
PROPANE	4.1	1.2	0.0
N-BUTANE	1.1	0.2	0.0
ISOBUTANE	0.9	0.7	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	2.0	1.6	97.9
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	1.3
HELIUM	0.02	0.02	0.52
HEATING VALUE*	1182	1078	1
SPECIFIC GRAVITY	0.686	0.614	0.970

	INDEX 11170 SAMPLE 15575	INDEX 11171 SAMPLE 13163	INDEX 11172 SAMPLE 13285
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	BUTCHER KNIFE SPRING	BUTCHER KNIFE SPRINGS	BUTCHER KNIFE SPRINGS
WELL NAME	BUTCHER KNIFE SPRING NO. 6	BUTCHER KNIFE SPRINGS NO. 1	BUTCHER KNIFE SPRINGS NO. 1
LOCATION	SEC. 22, T14N, R113W	SEC. 25, T15N, R112W	SEC. 29, T14N, R112W
OWNER	WEXPRO CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/18/78	NOT GIVEN	NOT GIVEN
SAMPLED	03/06/79	03/08/72	06/25/72
FORMATION	CRET-DAKOTA	PENN-MORGAN	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	13319	10211	17260
WELLHEAD PRESSURE,PSIG	5100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8000	600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.9	54.5	77.6
ETHANE	7.5	6.3	1.2
PROPANE	2.9	1.8	TRACE
N-BUTANE	0.7	0.6	TRACE
ISOBUTANE	0.7	0.6	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.6	0.4	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.3	TRACE
NITROGEN	1.3	6.6	4.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	1.7
HYDROGEN SULFIDE**	0.0	6.4	0.0
CARBON DIOXIDE	0.2	23.1	14.7
HELIUM	0.02	0.17	0.13
HEATING VALUE*	1131	829	826
SPECIFIC GRAVITY	0.683	0.929	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11173 SAMPLE 13288	INDEX 11174 SAMPLE 13299	INDEX 11175 SAMPLE 4289
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	BUTCHER KNIFE SPRINGS	BUTCHER KNIFE SPRINGS	CHURCH BUTTES
WELL NAME	BUTCHER KNIFE SPRINGS NO. 1	BUTCHER KNIFE SPRINGS NO. 1	UNIT NO. 1
LOCATION	SEC. 29, T15N, R112W	SEC. 29, T15N, R112W	SEC. 8, T16N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	04/28/46
SAMPLED	07/03/72	07/16/72	03/17/47
FORMATION	PENN-MORGAN	PENN-MORGAN	CRET-
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	18200	18200	12550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3000	5425
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.4	53.4	89.9
ETHANE	7.3	7.4	8.9
PROPANE	1.7	1.6	---
N-BUTANE	0.9	0.6	---
ISOBUTANE	0.7	0.6	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.4	0.2	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.5	0.2	---
NITROGEN	6.0	3.5	0.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	4.6	11.8	---
CARBON DIOXIDE	23.8	20.2	0.6
HELIUM	0.19	0.16	0.01
HEATING VALUE*	863	862	1070
SPECIFIC GRAVITY	0.946	0.925	0.607

	INDEX 11176 SAMPLE 4418	INDEX 11177 SAMPLE 11014	INDEX 11178 SAMPLE 11015
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	CHURCH BUTTES	CHURCH BUTTES	CHURCH BUTTES
WELL NAME	UNIT NO. 3	CHURCH BUTTES UNIT NO. 19	CHURCH BUTTES UNIT NO. 19
LOCATION	SEC. 12, T16N, R113W	SEC. 8, T16N, R112W	SEC. 8, T16N, R112W
OWNER	UNION PACIFIC&MT.FUEL SUPPLY	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	08/15/47	DRILL STEM TEST NO. 2	DRILL STEM TEST NO. 3
SAMPLED	01/16/48	05/30/67	05/30/67
FORMATION	CRET-DAKOTA	PENN-MORGAN	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12933	18060	18431
WELLHEAD PRESSURE,PSIG	5398	8021	7987
OPEN FLOW, MCFD	NOT GIVEN	2450	10500
COMPONENT, MOLE PCT			
METHANE	79.9	55.4	6.1
ETHANE	17.5	7.2	0.3
PROPANE	---	1.4	0.1
N-BUTANE	---	0.8	0.0
ISOBUTANE	---	0.5	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.4	0.0
NITROGEN	1.5	10.5	6.4
OXYGEN	0.4	0.0	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	2.6	0.0
HYDROGEN SULFIDE**	---	0.0	0.1
CARBON DIOXIDE	0.7	20.4	86.6
HELIUM	0.01	0.15	0.26
HEATING VALUE*	1123	829	70
SPECIFIC GRAVITY	0.656	0.982	1.429

	INDEX 11179 SAMPLE 11259	INDEX 11180 SAMPLE 16070	INDEX 11181 SAMPLE 14770
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	CHURCH BUTTES	CLEAR CREEK	RYCKMAN CREEK
WELL NAME	UNIT NO. 19	PRV22-9R	RYCKMAN CREEK UNIT NO. 1
LOCATION	SEC. 8, T16N, R112W	SEC. 9, T16N, R119W	SEC. 19, T17N, R118W
OWNER	MOUNTAIN FUEL SUPPLY CO.	CHEVRON U.S.A. INC.	AMOCO PRODUCTION CO.
COMPLETED	NOT GIVEN	04/22/80	NOT GIVEN
SAMPLED	01/18/68	09/17/80	09/14/76
FORMATION	PENN-MORGAN	JURA-NUGGET	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17740	8713	7455
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2200
OPEN FLOW, MCFD	NOT GIVEN	3228	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	51.8	79.3	78.2
ETHANE	6.9	11.0	11.3
PROPANE	1.2	4.8	5.2
N-BUTANE	0.7	1.1	1.2
ISOBUTANE	0.4	1.0	1.1
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	10.6	1.9	2.4
OXYGEN	0.9	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	3.7	0.0	0.0
CARBON DIOXIDE	22.9	0.1	TRACE
HELIUM	0.17	0.02	0.02
HEATING VALUE*	763	1231	1239
SPECIFIC GRAVITY	0.923	0.714	0.722

	INDEX 11182 SAMPLE 15196	INDEX 11183 SAMPLE 14708	INDEX 11184 SAMPLE 14734
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	WHITNEY CANYON	WILDCAT	WILDCAT
WELL NAME	AMOCO-CHEVRON-GULF W1 NO. 1	AMOCO GULF WI UNIT NO. 1	CHAMPLIN 224 AMOCO A NO. 1
LOCATION	SEC. 18, T17N, R119W	SEC. 2, T14N, R121W	SEC. 19, T17N, R118W
OWNER	AMOCO PRODUCTION CO.	AMOCO & GULF	AMOCO PRODUCTION CO.
COMPLETED	08/22/77	NOT GIVEN	DRILL STEM TEST
SAMPLED	01/11/78	06/10/76	07/27/76
FORMATION	TRIA-THAYNES	JURA-TWIN CREEK	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9178	5260	7450
WELLHEAD PRESSURE,PSIG	2450	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4700	2750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.5	77.6	67.5
ETHANE	6.5	8.7	16.3
PROPANE	2.2	4.1	9.3
N-BUTANE	0.7	1.3	2.2
ISOBUTANE	0.5	1.2	2.0
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.3	0.5	0.7
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	6.5	5.7	1.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.07	0.08	0.01
HEATING VALUE*	1085	1146	1425
SPECIFIC GRAVITY	0.670	0.724	0.830

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11185 SAMPLE 15010	INDEX 11186 SAMPLE 14707	INDEX 11187 SAMPLE 15647
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	WILDCAT	YELLOW CREEK	YELLOW CREEK
WELL NAME	BRUFF UNIT NO. 4	AMOCO GULF WI UNIT NO. 1	BURNT HILL STATE NO. 1-31
LOCATION	SEC. 17, T16N, R112W	SEC. 2, T14N, R121W	SEC. 31, T15N, R120W
OWNER	AMOCO PRODUCTION CO.	AMOCO & GULF	MESA PETROLEUM CO.
COMPLETED	04/11/77	NOT GIVEN	10/20/78
SAMPLED	05/20/77	06/09/76	06/09/79
FORMATION	CRET-FRONTIER	JURA-TWIN CREEK	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11514	5260	6007
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1575
OPEN FLOW, MCFD	4024	2750	9000
COMPONENT, MOLE PCT			
METHANE	93.8	77.5	77.4
ETHANE	3.5	8.8	9.0
PROPANE	0.4	4.0	4.1
N-BUTANE	0.3	1.3	1.2
ISOBUTANE	0.1	1.2	1.2
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.6	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.2	5.8	5.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.02	0.08	0.08
HEATING VALUE*	1064	1188	1186
SPECIFIC GRAVITY	0.600	0.728	0.726

	INDEX 11188 SAMPLE 15648	INDEX 11189 SAMPLE 15832	INDEX 11190 SAMPLE 15947
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	YELLOW CREEK	YELLOW CREEK	YELLOW CREEK
WELL NAME	BURNT HILL STATE NO. 2-31	YELLOW CREEK NO. 3-36	AMOCO-ANSCHUTZ NO. 1
LOCATION	SEC. 31, T15N, R120W	SEC. 36, T15N, R121W	SEC. 11, T14N, R121W
OWNER	MESA PETROLEUM CO.	WEXPRO CO.	AMOCO PRODUCTION CO.
COMPLETED	01/15/79	05/15/79	12/04/79
SAMPLED	06/09/79	11/10/79	04/10/80
FORMATION	JURA-TWIN CREEK	JURA-TWIN CREEK	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5733	5770	5968
WELLHEAD PRESSURE,PSIG	1600	2550	900
OPEN FLOW, MCFD	12500	9044	3500
COMPONENT, MOLE PCT			
METHANE	77.4	76.9	77.6
ETHANE	9.1	9.3	9.1
PROPANE	4.1	4.3	4.3
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	1.1	1.3	1.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	6.1	5.7	4.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.07	0.05
HEATING VALUE*	1171	1189	1208
SPECIFIC GRAVITY	0.719	0.726	0.729

	INDEX 11191 SAMPLE 2188	INDEX 11192 SAMPLE 10049	INDEX 11193 SAMPLE 9143
STATE	WYOMING	WYOMING	WYOMING
COUNTY	WASHAKIE	WASHAKIE	WASHAKIE
FIELD	HIDDEN DOME	NEIBER DOME	NOT GIVEN
WELL NAME	TENSLEEP 40 2,, WELL NO. 1	NEIBER DOME UNIT NO. 8	NO. 31
LOCATION	SEC. 5, T47N, R90W	SEC. 30, T45N, R91W	SEC. 17, T48N, R92W
OWNER	OHIO OIL CO.	CHEVRON OIL CO.	PURE OIL CO.
COMPLETED	05/15/19	09/13/54	01/03/52
SAMPLED	09/03/30	07/14/65	11/06/63
FORMATION	CRET-FRONTIER	MIOC-CRISTELLARIA	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1320	10486	7706
WELLHEAD PRESSURE,PSIG	70	22	1700
OPEN FLOW, MCFD	2000	NOT GIVEN	4130
COMPONENT, MOLE PCT			
METHANE	98.8	37.2	85.9
ETHANE	0.3	32.1	8.1
PROPANE	---	12.1	2.5
N-BUTANE	---	6.1	0.9
ISOBUTANE	---	2.6	0.4
N-PENTANE	---	1.7	0.1
ISOPENTANE	---	2.1	0.5
CYCLOPENTANE	---	0.4	0.1
HEXANES PLUS	---	2.1	0.3
NITROGEN	0.4	5.3	0.9
OXYGEN	0.0	0.0	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1006	1445	1169
SPECIFIC GRAVITY	0.564	1.115	0.667

	INDEX 11194 SAMPLE 9144	INDEX 11195 SAMPLE 9145	INDEX 11196 SAMPLE 9156
STATE	WYOMING	WYOMING	WYOMING
COUNTY	WASHAKIE	WASHAKIE	WASHAKIE
FIELD	NOT GIVEN	WORLAND	WORLAND
WELL NAME	NO. 35 F4	NO. 7 F3	NO. 5E
LOCATION	SEC. 28, T48N, R92W	SEC. 21, T48N, R92W	SEC. 21, T48N, R92W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	06/14/55	02/02/55	08/29/47
SAMPLED	11/06/63	11/06/63	11/06/63
FORMATION	CRET-FRONTIER 6TH	CRET-FRONTIER 3RD	PERM-EMBAR
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	7395	7287	10078
WELLHEAD PRESSURE,PSIG	1700	1700	200
OPEN FLOW, MCFD	2750	5540	574
COMPONENT, MOLE PCT			
METHANE	82.4	88.2	68.2
ETHANE	9.5	6.9	9.3
PROPANE	3.6	2.0	2.5
N-BUTANE	1.1	0.4	1.1
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.3	0.7	8.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	6.4
CARBON DIOXIDE	0.4	0.7	2.5
HELIUM	0.02	0.01	0.03
HEATING VALUE*	1192	1123	1063
SPECIFIC GRAVITY	0.687	0.642	0.772

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11197 SAMPLE 9001	INDEX 11198 SAMPLE 8999	INDEX 11199 SAMPLE 9004
STATE	WYOMING	WYOMING	WYOMING
COUNTY	WESTON	WESTON	WESTON
FIELD	CLARETON	FIDDLER CREEK	MUSH CREEK
WELL NAME	T. R. ELLIOTT NO. 2	GILMER NO. 3	UPDIKE NO. 2
LOCATION	SEC. 1, T43N, R65W	SEC. 18, T46N, R64W	SEC. 21, T44N, R63W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	07/31/53	05/30/59	06/12/48
SAMPLED	06/06/63	06/06/63	06/06/63
FORMATION	CRET-NEWCASTLE	CRET-MUDDY OR NEWCASTLE	CRET-NEWCASTLE
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	5447	4480	4145
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	5	2
COMPONENT, MOLE PCT			
METHANE	56.6	32.7	68.9
ETHANE	15.5	22.5	9.2
PROPANE	13.2	27.6	10.4
N-BUTANE	6.3	9.0	4.1
ISOBUTANE	2.1	3.4	1.8
N-PENTANE	0.9	1.7	0.6
ISOPENTANE	1.7	1.5	1.4
CYCLOPENTANE	0.4	0.4	0.3
HEXANES PLUS	1.2	1.1	0.7
NITROGEN	1.2	0.0	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	1.6
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1665	2077	1464
SPECIFIC GRAVITY	0.992	1.229	0.875

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 1 14308	INDEX SAMPLE 2 14536	INDEX SAMPLE 3 11926
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	ESCAMBIA	ESCAMBIA	HALE
FIELD	BIG ESCAMBIA CREEK	BIG ESCAMBIA CREEK	GULF COAST AREA
PLANT NAME	MALLARD EXPLORATION CO.	NOT GIVEN	GALLION COMPRESSOR STATION
LOCATION	6 IN. TO MALLARD PLANT	NOT GIVEN	18, 24&12 IN. LINES
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	SOUTHERN NATURAL GAS CO.
SAMPLED	03/19/75	11/12/75	06/06/69
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
PRESSURE,PSIG	840	780	1200
FLOW,MCFD	1400	6042	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.7	72.3	94.6
ETHANE	19.6	12.1	2.8
PROPANE	18.7	7.1	0.7
N-BUTANE	11.8	2.1	0.2
ISOBUTANE	7.8	1.3	0.0
N-PENTANE	3.0	0.3	0.0
ISOPENTANE	4.2	0.5	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.8	0.1	0.0
NITROGEN	1.5	4.1	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.8
HELIUM	0.01	0.04	0.01
HEATING VALUE*	2129	1294	1033
SPECIFIC GRAVITY	1.273	0.775	0.589

	INDEX SAMPLE 4 14218	INDEX SAMPLE 5 15864	INDEX SAMPLE 6 11925
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	HALE	HALE	MARENGO
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	GALLION COMPRESSOR STA.	GALLION COMPRESSOR STA.	LINDEN COMPRESSOR STATION
LOCATION	18, 20 & 24 IN.	2-18&1-24 IN.	20, 2-36 & 42 IN. LINES
OWNER	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.	TRANSCONTINENTAL GAS PL CORP
SAMPLED	11/11/74	12/17/79	06/06/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
PRESSURE,PSIG	960	1180	800
FLOW,MCFD	1128000	940000	600000
COMPONENT, MOLE PCT			
METHANE	96.3	96.8	95.2
ETHANE	2.1	1.6	2.7
PROPANE	0.2	0.3	0.5
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.9	0.4	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1018	1029	1026
SPECIFIC GRAVITY	0.577	0.580	0.580

	INDEX SAMPLE 7 14220	INDEX SAMPLE 8 15865	INDEX SAMPLE 9 14219
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	MARENGO	MARENGO	PICKENS
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	LINDEN COMPRESSOR STA.	LINDEN COMPRESSOR STATION	REFORM COMPRESSOR STA.
LOCATION	30 IN., 2-36 & 1-42 IN.	1-30, 2-36&1-42 IN.	22, 24 & 26 IN.
OWNER	TRANSCONTINENTAL GAS PL.CORP	TRANSCONTINENTAL GAS PL CORP	SOUTHERN NATURAL GAS CO.
SAMPLED	11/11/74	12/17/79	11/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	200
PRESSURE,PSIG	800	560	750
FLOW,MCFD	1500000	3000000	641000
COMPONENT, MOLE PCT			
METHANE	96.4	96.5	95.3
ETHANE	2.1	1.8	2.2
PROPANE	0.2	0.3	0.4
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.9	0.4	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.8
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1023	1029	1027
SPECIFIC GRAVITY	0.576	0.580	0.586

	INDEX SAMPLE 10 11927	INDEX SAMPLE 11 15862	INDEX SAMPLE 12 15863
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	PICKENS	PICKENS	PICKENS
FIELD	LOUISIANA	LOUISIANA	LOUISIANA
PLANT NAME	REFORM COMPRESSOR STATION	REFORM COMPRESSOR STA.	REFORM COMPRESSOR STA.
LOCATION	NOT GIVEN	1-22&1-24 IN.	24 IN.
OWNER	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.
SAMPLED	06/06/69	12/14/79	12/14/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
PRESSURE,PSIG	350	482	730
FLOW,MCFD	NOT GIVEN	388000	322000
COMPONENT, MOLE PCT			
METHANE	94.2	96.8	96.7
ETHANE	2.6	1.7	1.9
PROPANE	0.8	0.2	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	1.3	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	2.9	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.6	0.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1021	1028	1028
SPECIFIC GRAVITY	0.588	0.574	0.573

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 13 SAMPLE 11798	INDEX 14 SAMPLE 8490	INDEX 15 SAMPLE 15677
STATE	ARIZONA	ARIZONA	ARKANSAS
COUNTY	APACHE	APACHE	CLARK
FIELD	NAVAJO SPRINGS E	PINTA	LOUISIANA AND ARKANSAS FIELD
PLANT NAME	NOT GIVEN	PIPELINE SAMPLE	BEIRNE COMPRESSOR STA.
LOCATION	NOT GIVEN	SEC. 24, T20N, R26E	18 IN. A LINE
OWNER	ARIZONA HELIUM CORP.	KERR-MCGEE CORP.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	03/21/69	03/06/62	06/26/79
FORMATION	PERM-COCONINO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	400
PRESSURE,PSIG	NOT GIVEN	85	640
FLOW,MCFD	NOT GIVEN	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	TRACE	87.3
ETHANE	0.0	0.0	4.9
PROPANE	0.0	TRACE	1.3
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	90.0	89.6	4.7
OXYGEN	0.1	TRACE	0.0
ARGON	0.8	0.6	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.8
HELIUM	8.43	8.50	0.03
HEATING VALUE*	0	0	1036
SPECIFIC GRAVITY	0.903	0.905	0.632

	INDEX 16 SAMPLE 13614	INDEX 17 SAMPLE 13615	INDEX 18 SAMPLE 15678
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	NOT GIVEN	NOT GIVEN	OKLA., ARK., LA.
PLANT NAME	BEIRNE COMPRESSOR STA.	BEIRNE COMPRESSOR STA.	BEIRNE COMPRESSOR STA.
LOCATION	20 IN. LINE	18 IN. "A" LINE	20 IN.
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	06/07/73	06/07/73	06/26/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
PRESSURE,PSIG	655	240	620
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	86.9	93.2
ETHANE	1.5	4.2	3.2
PROPANE	0.3	1.2	0.8
N-BUTANE	0.0	0.3	0.2
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	5.6	0.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.3	1.0	1.6
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1000	1024	1042
SPECIFIC GRAVITY	0.590	0.636	0.607

	INDEX 19 SAMPLE 11922	INDEX 20 SAMPLE 14208	INDEX 21 SAMPLE 15851
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	HOT SPRING	HOT SPRING	HOT SPRING
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	STATION 306	DONALDSON COMPRESSOR STA.	DONALDSON COMPRESSOR NO. 4
LOCATION	2-30 & 36 IN. LINES	24 IN.	20 IN.
OWNER	NATURAL GAS PL CO OF AMERICA	TEXAS EASTERN TRANS. CORP.	TEXAS EASTERN TRANS. CORP.
SAMPLED	06/03/69	11/05/74	12/11/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
PRESSURE,PSIG	830	715	713
FLOW,MCFD	1000000	215000	200000
COMPONENT, MOLE PCT			
METHANE	94.9	92.2	93.8
ETHANE	3.0	4.6	3.3
PROPANE	0.5	0.8	0.6
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.6	1.1	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	1.3
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1035	1044	1044
SPECIFIC GRAVITY	0.588	0.602	0.601

	INDEX 22 SAMPLE 15852	INDEX 23 SAMPLE 11921	INDEX 24 SAMPLE 14207
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	HOT SPRING	HOT SPRING	HOT SPRINGS
FIELD	GULF COAST AREA	NOT GIVEN	GULF COAST AREA
PLANT NAME	MALVERN COMPRESSOR NO. 306	12 MI. E. OF DONALDSON	MALVERN COMPRESSOR STA.
LOCATION	2-30 & 1-36 IN.	24 IN. LINE	2-30 IN. & 1-36 IN.
OWNER	NATURAL GAS PL CO OF AMERICA	TEXAS EASTERN TRANS. CORP.	NATURAL GAS PL CO OF AMERICA
SAMPLED	12/11/79	06/03/69	11/05/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
PRESSURE,PSIG	858	777	710
FLOW,MCFD	1600000	250000	1300000
COMPONENT, MOLE PCT			
METHANE	96.6	92.3	95.6
ETHANE	1.6	4.0	2.4
PROPANE	0.4	0.6	0.3
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.5	1.5	0.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.8
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1034	1029	1026
SPECIFIC GRAVITY	0.582	0.601	0.583

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 25 SAMPLE 11923	INDEX 26 SAMPLE 14209	INDEX 27 SAMPLE 15653
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	GLENDALE COMP. STATION	GLENDALE COMPRESSOR STA.	GLENDALE COMPRESSOR STA.
LOCATION	22,24&36 IN. LOOPS	22, 24, & 26 IN. LOOP	24 IN.
OWNER	MISS. RIVER TRANS. CORP.	MISS. RIVER TRANS. CORP.	MISS. RIVER TRANS. CO.
SAMPLED	06/03/69	11/06/74	12/11/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	240	240
PRESSURE,PSIG	335	720	608
FLOW,MCFD	500000	600000	417000
COMPONENT, MOLE PCT			
METHANE	96.5	96.1	96.2
ETHANE	3.0	2.2	2.1
PROPANE	0.5	0.6	0.4
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.9	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.6
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.0	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1026	1050	1039
SPECIFIC GRAVITY	0.589	0.581	0.582

	INDEX 28 SAMPLE 15676	INDEX 29 SAMPLE 13623	INDEX 30 SAMPLE 15675
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	ARKANSAS FIELDS	NOT GIVEN	TEXAS-OKLAHOMA & ARKANSAS
PLANT NAME	DUNN JUNCTION	DUNN COMPRESSOR STA.	DUNN COMPRESSOR STA.
LOCATION	16 IN.	30 IN. LINE	30 IN.
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	06/25/79	06/07/73	06/25/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
PRESSURE,PSIG	800	948	870
FLOW,MCFD	80000	300000	325000
COMPONENT, MOLE PCT			
METHANE	97.4	95.5	94.8
ETHANE	1.2	1.5	2.1
PROPANE	0.1	0.3	0.4
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.1	1.8
HELIUM	0.07	0.06	0.05
HEATING VALUE*	1011	1002	1017
SPECIFIC GRAVITY	0.569	0.587	0.591

	INDEX 31 SAMPLE 3165	INDEX 32 SAMPLE 15767	INDEX 33 SAMPLE 14067
STATE	ARKANSAS	CALIFORNIA	CALIFORNIA
COUNTY	POPE	CONTRA COSTA	CONTRA COSTA
FIELD	TATES ISLAND	CANADIAN GAS	DUTCH SLOUGH
PLANT NAME	PIPELINE SAMPLE	ANTIOCH TERMINAL	ANTIOCH TERMINAL
LOCATION	DRIP LINE	36 IN. LINE NO. 400	12 IN. LINE NO. 316
OWNER	ARKANSAS LOUISIANA GAS CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	02/16/42	09/12/79	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	730	730
PRESSURE,PSIG	400	510	450
FLOW,MCFD	NOT GIVEN	248000	12000
COMPONENT, MOLE PCT			
METHANE	95.6	89.3	93.7
ETHANE	3.2	3.1	3.1
PROPANE	---	0.3	1.1
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	0.2
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.1	5.8	0.8
OXYGEN	0.1	1.1	0.0
ARGON	---	0.1	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.4
HELIUM	0.12	TRACE	TRACE
HEATING VALUE*	1026	968	1068
SPECIFIC GRAVITY	0.580	0.608	0.604

	INDEX 34 SAMPLE 14069	INDEX 35 SAMPLE 14068	INDEX 36 SAMPLE 15768
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	CONTRA COSTA
FIELD	FIELDS W OF SACRAMENTO RIVER	RIO VISTA GAS FIELD	SACRAMENTO RIVER E
PLANT NAME	ANTIOCH TERMINAL	ANTIOCH TERMINAL	ANTIOCH TERMINAL
LOCATION	16 IN. LINE NO. 118	12 IN. LINE NO. 131	12 & 16 IN. STAN PAK 4
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/11/74	07/11/74	09/12/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
PRESSURE,PSIG	200	280	310
FLOW,MCFD	76800	17000	20000
COMPONENT, MOLE PCT			
METHANE	94.0	93.7	93.8
ETHANE	2.9	2.8	2.9
PROPANE	0.7	0.8	0.6
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.6	1.9	1.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1033	1040	1034
SPECIFIC GRAVITY	0.591	0.594	0.594

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 37 SAMPLE 15766	INDEX 38 SAMPLE 15763	INDEX 39 SAMPLE 14059
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	FRESNO	FRESNO
FIELD	SACRAMENTO RIVER W	CHENEY	CHENEY RANCH GAS
PLANT NAME	ANTIOCH TERMINAL	CHENEY COMPRESSOR	CHENEY FIELD PROCESSING
LOCATION	16 IN. LINE NO. 114	4 IN. DISCHARGE	4 IN. NO. 204 LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/12/79	09/11/79	07/10/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	745	745
PRESSURE,PSIG	310	360	500
FLOW,MCFD	22000	550	5000
COMPONENT, MOLE PCT			
METHANE	93.5	84.9	88.7
ETHANE	2.9	5.4	7.0
PROPANE	0.7	4.3	1.6
N-BUTANE	0.2	1.2	0.1
ISOBUTANE	0.1	1.3	0.2
N-PENTANE	0.0	0.3	TRACE
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	2.0	1.5	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	1.0
HELIUM	TRACE	0.01	0.03
HEATING VALUE*	1041	1201	1076
SPECIFIC GRAVITY	0.599	0.695	0.623

	INDEX 40 SAMPLE 14058	INDEX 41 SAMPLE 14085	INDEX 42 SAMPLE 15775
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	KERN	KERN
FIELD	RAISIN CITY	BELRIDGE N	BELRIDGE N
PLANT NAME	RAISIN CITY	BELRIDGE	BELRIDGE
LOCATION	PACIFIC GAS & ELECTRIC	METER STA. NO. 4319, 12 IN.	16 IN. LINE NO. 102
OWNER	TEXACO INC.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/09/74	07/15/74	09/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	550	430	390
FLOW,MCFD	500	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	95.0	92.1	92.6
ETHANE	2.5	5.0	4.5
PROPANE	0.5	0.8	0.3
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	1.5	0.8	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	1.1	1.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1035	1043	1032
SPECIFIC GRAVITY	0.584	0.600	0.600

	INDEX 43 SAMPLE 14078	INDEX 44 SAMPLE 15872	INDEX 45 SAMPLE 14080
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BUENA VISTA HILLS & ELK HILL	COLES LEVEE N	COLES LEVEE S
PLANT NAME	STANDARD OIL 1-C	METER NO. 4702	MARATHON OIL CO N COLE LEVEE
LOCATION	METER STA. NO. 4432, 10 IN.	10 IN. LINE 103	METER STA. NO. 4709 & 4710
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	12/28/79	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	380	430	100
FLOW,MCFD	3000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	88.9	91.4
ETHANE	7.1	7.8	6.3
PROPANE	1.5	0.1	0.9
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	3.6	1.0	0.3
OXYGEN	0.8	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.4	2.0	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1022	1043	1062
SPECIFIC GRAVITY	0.647	0.618	0.607

	INDEX 46 SAMPLE 15871	INDEX 47 SAMPLE 15778	INDEX 48 SAMPLE 14082
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	COLES LEVEE S	CYMRIC	CYMRIC, BELGIAN & MCKITTRICK
PLANT NAME	METER NO. 4709	GETTY OIL CO.-M4320	GETTY OIL CO.
LOCATION	34 IN. LINE 225	10 IN. LINE NO. 133	METER STA. NO. 4320, 8 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	12/31/79	09/18/79	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	650	390	380
FLOW,MCFD	70000	5000	5000
COMPONENT, MOLE PCT			
METHANE	91.7	87.8	91.2
ETHANE	6.2	5.2	4.6
PROPANE	0.7	0.1	0.1
N-BUTANE	0.0	0.1	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.4	3.0	2.3
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	3.5	1.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1058	989	1009
SPECIFIC GRAVITY	0.605	0.630	0.603

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 49 SAMPLE 1956	INDEX 50 SAMPLE 15776	INDEX 51 SAMPLE 14087
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BYK HILLS	GOSFORD	LOST HILLS
PLANT NAME	PIPELINE SAMPLE	METER STATION 3628	STANDARD LOST HILLS PLANT
LOCATION	SEC. 6, T30S, R24E	4 IN. LINE NO. 5024	METER STA. NO. 4334, 6 IN.
OWNER	STANDARD OIL CO. OF CALIF.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	03/14/30	09/18/79	07/15/74
FORMATION	PLIO-ETCHEGOIN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	255	380	380
FLOW,MCFD	2550	1500	2000
COMPONENT, MOLE PCT			
METHANE	86.0	86.5	90.2
ETHANE	7.8	4.1	4.0
PROPANE	---	3.3	1.2
N-BUTANE	---	0.7	0.3
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	1.6	0.9	0.3
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	4.4	0.9	3.9
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	1011	1131	1030
SPECIFIC GRAVITY	0.645	0.654	0.632

	INDEX 52 SAMPLE 14084	INDEX 53 SAMPLE 14081	INDEX 54 SAMPLE 14079
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	MCDONALD ANTICLINE	RIO BRAVO	SAN JOAQUIN VALLEY AREA
PLANT NAME	FERGUSON & BOSWORTH	SUPERIOR OIL CO. RIO BRAVO	ATLANTIC RICHFIELD N. COLES
LOCATION	METER STA. NO. 4324, 6 IN.	METER STA. NO. 5993, 8 IN.	METER STA. NO. 4702, 10 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	07/15/74	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	380	680	380
FLOW,MCFD	2000	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	88.3	87.7
ETHANE	7.9	6.5	8.0
PROPANE	5.9	0.3	0.3
N-BUTANE	1.5	0.1	0.1
ISOBUTANE	1.1	0.1	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.1	1.3	2.4
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.4	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1229	1071	1043
SPECIFIC GRAVITY	0.709	0.621	0.622

	INDEX 55 SAMPLE 14083	INDEX 56 SAMPLE 14086	INDEX 57 SAMPLE 15777
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	SAN JOAQUIN VALLEY AREA	TRICO, TRICO NW & HARVESTER	YOWLUMNE
PLANT NAME	STANDARD 17-Z (MCKITTRICK)	TRICO JUNCTION	METER STATION 5240
LOCATION	METER STA. NO. 4339, 12 IN.	METER STA. NO. 952-2, 12 IN.	4 IN. LINE NO. 5023
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	07/15/74	09/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	380	380	380
FLOW,MCFD	12000	2000	7000
COMPONENT, MOLE PCT			
METHANE	87.9	99.2	82.0
ETHANE	6.1	0.2	9.5
PROPANE	0.7	TRACE	4.8
N-BUTANE	TRACE	0.0	0.7
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.6	0.2	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.5	0.3	1.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1059	1006	1171
SPECIFIC GRAVITY	0.627	0.559	0.690

	INDEX 58 SAMPLE 14056	INDEX 59 SAMPLE 15673	INDEX 60 SAMPLE 14088
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	KETTLEMAN HILLS	KETTLEMAN HILLS	SAN JOAQUIN VALLEY AREA
PLANT NAME	STAN PAC NO. 3	METER NO. 4228	STANDARD 3-P
LOCATION	32 TP, SP NO. 1	26 IN. LINE	METER STA. NO. 4228, 8 IN.
OWNER	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/09/74	01/01/80	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	400	450	395
FLOW,MCFD	11000	9000	8000
COMPONENT, MOLE PCT			
METHANE	93.8	93.5	94.8
ETHANE	4.2	5.4	3.3
PROPANE	TRACE	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	1.1	1.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.8
HELIUM	0.06	TRACE	TRACE
HEATING VALUE*	1022	1031	1019
SPECIFIC GRAVITY	0.587	0.592	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 61 SAMPLE 14055	INDEX 62 SAMPLE 15762	INDEX 63 SAMPLE 14133
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	LOS ANGELES
FIELD	TEXAS GAS FIELDS	TEXAS GAS FIELDS	CASTAIC JUNCTION
PLANT NAME	KETTLEMAN COMPRESSOR STA.	KETTLEMAN COMPRESSOR STA.	SUN OIL CO.
LOCATION	34 IN. NO. 300	2-34 IN DISCHARGE	METER 4512 TO LINE 1638+1001
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/09/74	09/11/79	08/16/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	760
PRESSURE,PSIG	540	604	300
FLOW,MCFD	950000	650000	4500
COMPONENT, MOLE PCT			
METHANE	86.8	88.9	93.9
ETHANE	7.4	7.1	3.2
PROPANE	1.4	1.5	0.2
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	2.2	1.3	1.6
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.8	0.2
HELIUM	0.06	0.03	TRACE
HEATING VALUE*	1070	1082	1044
SPECIFIC GRAVITY	0.644	0.625	0.585

	INDEX 64 SAMPLE 15785	INDEX 65 SAMPLE 1372	INDEX 66 SAMPLE 1373
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	CASTAIC, PICO PORTERIO	DOMINGUEZ	DOMINGUEZ
PLANT NAME	SUN GAS-M4512	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	8 IN.	NOT GIVEN	NOT GIVEN
OWNER	SOUTHERN CALIFORNIA GAS CO.	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA
SAMPLED	09/19/79	03/25/27	03/25/27
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
PRESSURE,PSIG	272	NOT GIVEN	NOT GIVEN
FLOW,MCFD	2100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.2	74.4	74.3
ETHANE	3.2	22.5	22.1
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.4	1.3	1.8
OXYGEN	0.0	1.2	1.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.1	0.6	0.5
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1032	1157	1132
SPECIFIC GRAVITY	0.572	0.684	0.683

	INDEX 67 SAMPLE 14096	INDEX 68 SAMPLE 14131	INDEX 69 SAMPLE 15786
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	DOMINGUEZ ROSECRANS LASCIENE	HONOR RANCHO	INGLEWOOD
PLANT NAME	UNION OIL DOMINGUEZ	TEXAS OIL CO. HONOR RANCH	AMINOIL-M2812
LOCATION	METER 732, 15 IN. LINE 77	FIELD METER 4510 TO LINE 174	10 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/12/74	08/16/74	09/20/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
PRESSURE,PSIG	170	200	154
FLOW,MCFD	2500	1600	3000
COMPONENT, MOLE PCT			
METHANE	90.3	86.6	88.9
ETHANE	7.2	11.6	6.5
PROPANE	TRACE	0.5	0.8
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	2.2	0.4	1.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	2.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1044	1096	1038
SPECIFIC GRAVITY	0.599	0.626	0.624

	INDEX 70 SAMPLE 14097	INDEX 71 SAMPLE 14099	INDEX 72 SAMPLE 14098
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	LOS ANGELES BASIN FIELDS	LOS ANGELES BASIN FIELDS	LOS ANGELES DOWNTOWN
PLANT NAME	SIGNAL INGLEWOOD METER 2812	SIGNAL HILL 9TH. STREET	STANDARD OIL LOS ANGELES
LOCATION	16 IN. LINE 125	METER STATION NO. A-2	MTR NO. 6004, 6 IN. LINE 296
OWNER	SOUTHERN CALIFORNIA GAS CO.	LOMITA GASOLINE CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	07/12/74	07/12/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
PRESSURE,PSIG	155	60	160
FLOW,MCFD	6500	2500	2000
COMPONENT, MOLE PCT			
METHANE	86.3	81.8	80.3
ETHANE	7.6	6.4	8.3
PROPANE	1.8	4.5	6.4
N-BUTANE	TRACE	0.7	2.0
ISOBUTANE	TRACE	0.7	1.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.8
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	2.4	3.4	0.0
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.3	0.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1057	1112	1283
SPECIFIC GRAVITY	0.635	0.695	0.735

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 73 SAMPLE 1965	INDEX 74 SAMPLE 1962	INDEX 75 SAMPLE 14132
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	MONTEBELLO	SANTA FE SPRINGS	TORREY CANYON
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	UNION OIL CO. TORREY CANYON
LOCATION	NOT GIVEN	SEC. 5, T3S, R11W	LINE 1001 FIELD METER 3723
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	03/17/30	03/15/30	08/16/74
FORMATION	PLIO-	PLIO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
PRESSURE,PSIG	NOT GIVEN	2000	300
FLOW,MCFD	NOT GIVEN	385	8000
COMPONENT, MOLE PCT			
METHANE	89.6	77.1	89.7
ETHANE	3.1	21.9	6.2
PROPANE	---	---	1.8
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	1.9	0.9	1.1
OXYGEN	0.3	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	5.7	0.3	0.6
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	963	1175	1079
SPECIFIC GRAVITY	0.633	0.669	0.619

	INDEX 76 SAMPLE 14062	INDEX 77 SAMPLE 14061	INDEX 78 SAMPLE 14060
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MADERA	MADERA
FIELD	CHOWCHILLA	GILL RANCH	MOFFAT RANCH
PLANT NAME	NITROGEN EXTRACTION	TEXACO GILL RANCH COMP.	FIREBAUGH GAS REGULATOR STA.
LOCATION	4 IN. NO. 186 LINE	6 IN. NO. 133 LINE	4 IN. NO. 183 LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	TEXACO INC.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/10/74	07/10/74	07/10/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	1480	400	150
FLOW,MCFD	4000	3000	200
COMPONENT, MOLE PCT			
METHANE	40.5	91.2	88.9
ETHANE	0.4	0.4	0.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	59.0	6.0	10.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.4
HELIUM	0.01	0.01	0.03
HEATING VALUE*	420	951	906
SPECIFIC GRAVITY	0.801	0.593	0.601

	INDEX 79 SAMPLE 15764	INDEX 80 SAMPLE 1966	INDEX 81 SAMPLE 14100
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	ORANGE	ORANGE
FIELD	VERNALIS	HUNTINGTON BEACH	HUNTINGTON BEACH
PLANT NAME	VERNALIS COMPRESSOR STA.	PIPELINE SAMPLE	HUNTINGTON BEACH
LOCATION	6 IN. SUCTION	NOT GIVEN	METER STA. NO. 2343
OWNER	PACIFIC GAS & ELECTRIC CO.	STANDARD OIL CO. OF CALIF.	SIGNAL OIL CO.
SAMPLED	09/12/79	03/17/30	07/12/74
FORMATION	NOT GIVEN	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	760	760
PRESSURE,PSIG	150	NOT GIVEN	150
FLOW,MCFD	6000	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	89.4	63.6	79.5
ETHANE	0.6	35.5	3.4
PROPANE	0.1	---	2.6
N-BUTANE	0.0	---	0.5
ISOBUTANE	0.0	---	0.5
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	TRACE
NITROGEN	9.9	0.3	8.8
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	4.5
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	919	1280	972
SPECIFIC GRAVITY	0.601	0.736	0.695

	INDEX 82 SAMPLE 1964	INDEX 83 SAMPLE 15772	INDEX 84 SAMPLE 14073
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	ORANGE	SACRAMENTO	SACRAMENTO
FIELD	MURPHY-COYOTE	BEEHIVE BEND AREA	MARYSVILLE & HERSHEY JCT.
PLANT NAME	PIPELINE SAMPLE	P.G. & E. LOAD CENTER	PG&E LOAD CENTER
LOCATION	SEC. 18, T3S, R10W	12 IN.	12 IN. LINE 172
OWNER	STANDARD OIL CO. OF CALIF.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	03/17/30	09/14/79	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	730	730
PRESSURE,PSIG	NOT GIVEN	500	500
FLOW,MCFD	NOT GIVEN	800	70000
COMPONENT, MOLE PCT			
METHANE	76.4	92.1	91.9
ETHANE	22.1	3.4	0.3
PROPANE	---	0.2	TRACE
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	0.9	0.1	7.6
OXYGEN	0.5	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.00	0.02	TRACE
HEATING VALUE*	1170	981	936
SPECIFIC GRAVITY	0.673	0.591	0.588

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 85 SAMPLE 15769	INDEX 86 SAMPLE 14070	INDEX 87 SAMPLE 14066
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SAN JOAQUIN
FIELD	RIO VISTA E	RIVER ISLANDS	LATHROP
PLANT NAME	DEHYDRATOR STATION 196	DEHYDRATOR STATION 196	FIELD GATHERING UNIT
LOCATION	12 IN.	12 IN., LINE 196	10 IN., NO. 304
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/13/79	07/11/74	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
PRESSURE, PSIG	700	482	400
FLOW, MCFD	40000	48000	50000
COMPONENT, MOLE PCT			
METHANE	92.7	93.4	82.6
ETHANE	3.4	3.1	0.3
PROPANE	1.2	0.9	TRACE
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.7	1.1	16.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1065	1044	842
SPECIFIC GRAVITY	0.609	0.597	0.628

	INDEX 88 SAMPLE 15765	INDEX 89 SAMPLE 14064	INDEX 90 SAMPLE 14065
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	LATHROP	MCMULLIN RANCH	ROBERTS ISLAND
PLANT NAME	LATHROP GATHERING	MCMULLIN COMPRESSOR STA.	NOT GIVEN
LOCATION	12 IN. SUCTION	6 IN. NO. 194 LINE	8 IN. NO. 176
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/12/79	07/10/74	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
PRESSURE, PSIG	200	150	1700
FLOW, MCFD	15000	2500	250
COMPONENT, MOLE PCT			
METHANE	85.6	85.1	92.9
ETHANE	0.5	0.6	0.3
PROPANE	TRACE	0.1	TRACE
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	13.5	13.5	6.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	876	880	946
SPECIFIC GRAVITY	0.617	0.620	0.584

	INDEX 91 SAMPLE 14063	INDEX 92 SAMPLE 14091	INDEX 93 SAMPLE 14090
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SANTA BARBARA	SANTA BARBARA
FIELD	VERNALIS	GAVIOTA & CALIENTE	MOLINO
PLANT NAME	FIELD COMPRESSOR STATION	GAVIOTA STANDARD METER 3442	SHELL MOLINO METER NO. 3450
LOCATION	6 IN. NO. 112 LINE	16 IN., LINE 1010	12 IN., LINE 260
OWNER	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/10/74	07/16/74	07/16/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	750	750
PRESSURE, PSIG	450	540	830
FLOW, MCFD	6000	3000	14000
COMPONENT, MOLE PCT			
METHANE	89.5	90.0	95.4
ETHANE	0.6	6.2	4.1
PROPANE	0.1	2.5	TRACE
N-BUTANE	0.0	0.4	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	9.7	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	920	1115	1040
SPECIFIC GRAVITY	0.599	0.623	0.576

	INDEX 94 SAMPLE 15781	INDEX 95 SAMPLE 14089	INDEX 96 SAMPLE 15780
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SANTA BARBARA	SANTA BARBARA
FIELD	MOLINO	SANTA MARIA VALLEY	SANTA MARIA, ET AL
PLANT NAME	SHELL MOLINO-M3450	UNION OIL BATTLES	UNION OIL BATTLES-M5805
LOCATION	10 IN. NO. 260	METER STA. NO. 5805, 12 IN.	10 IN. DISCHARGE
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/19/79	07/12/74	09/19/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	750	750
PRESSURE, PSIG	750	179	400
FLOW, MCFD	5000	13000	8000
COMPONENT, MOLE PCT			
METHANE	81.9	85.5	80.4
ETHANE	7.2	5.6	6.7
PROPANE	6.4	1.4	2.4
N-BUTANE	1.3	TRACE	0.1
ISOBUTANE	1.2	0.1	0.0
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	TRACE
NITROGEN	0.3	3.3	3.3
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	3.9	6.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1275	1011	1000
SPECIFIC GRAVITY	0.723	0.651	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 97 SAMPLE 14092	INDEX 98 SAMPLE 15770	INDEX 99 SAMPLE 14071
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SOLANO	SOLANO
FIELD	SUMMERLAND & CARPINTERIA	LINDSEY SLOUGH	LINDSEY SLOUGH & RIO VISTA W
PLANT NAME	STANDARD SUMMERLAND MTR 5504	SERPA JUNCTION	SERPA JUNCTION COMP. STA.
LOCATION	16 IN. LINE 1003	12 IN.	16 IN. LINE 200
OWNER	SOUTHERN CALIFORNIA GAS CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/16/74	09/13/79	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	730	730
PRESSURE,PSIG	375	500	480
FLOW,MCFD	4000	70000	80000
COMPONENT, MOLE PCT			
METHANE	83.0	90.9	94.1
ETHANE	9.0	3.6	3.0
PROPANE	4.2	1.4	0.8
N-BUTANE	0.7	0.3	0.1
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.3	2.8	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.2	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1165	1065	1036
SPECIFIC GRAVITY	0.686	0.620	0.589

	INDEX 100 SAMPLE 15771	INDEX 101 SAMPLE 14072	INDEX 102 SAMPLE 15773
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SUTTER
FIELD	MILLAR W ET AL	MILLAR, SAXON & BUNKER	NORTHERN CALIFORNIA GAS
PLANT NAME	MILLAR DEHYDRATOR	MILLAR DEHYDRATOR STATION	YUBA CITY
LOCATION	10 IN.	10 IN. LINE 220	34 IN.
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/13/79	07/11/74	09/14/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
PRESSURE,PSIG	550	518	500
FLOW,MCFD	7000	6200	25000
COMPONENT, MOLE PCT			
METHANE	83.3	81.9	94.4
ETHANE	1.1	1.3	0.4
PROPANE	0.2	0.3	TRACE
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	15.1	16.2	0.1
OXYGEN	0.0	0.0	5.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.01	0.01	0.1
HEATING VALUE*	877	864	TRACE
SPECIFIC GRAVITY	0.629	0.633	969 0.580

	INDEX 103 SAMPLE 14074	INDEX 104 SAMPLE 14075	INDEX 105 SAMPLE 14093
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SUTTER	SUTTER	VENTURA
FIELD	NOT GIVEN	SUTTER CREEK & SUTTER BUTTES	FEDERAL OFFSHORE 401 & 402
PLANT NAME	YUBA CITY UNDERGROUND STA.	YUBA CITY UNDERGROUND STA.	MOBIL RINCON METER 3372
LOCATION	16 IN. LINE 167	6 IN. LINE NO. 121	16 IN. LINE 1004
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/12/74	07/12/74	07/16/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	755
PRESSURE,PSIG	600	400	1000
FLOW,MCFD	7500	600	14000
COMPONENT, MOLE PCT			
METHANE	92.6	95.4	79.5
ETHANE	0.3	0.1	2.3
PROPANE	TRACE	TRACE	4.6
N-BUTANE	0.0	0.0	1.3
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	7.1	4.3	TRACE
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	11.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	943	968	1035
SPECIFIC GRAVITY	0.585	0.573	0.755

	INDEX 106 SAMPLE 15782	INDEX 107 SAMPLE 15784	INDEX 108 SAMPLE 1969
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	VENTURA
FIELD	RINCON OFFSHORE	TORREY CANYON	VENTURA
PLANT NAME	MOBIL OIL RINCON-M3372	UNION OIL-M2723	PIPELINE SAMPLE
LOCATION	16 IN. LINE NO. 1004	10 IN.	NOT GIVEN
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	ASSOCIATED OIL CO.
SAMPLED	09/19/79	09/19/79	03/10/30
FORMATION	NOT GIVEN	NOT GIVEN	PLIO-
GEOLOGIC PROVINCE CODE	950	755	755
PRESSURE,PSIG	750	285	NOT GIVEN
FLOW,MCFD	7000	11500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.8	89.7	83.3
ETHANE	2.6	6.2	15.7
PROPANE	5.2	2.3	---
N-BUTANE	2.0	0.3	---
ISOBUTANE	1.7	0.2	---
N-PENTANE	1.3	TRACE	---
ISOPENTANE	1.8	TRACE	---
CYCLOPENTANE	1.2	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	1.1	0.9	---
OXYGEN	0.1	0.0	0.6
ARGON	0.0	TRACE	0.3
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	5.8	0.4	---
HELIUM	TRACE	TRACE	0.2
HEATING VALUE*	1160	1096	0.00
SPECIFIC GRAVITY	0.742	0.622	1125 0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 109 SAMPLE 15783	INDEX 110 SAMPLE 14095	INDEX 111 SAMPLE 14077
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	YOLO
FIELD	VENTURA	VENTURA&SANTA MARIE BSN FLDS	CANADIAN GAS
PLANT NAME	GETTY NO. 7-M3374	SHELL VENTURA METER 3353	HERSHEY JUNCTION
LOCATION	6 IN.	15 IN. LINE 37	20 IN. NO. 302 WEST LINE
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/19/79	07/16/74	07/12/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	755	755	730
PRESSURE,PSIG	150	400	695
FLOW,MCFD	6000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	88.8	87.9
ETHANE	5.5	5.2	6.1
PROPANE	1.6	0.4	1.0
N-BUTANE	TRACE	TRACE	0.5
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	TRACE	TRACE	0.5
NITROGEN	4.2	3.6	2.4
OXYGEN	0.8	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.7	0.1
HELIUM	TRACE	TRACE	0.06
HEATING VALUE*	1015	1007	1123
SPECIFIC GRAVITY	0.632	0.616	0.650

	INDEX 112 SAMPLE 15774	INDEX 113 SAMPLE 14076	INDEX 114 SAMPLE 15433
STATE	CALIFORNIA	CALIFORNIA	COLORADO
COUNTY	YOLO	YOLO	CHEYENNE
FIELD	NORTHERN CALIFORNIA GAS	VARIOUS	COMPOSITE
PLANT NAME	HERSHEY JUNCTION	HERSHEY JUNCTION	KIT CARSON COMPRESSOR STA.
LOCATION	20 IN. INLET	20 IN. NO. 302 EAST LINE	20 IN. DISCHARGE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	09/14/79	07/11/74	10/19/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	450
PRESSURE,PSIG	1000	800	725
FLOW,MCFD	100	31000	50000
COMPONENT, MOLE PCT			
METHANE	95.1	96.0	85.4
ETHANE	0.3	0.3	10.2
PROPANE	TRACE	TRACE	1.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.5	3.6	0.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	2.5
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	969	978	1074
SPECIFIC GRAVITY	0.575	0.570	0.643

	INDEX 115 SAMPLE 13434	INDEX 116 SAMPLE 8694	INDEX 117 SAMPLE 8342
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	GARFIELD	JACKSON
FIELD	NOT GIVEN	PRAIRIE CANYON & CARBONERA	MCCALLUM UNIT
PLANT NAME	KIT CARSON COMPRESSOR STA.	PIPELINE SAMPLE	SEPERATOR AT PLANT
LOCATION	2-20 IN. DISCHARGE LINES	NOT GIVEN	MORRISON POOL
OWNER	COLORADO INTERSTATE GAS CO.	WESTERN SLOPE GAS CO.	CONTINENTAL OIL CO.
SAMPLED	10/02/72	10/06/62	11/02/61
FORMATION	NOT GIVEN	NOT GIVEN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	450	595	545
PRESSURE,PSIG	920	NOT GIVEN	800
FLOW,MCFD	275000	NOT GIVEN	34590
COMPONENT, MOLE PCT			
METHANE	76.2	68.3	2.3
ETHANE	6.6	3.3	0.5
PROPANE	2.2	1.0	2.1
N-BUTANE	0.2	0.3	1.1
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.1	0.5
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.5
NITROGEN	14.0	10.9	0.1
OXYGEN	0.0	0.1	0.1
ARGON	0.1	0.1	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	14.8	91.7
HELIUM	0.37	0.57	0.05
HEATING VALUE*	961	815	201
SPECIFIC GRAVITY	0.673	0.787	1.526

	INDEX 118 SAMPLE 8343	INDEX 119 SAMPLE 16120	INDEX 120 SAMPLE 12061
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	LA PLATA	LA PLATA
FIELD	MCCALLUM UNIT	ALL COLORADO	IGNACIO
PLANT NAME	SEPERATOR AT PLANT	TIFFANY COMPRESSOR STA.	NOT GIVEN
LOCATION	DAKOTA-LAKOTA RESERVOIR	8 IN.	TIFFANY COMPRESSOR STA.
OWNER	CONTINENTAL OIL CO.	WESTERN SLOPE GAS CO.	WESTERN SLOPE GAS CO.
SAMPLED	11/02/61	10/28/80	10/06/69
FORMATION	CRET-DAKOTA-LAKOTA	NOT GIVEN	CRET-MESAVERDE & DAKOTA
GEOLOGIC PROVINCE CODE	545	580	580
PRESSURE,PSIG	710	750	625
FLOW,MCFD	72021	14500	13000
COMPONENT, MOLE PCT			
METHANE	3.1	95.0	94.7
ETHANE	0.3	1.2	1.1
PROPANE	1.4	0.2	0.2
N-BUTANE	0.3	TRACE	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	1.8	TRACE	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	92.3	3.3	3.6
HELIUM	0.17	0.01	0.01
HEATING VALUE*	111	998	985
SPECIFIC GRAVITY	1.495	0.598	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 121 SAMPLE 14481	INDEX 122 SAMPLE 8323	INDEX 123 SAMPLE 8324
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO	NOT GIVEN	NOT GIVEN
PLANT NAME	TIFFANY COMPRESSOR STA.	IGNACIO COMPRESSOR STA.	IGNACIO COMPRESSOR STA.
LOCATION	8 IN,	IGNACIO PLANT	IGNACIO PLANT
OWNER	WESTERN SLOPE GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/01/75	12/05/61	12/05/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	700	467	466
FLOW,MCFD	7400	162900	54400
COMPONENT, MOLE PCT			
METHANE	96.9	87.7	94.3
ETHANE	1.5	6.6	1.5
PROPANE	0.2	2.5	0.5
N-BUTANE	TRACE	0.6	0.1
ISOBUTANE	TRACE	0.5	TRACE
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.2	0.7	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	3.0
HELIUM	0.01	0.01	0.07
HEATING VALUE*	993	1122	999
SPECIFIC GRAVITY	0.594	0.647	0.598

	INDEX 124 SAMPLE 6914	INDEX 125 SAMPLE 1736	INDEX 126 SAMPLE 16010
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LAS ANIMAS	LOGAN
FIELD	SAN JUAN BASIN	SAN FRANCISCO CREEK	ALL SOUTHERN WYOMING
PLANT NAME	STATION NO. 1	ABSORBTION PLANT	MERINO GATE VALVE
LOCATION	NOT GIVEN	SEC. 9, T34S, R62W	20 IN, MERINO W
OWNER	PACIFIC NORTHWEST PIPELINE	MOUNTAIN STATES OIL CORP.	CITIES SERVICE GAS CO.
SAMPLED	12/22/58	04/06/29	07/15/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	455	540
PRESSURE,PSIG	650	NOT GIVEN	560
FLOW,MCFD	118167	NOT GIVEN	60000
COMPONENT, MOLE PCT			
METHANE	96.3	11.7	84.0
ETHANE	2.1	73.7	8.8
PROPANE	0.4	---	3.1
N-BUTANE	0.2	---	0.7
ISOBUTANE	0.0	---	0.6
N-PENTANE	TRACE	---	0.2
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	0.1
NITROGEN	0.0	9.0	0.0
OXYGEN	TRACE	2.4	0.0
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	2.8	3.1	2.3
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1010	1439	1155
SPECIFIC GRAVITY	0.598	0.999	0.681

	INDEX 127 SAMPLE 5463	INDEX 128 SAMPLE 8332	INDEX 129 SAMPLE 2211
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	MESA	MOFFAT
FIELD	SPRINGDALE S	BAR X	ILES
PLANT NAME	PIPELINE SAMPLE	BAR X	PIPELINE SAMPLE
LOCATION	SEC. 28, T8N, R53W	6 IN, LINE	T4, R92W
OWNER	SHELL OIL CO.	EL PASO NATURAL GAS CO.	MIDWEST REFINING CO.
SAMPLED	04/06/53	12/07/61	10/08/30
FORMATION	CRET-DAKOTA	NOT GIVEN	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	540	595	535
PRESSURE,PSIG	NOT GIVEN	600	NOT GIVEN
FLOW,MCFD	NOT GIVEN	3800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.9	78.8	83.6
ETHANE	16.0	4.3	11.6
PROPANE	17.3	1.5	---
N-BUTANE	5.3	0.5	---
ISOBUTANE	2.6	0.3	---
N-PENTANE	1.1	0.2	---
ISOPENTANE	1.1	0.2	---
CYCLOPENTANE	0.2	0.3	---
HEXANES PLUS	0.6	0.5	---
NITROGEN	1.8	10.1	0.8
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	1.0	3.2	3.8
HELIUM	0.01	0.20	0.00
HEATING VALUE*	1475	996	1055
SPECIFIC GRAVITY	1.008	0.701	0.653

	INDEX 130 SAMPLE 3052	INDEX 131 SAMPLE 16012	INDEX 132 SAMPLE 8334
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MORGAN	RIO BLANCO
FIELD	POWDER WASH	WYOMING & KANSAS	4 CORNERS & PICEANCE CREEK
PLANT NAME	PIPELINE SAMPLE	FT. MORGAN STORAGE	STATION NO. 4
LOCATION	SEC. 9, T8S, T12N&11N, R97W	16 IN,	OUTLET
OWNER	MOUNTAIN FUEL SUPPLY CO.	COLORADO INTERSTATE GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	11/27/41	07/15/80	12/07/61
FORMATION	EOCE-WASATCH	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	540	595
PRESSURE,PSIG	600	1600	786
FLOW,MCFD	55000	53000	288000
COMPONENT, MOLE PCT			
METHANE	90.6	89.3	90.8
ETHANE	7.8	6.9	4.6
PROPANE	---	0.8	1.3
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.1	0.1
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	TRACE	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.0
NITROGEN	1.3	0.7	1.0
OXYGEN	0.1	0.0	0.1
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	2.0	1.8
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1058	1056	1043
SPECIFIC GRAVITY	0.601	0.621	0.614

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 133 SAMPLE 8690	INDEX 134 SAMPLE 8333	INDEX 135 SAMPLE 8011
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS N	PICEANCE CREEK	RANGELY
PLANT NAME	PIPELINE SAMPLE	RANGELY COLO. STATION NO. 4	RANGELY GASOLINE PLANT
LOCATION	COMPOSITE SAMPLE	10 IN. LINE	COMPOSITE SAMPLE
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	CALIFORNIA OIL CO.
SAMPLED	09/21/62	12/07/61	06/07/61
FORMATION	CRET-	NOT GIVEN	PENN-WEBER
GEOLOGIC PROVINCE CODE	595	595	595
PRESSURE,PSIG	NOT GIVEN	460	NOT GIVEN
FLOW,MCFD	NOT GIVEN	10800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.8	91.1	61.7
ETHANE	2.1	4.6	7.8
PROPANE	0.1	1.4	3.1
N-BUTANE	0.0	0.1	1.1
ISOBUTANE	0.0	0.1	1.0
N-PENTANE	0.0	TRACE	0.5
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	TRACE	0.4
NITROGEN	1.7	0.7	22.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.8	0.9
HELIUM	0.11	0.03	0.40
HEATING VALUE*	1011	1057	970
SPECIFIC GRAVITY	0.573	0.619	0.784

	INDEX 136 SAMPLE 13661	INDEX 137 SAMPLE 13732	INDEX 138 SAMPLE 2208
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	ROUTT
FIELD	RANGELY	RANGELY	TOM CREEK
PLANT NAME	FIELD COMP STA.	HAGOOD COMPRESSOR STA.	PIPELINE SAMPLE
LOCATION	FIELD COMP. STA. 8 IN. LINE	HAGOOD COMPRESSOR PLANT	NOT GIVEN
OWNER	CHEVRON OIL CO.	CHEVRON OIL CO.	TEXAS PRODUCTION CO.
SAMPLED	07/31/73	10/01/73	10/04/30
FORMATION	PENN-WEBER	PENN-WEBER	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	595	535
PRESSURE,PSIG	1800	NOT GIVEN	NOT GIVEN
FLOW,MCFD	5000	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	55.7	45.4	35.8
ETHANE	15.9	13.9	48.4
PROPANE	8.6	11.3	---
N-BUTANE	2.6	5.9	---
ISOBUTANE	2.1	4.5	---
N-PENTANE	0.6	3.0	---
ISOPENTANE	0.9	1.8	---
CYCLOPENTANE	0.1	0.3	---
HEXANES PLUS	0.3	1.8	---
NITROGEN	11.6	10.6	2.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	1.4	1.1	13.1
HELIUM	0.18	0.21	0.07
HEATING VALUE*	1314	1661	1230
SPECIFIC GRAVITY	0.891	1.089	0.932

	INDEX 139 SAMPLE 16011	INDEX 140 SAMPLE 8284	INDEX 141 SAMPLE 8285
STATE	COLORADO	GEORGIA	GEORGIA
COUNTY	WELD	MONTGOMERY	MONTGOMERY
FIELD	WESTERN WYOMING	NOT GIVEN	NOT GIVEN
PLANT NAME	CHEYENNE COMPRESSOR STA.	BUD ROBINSON LAKE	CONNER LAKE
LOCATION	22 IN. & 24 IN.	NOT GIVEN	NOT GIVEN
OWNER	COLORADO INTERSTATE GAS CO.	DIXIE DRILLING CO.	DIXIE DRILLING CO.
SAMPLED	07/14/80	05/05/61	05/05/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	130	130
PRESSURE,PSIG	540	NOT GIVEN	NOT GIVEN
FLOW,MCFD	315000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	84.1	50.2
ETHANE	5.8	0.0	TRACE
PROPANE	1.1	0.1	0.0
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.7	11.6	46.1
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.2	0.7
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.7	3.7	2.8
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	1059	855	509
SPECIFIC GRAVITY	0.629	0.641	0.778

	INDEX 142 SAMPLE 8286	INDEX 143 SAMPLE 3528	INDEX 144 SAMPLE 7545
STATE	GEORGIA	INDIANA	KANSAS
COUNTY	WHELER	PIKE	BARBER
FIELD	NOT GIVEN	ALFORD	BARBER COUNTY FIELDS
PLANT NAME	PIPELINE SAMPLE	COMPRESSOR STA.	GASOLINE PLANT
LOCATION	OIL SPRINGS	SEC. 17, T1N, R7W	OUTLET
OWNER	DIXIE DRILLING CO.	HOOSIER GAS CO.	KANSAS POWER & LIGHT CO.
SAMPLED	05/29/61	05/15/42	05/10/60
FORMATION	NOT GIVEN	MISS-BROWN SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	130	315	375
PRESSURE,PSIG	NOT GIVEN	40	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	42.0	84.8	92.1
ETHANE	0.0	6.4	4.2
PROPANE	0.0	---	0.1
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	53.4	7.0	3.4
OXYGEN	TRACE	0.4	0.0
ARGON	0.7	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	3.8	1.2	0.1
HELIUM	0.00	0.17	0.10
HEATING VALUE*	425	974	1011
SPECIFIC GRAVITY	0.817	0.628	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 145 SAMPLE 7546	INDEX 146 SAMPLE 8768	INDEX 147 SAMPLE 8769
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARTON	BARTON
FIELD	MEDICINE LODGE W	ADOLPH STORAGE	ADOLPH, SWEENEY, MACKSVILLE
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	KANSAS POWER & LIGHT CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	05/10/60	11/07/62	11/07/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.6	79.0	78.8
ETHANE	4.9	4.1	4.0
PROPANE	1.9	1.8	1.8
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.3	11.7	12.2
OXYGEN	0.6	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.02	1.99	1.34
HEATING VALUE*	1091	966	976
SPECIFIC GRAVITY	0.645	0.668	0.665

	INDEX 148 SAMPLE 4505	INDEX 149 SAMPLE 6346	INDEX 150 SAMPLE 6650
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	BEHREN	HUGOTON, MCKINNEY & OTHERS	NOT GIVEN
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PLANT NO. 104
LOCATION	PIPELINE TO JONES PLANT	SOUTHEAST OF GREAT BEND	NOT GIVEN
OWNER	A. R. JONES OIL & OPER. CO.	KANSAS POWER & LIGHT CO.	NATURAL GAS PL CO OF AMERICA
SAMPLED	06/--/48	05/19/57	06/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.8	77.3	81.2
ETHANE	11.9	6.3	6.8
PROPANE	---	2.8	2.5
N-BUTANE	---	0.6	0.5
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	5.7	11.6	7.6
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.3
HELIUM	0.82	0.48	0.30
HEATING VALUE*	1032	1016	1050
SPECIFIC GRAVITY	0.640	0.681	0.663

	INDEX 151 SAMPLE 9791	INDEX 152 SAMPLE 2858	INDEX 153 SAMPLE 4485
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	NOT GIVEN	OTIS	OTIS
PLANT NAME	COMPRESSOR STATION 104	SULPHUR REMOVAL PLANT	PIPELINE SAMPLE
LOCATION	24",26,&36 IN. LINES	INLET	NOT GIVEN
OWNER	NATURAL GAS PL CO OF AMERICA	PRODUCERS GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	03/12/65	06/30/41	05/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	8000	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.9	73.5	76.8
ETHANE	6.5	10.4	11.4
PROPANE	2.2	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	6.0	13.8	9.8
OXYGEN	0.0	0.4	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.3	0.5	0.3
HELIUM	0.25	1.36	1.36
HEATING VALUE*	1056	931	982
SPECIFIC GRAVITY	0.650	0.664	0.650

	INDEX 154 SAMPLE 4488	INDEX 155 SAMPLE 4506	INDEX 156 SAMPLE 4509
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS	OTIS	OTIS
PLANT NAME	PIPELINE SAMPLE	PRODUCERS PLANT	PRODUCERS PLANT
LOCATION	NOT GIVEN	OUTLET	INLET
OWNER	PRODUCERS GAS CO.	PRODUCERS GAS CO.	PRODUCERS GAS CO.
SAMPLED	05/--/48	06/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.3	78.2	76.4
ETHANE	15.4	10.4	11.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	10.6	10.2
OXYGEN	0.5	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	1.18	0.32	1.41
HEATING VALUE*	1038	979	980
SPECIFIC GRAVITY	0.674	0.652	0.652

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 157 SAMPLE 4511	INDEX 158 SAMPLE 4512	INDEX 159 SAMPLE 4990
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS	OTIS	PAWNEE
PLANT NAME	NORTHERN NATURAL PLANT	NORTHERN NATURAL PLANT	PIPELINE SAMPLE
LOCATION	INLET	OUTLET	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	06/--/48	06/--/48	02/14/51
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.3	76.6	75.3
ETHANE	15.8	13.2	3.8
PROPANE	---	---	1.7
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	1.1
NITROGEN	10.0	8.5	15.6
OXYGEN	0.2	0.2	0.2
ARGON	---	---	0.1
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	1.33	1.34	1.76
HEATING VALUE*	1016	1013	924
SPECIFIC GRAVITY	0.674	0.654	0.679

	INDEX 160 SAMPLE 4991	INDEX 161 SAMPLE 4487	INDEX 162 SAMPLE 4493
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE	PAWNEE ROCK	PAWNEE ROCK
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PRODUCERS GAS TREATING PLANT
LOCATION	NOT GIVEN	NOT GIVEN	OUTLET
OWNER	NORTHERN NATURAL GAS CO.	PRODUCERS GAS CO.	PRODUCERS GAS CO.
SAMPLED	02/14/51	05/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.8	74.3	78.0
ETHANE	4.2	10.1	11.3
PROPANE	2.0	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	1.4	---	---
NITROGEN	12.4	13.2	8.8
OXYGEN	0.1	0.3	0.1
ARGON	0.1	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	1.47	1.56	1.35
HEATING VALUE*	976	934	993
SPECIFIC GRAVITY	0.680	0.659	0.645

	INDEX 163 SAMPLE 4508	INDEX 164 SAMPLE 4510	INDEX 165 SAMPLE 4484
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK & OTIS
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	LINE TO PRODUCERS PLANT	LINE TO NORTHERN PLANT	NOT GIVEN
OWNER	PRODUCERS GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	06/--/48	06/--/48	05/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.6	75.6	76.8
ETHANE	12.2	13.7	11.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	8.5	9.3
OXYGEN	0.2	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.7	0.5
HELIUM	1.37	1.37	1.27
HEATING VALUE*	995	1011	1008
SPECIFIC GRAVITY	0.652	0.659	0.652

	INDEX 166 SAMPLE 4489	INDEX 167 SAMPLE 148	INDEX 168 SAMPLE 13249
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BUTLER	CHASE
FIELD	PAWNEE ROCK & OTIS	EL DORADO	NOT GIVEN
PLANT NAME	PIPELINE	PIPELINE SAMPLE	MAYFIELD COMPRESSOR STATION
LOCATION	NOT GIVEN	NOT GIVEN	20 IN. LINE
OWNER	PRODUCERS GAS CO.	EMPIRE GAS & FUEL CO.	CITIES SERVICE GAS CO.
SAMPLED	05/--/48	03/12/20	06/08/72
FORMATION	NOT GIVEN	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	370	370
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	407
FLOW,MCFD	NOT GIVEN	11000	107000
COMPONENT, MOLE PCT			
METHANE	76.4	71.8	85.1
ETHANE	11.1	7.8	6.2
PROPANE	---	---	2.5
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	10.5	18.6	5.5
OXYGEN	0.3	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	1.35	0.89	0.27
HEATING VALUE*	973	867	1045
SPECIFIC GRAVITY	0.651	0.672	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 169 SAMPLE 15671	INDEX 170 SAMPLE 1191	INDEX 171 SAMPLE 13308
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	COWLEY	DICKINSON
FIELD	PAMPA & WESTERN OKLAHOMA	RAINBOW BEND	PANHANDLE HUGOTON AREA
PLANT NAME	MATFIELD COMPRESSOR STA.	RAINBOW BEND COMPRESSOR STA.	ENTERPRISE COMPRESSOR STA.
LOCATION	20 IN.	NOT GIVEN	DISCHARGE
OWNER	CITIES SERVICE GAS CO.	MARLAND OIL CO.	MICHIGAN WISCONSIN PL CO.
SAMPLED	06/21/79	12/10/25	07/27/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	380
PRESSURE,PSIG	307	NOT GIVEN	973
FLOW,MCFD	NOT GIVEN	NOT GIVEN	650000
COMPONENT, MOLE PCT			
METHANE	85.1	37.5	87.9
ETHANE	6.3	54.0	5.7
PROPANE	2.1	---	1.4
N-BUTANE	0.1	---	0.1
ISOBUTANE	TRACE	---	0.1
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	TRACE
NITROGEN	5.5	7.3	4.4
OXYGEN	0.0	0.8	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	0.26	0.10	0.08
HEATING VALUE*	1038	1348	1036
SPECIFIC GRAVITY	0.634	0.862	0.619

	INDEX 172 SAMPLE 15491	INDEX 173 SAMPLE 5317	INDEX 174 SAMPLE 5336
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DICKINSON	DOUGLAS	DOUGLAS
FIELD	PANHANDLE W ET AL.	NOT GIVEN	NOT GIVEN
PLANT NAME	ENTERPRISE COMPRESSOR STA.	CITIES SERVICE PUMP STA.	CITIES SERVICE PUMP STA.
LOCATION	24 IN.	NOT GIVEN	NOT GIVEN
OWNER	MICHIGAN WISCONSIN PL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	11/17/78	11/14/52	11/21/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	335	335
PRESSURE,PSIG	700	NOT GIVEN	NOT GIVEN
FLOW,MCFD	590000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	77.1	76.6
ETHANE	3.1	5.9	6.2
PROPANE	0.8	2.8	2.9
N-BUTANE	0.1	0.3	0.3
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	4.2	12.6	12.6
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.7
HELIUM	0.08	0.34	0.25
HEATING VALUE*	1006	976	979
SPECIFIC GRAVITY	0.604	0.677	0.679

	INDEX 175 SAMPLE 5339	INDEX 176 SAMPLE 5351	INDEX 177 SAMPLE 5361
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DOUGLAS	DOUGLAS	DOUGLAS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	CITIES SERVICE PUMP STA.	CITIES SERVICE PUMP STA.	CITIES SERVICE PUMP STA.
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	11/28/52	12/05/52	01/08/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	78.6	80.4
ETHANE	6.3	6.2	6.7
PROPANE	2.9	2.9	2.9
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	10.6	10.7	8.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.2
HELIUM	0.19	0.28	0.29
HEATING VALUE*	1003	1003	1034
SPECIFIC GRAVITY	0.672	0.674	0.663

	INDEX 178 SAMPLE 12135	INDEX 179 SAMPLE 13309	INDEX 180 SAMPLE 15488
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	ELLSWORTH	ELLSWORTH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	NOT GIVEN	WILSON COMP. STA. NO. 194	COMPRESSOR STA. NO. 194
LOCATION	NOT GIVEN	24,26,&36 IN. LINES	24,26&36 IN.
OWNER	NORTHERN NELEX CO.	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	12/05/69	07/26/72	11/16/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	647	580
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	88.5	85.3
ETHANE	5.8	4.6	3.6
PROPANE	2.9	1.7	1.2
N-BUTANE	1.0	0.4	0.3
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	13.2	3.9	7.2
OXYGEN	0.0	0.0	1.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.6
HELIUM	0.40	0.15	0.15
HEATING VALUE*	987	1051	991
SPECIFIC GRAVITY	0.680	0.626	0.639

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 181 SAMPLE 5542	INDEX 182 SAMPLE 6815	INDEX 183 SAMPLE 6816
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HOLCOMB COMPRESSOR STA.	HOLCOMB COMPRESSOR STA.	HOLCOMB COMPRESSOR STA.
LOCATION	20 IN. DISCHARGE	24 IN. INLET	24 IN. INLET
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	08/12/53	--/--/58	09/30/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.5	71.1	63.5
ETHANE	6.7	5.8	5.0
PROPANE	3.6	3.2	2.9
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.2	17.6	26.2
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.42	0.45	0.58
HEATING VALUE*	1002	970	866
SPECIFIC GRAVITY	0.712	0.718	0.740

	INDEX 184 SAMPLE 6817	INDEX 185 SAMPLE 13314	INDEX 186 SAMPLE 15501
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HOLCOMB COMPRESSOR STA.	HOLCOMB COMPRESSOR STATION	HOLCOMB COMPRESSOR STA.
LOCATION	20 IN. OUTLET	DISCHARGE	20 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	09/30/58	07/25/72	11/14/78
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	800	798
FLOW,MCFD	NOT GIVEN	200000	200000
COMPONENT, MOLE PCT			
METHANE	73.2	72.2	72.1
ETHANE	5.9	6.4	6.2
PROPANE	3.3	3.7	3.6
N-BUTANE	0.7	0.9	1.0
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.6	15.4	15.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.42	0.40	0.42
HEATING VALUE*	988	1004	1014
SPECIFIC GRAVITY	0.705	0.712	0.719

	INDEX 187 SAMPLE 5337	INDEX 188 SAMPLE 5531	INDEX 189 SAMPLE 6722
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FRANKLIN	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	PIPELINE SAMPLE	HUGOTON COMPRESSOR STA.	ULYSSES GASOLINE PLANT
LOCATION	26 IN.	26 IN. OUTLET	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	HUGOTON PRODUCTION CO.
SAMPLED	11/21/52	08/12/53	07/17/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	280
FLOW,MCFD	NOT GIVEN	NOT GIVEN	78000
COMPONENT, MOLE PCT			
METHANE	71.4	66.1	71.7
ETHANE	5.6	11.3	6.8
PROPANE	4.7	8.0	3.7
N-BUTANE	0.2	0.9	1.1
ISOBUTANE	0.0	0.6	0.5
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	17.7	12.4	14.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.35	0.32	0.40
HEATING VALUE*	952	1149	1045
SPECIFIC GRAVITY	0.705	0.772	0.731

	INDEX 190 SAMPLE 6726	INDEX 191 SAMPLE 6727	INDEX 192 SAMPLE 6728
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	NORTH HUGOTON STA.	NORTH HUGOTON STA.	NORTH HUGOTON STA.
LOCATION	20 IN.	26 IN.	26 IN.
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	07/17/58	07/17/58	07/17/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	300	300	850
FLOW,MCFD	60000	20000	320000
COMPONENT, MOLE PCT			
METHANE	74.6	74.5	73.8
ETHANE	6.1	6.0	5.9
PROPANE	2.9	3.2	2.6
N-BUTANE	0.6	0.9	0.6
ISOBUTANE	0.1	0.5	0.1
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	14.9	13.9	16.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.40	0.40	0.50
HEATING VALUE*	972	1018	957
SPECIFIC GRAVITY	0.687	0.707	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 193 SAMPLE 6729	INDEX 194 SAMPLE 6730	INDEX 195 SAMPLE 7342
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	NORTH HUGOTON STA.	NORTH HUGOTON STA.	HUGOTON COMPRESSOR STA.
LOCATION	30 IN.	22 IN.	26 IN.
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	07/17/58	07/17/58	01/21/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	320	260	323
FLOW,MCFD	170000	45000	69600
COMPONENT, MOLE PCT			
METHANE	78.7	68.0	67.6
ETHANE	6.1	4.4	4.4
PROPANE	2.6	2.2	2.2
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	15.2	23.4	23.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.60	0.60
HEATING VALUE*	960	873	870
SPECIFIC GRAVITY	0.684	0.717	0.714

	INDEX 196 SAMPLE 7343	INDEX 197 SAMPLE 7344	INDEX 198 SAMPLE 7345
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HUGOTON COMPRESSOR STA.	HUGOTON COMPRESSOR STA.	HUGOTON COMPRESSOR STA.
LOCATION	26 IN. INLET	26 IN. INLET	26 IN. INLET
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	01/21/60	01/21/60	01/21/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	326	270	279
FLOW,MCFD	2300	43500	89600
COMPONENT, MOLE PCT			
METHANE	72.6	73.2	73.7
ETHANE	6.8	5.8	6.3
PROPANE	3.0	3.1	2.8
N-BUTANE	0.3	0.8	0.5
ISOBUTANE	TRACE	0.4	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.4	0.1
NITROGEN	17.0	15.4	15.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.40	0.40
HEATING VALUE*	943	989	965
SPECIFIC GRAVITY	0.692	0.705	0.691

	INDEX 199 SAMPLE 7346	INDEX 200 SAMPLE 7533	INDEX 201 SAMPLE 13239
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HUGOTON COMPRESSOR STA.	ULYSSES COMPRESSOR STA.	HUGOTON COMPRESSOR STATION
LOCATION	26 IN.	NOT GIVEN	MOBIL LINE
OWNER	CITIES SERVICE OIL CO.	HUGOTON PRODUCTION CO.	CITIES SERVICE GAS CO.
SAMPLED	01/22/60	05/03/60	06/06/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	900	NOT GIVEN	285
FLOW,MCFD	384600	NOT GIVEN	180000
COMPONENT, MOLE PCT			
METHANE	72.3	74.5	74.1
ETHANE	5.9	7.1	6.3
PROPANE	2.7	2.7	3.4
N-BUTANE	0.5	0.3	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	17.8	14.6	14.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.40	0.43
HEATING VALUE*	934	969	982
SPECIFIC GRAVITY	0.694	0.688	0.691

	INDEX 202 SAMPLE 13240	INDEX 203 SAMPLE 13241	INDEX 204 SAMPLE 13242
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HUGOTON COMPRESSOR STATION	HUGOTON COMPRESSOR STATION	HUGOTON COMPRESSOR STATION
LOCATION	ASHLAND LINE	AMOCO A & B LINES	AMOCO C SYSTEM
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/06/72	06/06/72	06/06/72
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	140	335	345
FLOW,MCFD	105083	322000	65000
COMPONENT, MOLE PCT			
METHANE	73.6	73.3	69.5
ETHANE	5.8	6.6	5.7
PROPANE	3.4	2.9	2.4
N-BUTANE	0.9	0.1	0.6
ISOBUTANE	0.5	0.1	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.0	16.4	21.3
OXYGEN	0.4	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.45	0.38	0.55
HEATING VALUE*	1007	952	900
SPECIFIC GRAVITY	0.710	0.691	0.709

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 205 SAMPLE 13243	INDEX 206 SAMPLE 13244	INDEX 207 SAMPLE 13245
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HUGOTON COMPRESSOR STATION	HUGOTON COMPRESSOR STATION	ULYSSES COMPRESSOR STATION
LOCATION	HELEX DISCHARGE	26 IN. DISCHARGE	DISCHARGE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	KANSAS POWER & LIGHT CO.
SAMPLED	06/06/72	06/06/72	06/06/72
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	335	811	600
FLOW,MCFD	460000	130000	200000
COMPONENT, MOLE PCT			
METHANE	79.8	74.0	74.1
ETHANE	6.8	6.6	6.7
PROPANE	0.7	3.3	3.2
N-BUTANE	TRACE	0.6	0.4
ISOBUTANE	TRACE	0.4	0.2
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	12.5	14.8	14.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.04	0.43	0.41
HEATING VALUE*	948	989	974
SPECIFIC GRAVITY	0.646	0.697	0.687

	INDEX 208 SAMPLE 15658	INDEX 209 SAMPLE 15659	INDEX 210 SAMPLE 15660
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	ULYSSES COMPRESSOR STA.	HUGOTON COMPRESSOR STA.	HUGOTON COMPRESSOR STA.
LOCATION	36 IN. STATION DISCHARGE	26 IN. AMOCO A&B	HELEX DISCHARGE
OWNER	KANSAS POWER & LIGHT CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/19/79	06/19/79	06/19/79
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	480	320	320
FLOW,MCFD	70000	277800	438961
COMPONENT, MOLE PCT			
METHANE	74.3	72.8	80.3
ETHANE	6.9	6.6	6.9
PROPANE	2.9	2.7	0.6
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	15.1	17.0	12.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.41	0.45	0.05
HEATING VALUE*	958	936	961
SPECIFIC GRAVITY	0.680	0.686	0.648

	INDEX 211 SAMPLE 15661	INDEX 212 SAMPLE 15662	INDEX 213 SAMPLE 15663
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	HUGOTON COMPRESSOR STA.	HUGOTON COMPRESSOR STA.	HUGOTON COMPRESSOR STA.
LOCATION	AMOCO C SYSTEM	20 IN. MOBIL LINE	26 IN. DISCHARGE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/19/79	06/19/79	06/19/79
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	320	250	NOT GIVEN
FLOW,MCFD	39900	109350	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.6	74.1	80.3
ETHANE	4.6	6.2	6.9
PROPANE	2.3	3.1	0.5
N-BUTANE	0.7	0.5	TRACE
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	21.5	15.2	12.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.56	0.43	0.05
HEATING VALUE*	899	970	951
SPECIFIC GRAVITY	0.710	0.689	0.642

	INDEX 214 SAMPLE 15664	INDEX 215 SAMPLE 6391	INDEX 216 SAMPLE 6392
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	NOT GIVEN	NOT GIVEN
PLANT NAME	HUGOTON COMPRESSOR STA.	ULYSSES COMPRESSOR STA.	ULYSSES COMPRESSOR STA.
LOCATION	26 IN. ASHLAND LINE	STA. INLET	STA. INLET
OWNER	CITIES SERVICE GAS CO.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	06/19/79	08/20/57	08/20/57
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	90	NOT GIVEN	NOT GIVEN
FLOW,MCFD	88326	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.3	72.1	74.1
ETHANE	5.9	5.6	6.7
PROPANE	3.3	3.7	2.7
N-BUTANE	0.9	1.0	0.3
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.3	0.3	0.0
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	14.9	15.1	15.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.43	0.41	0.42
HEATING VALUE*	1009	1017	962
SPECIFIC GRAVITY	0.710	0.721	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 217 SAMPLE 12133	INDEX 218 SAMPLE 13746	INDEX 219 SAMPLE 880
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GREENWOOD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	HELIUM PLANT	JAYHAWK PLANT	GASOLINE PLANT
LOCATION	PLANT INLET	INLET FEED GAS	SEC. 8, T23S, R11E
OWNER	CITIES SERVICE HELEX INC.	CITIES SERVICE HELEX, INC.	EMPIRE GASOLINE CO.
SAMPLED	11/26/69	10/11/73	05/20/24
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	365
PRESSURE,PSIG	NOT GIVEN	350	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	73.4	5.9
ETHANE	6.0	6.1	64.3
PROPANE	2.9	2.8	---
N-BUTANE	0.3	0.3	---
ISOBUTANE	0.1	0.3	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	16.9	16.4	28.5
OXYGEN	0.0	0.0	1.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.44	0.42	0.28
HEATING VALUE*	937	955	1212
SPECIFIC GRAVITY	0.686	0.692	0.996

	INDEX 220 SAMPLE 10825	INDEX 221 SAMPLE 6398	INDEX 222 SAMPLE 6399
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	BAUER	SPIVEY-GRABS	SPIVEY-GRABS
PLANT NAME	WOHLSCHLEGEL LEASE	MAGNOLIA PET. GASOLINE PLANT OUTLET	PIPELINE SAMPLE
LOCATION	SEC. 9, T31S, R6W	KANSAS POWER & LIGHT CO.	NOT GIVEN
OWNER	PETROLEUM, INC.	08/29/57	KANSAS POWER & LIGHT CO.
SAMPLED	12/21/66	NOT GIVEN	08/29/57
FORMATION	MISS-	375	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	NOT GIVEN	375
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN		NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	90.3	89.4
ETHANE	6.5	5.2	5.0
PROPANE	5.7	1.2	1.9
N-BUTANE	2.4	TRACE	0.7
ISOBUTANE	0.9	TRACE	0.4
N-PENTANE	0.7	0.0	0.2
ISOPENTANE	0.7	TRACE	0.1
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.5	0.0	0.2
NITROGEN	6.5	3.0	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.27	0.18	0.11
HEATING VALUE*	1250	1039	1108
SPECIFIC GRAVITY	0.773	0.605	0.635

	INDEX 223 SAMPLE 15666	INDEX 224 SAMPLE 13248	INDEX 225 SAMPLE 5535
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	KEARNY
FIELD	HUGOTON & P.E.P.L.	NOT GIVEN	HUGOTON
PLANT NAME	HESSTON COMPRESSOR STA.	HESSTON COMPRESSOR STATION	LAKIN COMPRESSOR STA.
LOCATION	26 IN. DISCHARGE	2-26 IN. LINES	NOT GIVEN
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	06/20/79	06/07/72	08/12/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	360
PRESSURE,PSIG	700	792	NOT GIVEN
FLOW,MCFD	300000	455000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	80.0	72.9
ETHANE	6.5	6.5	7.0
PROPANE	0.6	1.0	3.7
N-BUTANE	0.1	0.1	1.0
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	TRACE	0.3
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	11.8	12.0	14.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.08	0.08	0.39
HEATING VALUE*	957	960	1027
SPECIFIC GRAVITY	0.645	0.649	0.713

	INDEX 226 SAMPLE 5541	INDEX 227 SAMPLE 6719	INDEX 228 SAMPLE 6720
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	LAKIN COMPRESSOR STA.	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	NOT GIVEN	SEC. 29, T24S, R36W	SEC. 29, T24S, R36W
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/12/53	07/16/58	07/16/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	200	740
FLOW,MCFD	NOT GIVEN	NOT GIVEN	80000
COMPONENT, MOLE PCT			
METHANE	70.7	68.8	72.1
ETHANE	6.2	6.0	5.3
PROPANE	3.5	3.6	2.8
N-BUTANE	0.8	1.0	0.6
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	17.8	19.2	17.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.46	0.50	0.50
HEATING VALUE*	966	965	961
SPECIFIC GRAVITY	0.712	0.728	0.708

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 229 SAMPLE 6721	INDEX 230 SAMPLE 6725	INDEX 231 SAMPLE 7366
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	LAKIN PLANT INLET
LOCATION	SEC. 29, T24S, R36W	SEC. 16, T24S, R35W	F1-20 IN.
OWNER	COLORADO INTERSTATE GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/16/58	07/16/58	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	200	400	NOT GIVEN
FLOW,MCFD	80000	90000	45000
COMPONENT, MOLE PCT			
METHANE	73.2	75.8	71.2
ETHANE	6.1	5.5	5.8
PROPANE	3.2	2.4	2.8
N-BUTANE	0.9	0.5	0.8
ISOBUTANE	0.5	0.2	0.5
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	15.0	14.9	17.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.40	0.44
HEATING VALUE*	1007	961	960
SPECIFIC GRAVITY	0.711	0.681	0.711

	INDEX 232 SAMPLE 7367	INDEX 233 SAMPLE 7368	INDEX 234 SAMPLE 7369
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	LAKIN PLANT INLET	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	F8-8 IN.	SEC. 29, T24S, R36W	SEC. 29, T24S, R36W
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	02/02/60	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	4400	123000	11000
COMPONENT, MOLE PCT			
METHANE	66.3	70.9	65.5
ETHANE	5.9	5.6	5.9
PROPANE	3.3	2.9	3.2
N-BUTANE	0.9	0.6	0.8
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	21.9	18.8	21.6
OXYGEN	TRACE	TRACE	1.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.51	0.46	0.39
HEATING VALUE*	925	929	915
SPECIFIC GRAVITY	0.731	0.701	0.740

	INDEX 235 SAMPLE 7370	INDEX 236 SAMPLE 13435	INDEX 237 SAMPLE 15432
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	PIPELINE SAMPLE	LAKIN COMPRESSOR STATION	LAKIN COMPRESSOR STA.
LOCATION	SEC. 20, T24S, R36W	20 IN. DISCHARGE	20 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	10/03/72	10/18/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	800	739
FLOW,MCFD	11000	140000	36500
COMPONENT, MOLE PCT			
METHANE	67.7	71.4	71.0
ETHANE	6.1	6.2	6.2
PROPANE	3.4	3.3	3.3
N-BUTANE	0.9	0.7	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	20.3	17.4	17.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.58	0.46	0.46
HEATING VALUE*	945	961	967
SPECIFIC GRAVITY	0.727	0.707	0.712

	INDEX 238 SAMPLE 15665	INDEX 239 SAMPLE 2839	INDEX 240 SAMPLE 2840
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CENTRAL KANSAS AREA	CUNNINGHAM	CUNNINGHAM
PLANT NAME	CALISTA COMPRESSOR STA.	PIPE LINE SAMPLE	PIPE LINE SAMPLE
LOCATION	18&16 IN. DISCHARGE	NOT GIVEN	NOT GIVEN
OWNER	KANSAS POWER & LIGHT CO.	SKELLY OIL CO.	SKELLY OIL CO.
SAMPLED	06/20/79	09/07/40	09/07/40
FORMATION	NOT GIVEN	PENN-LANSING-KANSAS CITY	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
PRESSURE,PSIG	360	NOT GIVEN	NOT GIVEN
FLOW,MCFD	60000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	61.1	68.5
ETHANE	6.4	24.4	16.6
PROPANE	2.5	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	13.2	12.4	12.8
OXYGEN	0.0	0.6	0.6
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	TRACE	0.6	0.4
HELIUM	0.38	0.93	1.13
HEATING VALUE*	980	1056	991
SPECIFIC GRAVITY	0.674	0.732	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 241 SAMPLE 2841	INDEX 242 SAMPLE 13247	INDEX 243 SAMPLE 7538
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	NOT GIVEN	SPIVEY-GRABS
PLANT NAME	PIPE LINE SAMPLE	CALISTA COMPRESSOR STATION	GASOLINE PLANT
LOCATION	NOT GIVEN	DISCHARGE	NOT GIVEN
OWNER	SKELLY OIL CO.	KANSAS POWER & LIGHT CO.	NOT GIVEN
SAMPLED	09/07/40	06/07/72	05/05/60
FORMATION	ORDO-VIOLA	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
PRESSURE,PSIG	NOT GIVEN	600	NOT GIVEN
FLOW,MCFD	NOT GIVEN	150000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.2	74.6	89.6
ETHANE	13.5	6.8	5.6
PROPANE	---	3.0	1.6
N-BUTANE	---	0.3	0.1
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	13.8	14.6	2.7
OXYGEN	0.8	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.1
HELIUM	1.10	0.41	0.20
HEATING VALUE*	953	972	1056
SPECIFIC GRAVITY	0.684	0.684	0.612

	INDEX 244 SAMPLE 15668	INDEX 245 SAMPLE 15669	INDEX 246 SAMPLE 15670
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.
LOCATION	24 IN.-100 LINE	26 IN. - 200 LINE	36 IN. - 400 LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/21/79	06/21/79	06/21/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	455	635	772
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	89.8	87.7
ETHANE	3.7	3.8	3.1
PROPANE	0.6	0.6	0.4
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	4.5	4.3	7.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.7
HELIUM	0.16	0.16	0.27
HEATING VALUE*	1002	1005	962
SPECIFIC GRAVITY	0.612	0.611	0.614

	INDEX 247 SAMPLE 13250	INDEX 248 SAMPLE 13251	INDEX 249 SAMPLE 13252
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.
LOCATION	100 LINE	200 LINE	300 LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	NOT GIVEN	06/08/72	06/08/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	560	782	897
FLOW,MCFD	188	342000	417000
COMPONENT, MOLE PCT			
METHANE	84.8	86.2	76.3
ETHANE	5.9	5.4	7.7
PROPANE	1.2	1.0	4.3
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	7.8	6.7	10.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.02	0.11	0.02
HEATING VALUE*	999	1003	1063
SPECIFIC GRAVITY	0.630	0.625	0.700

	INDEX 250 SAMPLE 13618	INDEX 251 SAMPLE 13619	INDEX 252 SAMPLE 13620
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.
LOCATION	100 LINE	200 LINE	300 LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/06/73	06/06/73	06/06/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	400	490	550
FLOW,MCFD	188000	342000	417000
COMPONENT, MOLE PCT			
METHANE	83.7	83.7	77.4
ETHANE	5.8	5.8	7.5
PROPANE	1.6	1.2	3.7
N-BUTANE	0.1	0.0	0.5
ISOBUTANE	0.1	0.0	0.4
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	8.3	8.9	10.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.03	0.09	0.02
HEATING VALUE*	1000	983	1053
SPECIFIC GRAVITY	0.638	0.633	0.689

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 253 SAMPLE 13621	INDEX 254 SAMPLE 15667	INDEX 255 SAMPLE 13253
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	WESTERN OKLAHOMA	NOT GIVEN
PLANT NAME	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.
LOCATION	400 INLET LINE	30 IN.-300 LINE	400 LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/06/73	06/21/79	06/08/72
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	510	637	826
FLOW,MCFD	777000	NOT GIVEN	777
COMPONENT, MOLE PCT			
METHANE	90.2	80.9	81.5
ETHANE	4.7	8.1	4.7
PROPANE	0.9	2.8	0.9
N-BUTANE	0.1	0.4	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	3.0	6.6	9.6
OXYGEN	0.0	0.0	1.8
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	1.0
HELIUM	0.04	0.22	0.03
HEATING VALUE*	1028	1068	945
SPECIFIC GRAVITY	0.610	0.666	0.652

	INDEX 256 SAMPLE 11793	INDEX 257 SAMPLE 5533	INDEX 258 SAMPLE 7534
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MEADE	MEADE
FIELD	DURHAM & DURHAM E	HUGOTON	MCKINNEY
PLANT NAME	NOT GIVEN	MEADE CAMP STA.	PIPELINE SAMPLE
LOCATION	NOT GIVEN	24 IN. DISCHARGE	COMPOSITE GAS-MCKINNEY FIELD
OWNER	ROUNDS & STEWAR	MICHIGAN WISCONSIN PL CO.	KANSAS POWER & LIGHT CO.
SAMPLED	03/20/69	08/14/53	05/02/60
FORMATION	MISS-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	360	360
PRESSURE,PSIG	123	NOT GIVEN	NOT GIVEN
FLOW,MCFD	2300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	71.7	82.8
ETHANE	5.9	7.0	6.0
PROPANE	4.2	3.6	3.9
N-BUTANE	1.3	0.5	1.3
ISOBUTANE	0.9	0.4	0.7
N-PENTANE	0.6	0.0	0.2
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	17.8	15.8	4.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.82	0.71	0.10
HEATING VALUE*	1027	975	1155
SPECIFIC GRAVITY	0.753	0.702	0.691

	INDEX 259 SAMPLE 3190	INDEX 260 SAMPLE 1346	INDEX 261 SAMPLE 5705
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MONTGOMERY	MONTGOMERY	MORTON
FIELD	BOLTON	NOT GIVEN	GREENWOOD
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	HOOKER STA.
LOCATION	SEC. 20, T33S, R15E	CONEY	HOOKER STA. INLET
OWNER	CONSOLIDATED GAS, OIL & MFG.	EMPIRE GAS & FUEL CO.	NATURAL GAS PL CO OF AMERICA
SAMPLED	03/24/42	02/14/27	10/14/54
FORMATION	MISS-LIME	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	365	365	360
PRESSURE,PSIG	500	NOT GIVEN	325
FLOW,MCFD	1500	NOT GIVEN	43000
COMPONENT, MOLE PCT			
METHANE	93.8	47.7	68.1
ETHANE	1.0	37.9	6.1
PROPANE	---	---	3.4
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	3.6	11.5	19.4
OXYGEN	0.3	2.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	1.1	0.8	0.1
HELIUM	0.21	0.12	0.52
HEATING VALUE*	968	1162	976
SPECIFIC GRAVITY	0.586	0.809	0.738

	INDEX 262 SAMPLE 5706	INDEX 263 SAMPLE 6999	INDEX 264 SAMPLE 7000
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
PLANT NAME	HOOKER STA.	GREENWOOD COMPRESSOR STA.	MORTON CO. COMPRESSOR STA.
LOCATION	HOOKER STA. OUTLET	INLET	24 IN. & 12 IN.
OWNER	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/15/54	03/99/59	03/20/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	680	NOT GIVEN	NOT GIVEN
FLOW,MCFD	43000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	65.8	67.9
ETHANE	6.0	6.5	6.2
PROPANE	3.7	3.8	3.4
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	19.3	20.8	19.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.53	0.60	0.60
HEATING VALUE*	979	962	952
SPECIFIC GRAVITY	0.737	0.746	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 265 SAMPLE 7374	INDEX 266 SAMPLE 7380	INDEX 267 SAMPLE 13439
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
PLANT NAME	MORTON CO. COMPRESSOR STA.	GREENWOOD DISCHARGE	MORTON CO. COMPRESSOR STA.
LOCATION	24 IN. GREENWOOD DISCHARGE	SEC. 18, T33S, R43W	12 IN. INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	02/04/60	10/03/72
FORMATION	NOT GIVEN	PENN-VIRGIL	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	750 NOT GIVEN	795
FLOW,MCFD	104000		50000
COMPONENT, MOLE PCT			
METHANE	66.0	52.3	71.7
ETHANE	6.7	8.1	1.4
PROPANE	3.7	8.0	3.7
N-BUTANE	1.0	5.6	0.4
ISOBUTANE	0.3	2.2	0.2
N-PENTANE	0.3	2.2	TRACE
ISOPENTANE	0.2	2.2	TRACE
CYCLOPENTANE	TRACE	0.5	TRACE
HEXANES PLUS	0.1	2.0	TRACE
NITROGEN	21.2	15.5	16.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.55	0.40	0.02
HEATING VALUE*	950	1477	1077
SPECIFIC GRAVITY	0.740	1.010	0.705

	INDEX 268 SAMPLE 15430	INDEX 269 SAMPLE 15431	INDEX 270 SAMPLE 15657
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD GAS AREA	GREENWOOD GAS AREA	KEYES & GREENWOOD
PLANT NAME	MORTON CO. COMPRESSOR STA.	ALAMO HELIUM	ELKHART COMPRESSOR STA.
LOCATION	24 IN. INLET	12 IN. INLET	24 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	PHILLIPS PETROLEUM CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	10/18/78	10/18/78	06/19/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	238	238	375
FLOW,MCFD	33800	43800	40000
COMPONENT, MOLE PCT			
METHANE	70.4	63.6	43.1
ETHANE	7.6	6.7	7.0
PROPANE	4.1	4.5	17.3
N-BUTANE	0.3	1.4	9.5
ISOBUTANE	0.1	0.6	3.9
N-PENTANE	TRACE	0.4	2.9
ISOPENTANE	TRACE	0.4	3.2
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	TRACE	0.3	1.5
NITROGEN	17.2	21.2	10.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.01	0.57	0.40
HEATING VALUE*	969	1052	1816
SPECIFIC GRAVITY	0.710	0.773	1.171

	INDEX 271 SAMPLE 13246	INDEX 272 SAMPLE 7373	INDEX 273 SAMPLE 13440
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KEYES + GREENWOOD	MOCANE	MOCANE-LAVERNE
PLANT NAME	ELKHART COMPRESSOR STATION	MORTON CO. COMPRESSOR STA.	MORTON CO. COMPRESSOR STA.
LOCATION	DISCHARGE LINE	20 IN. MOCANE OUTLET	24 IN. INLET
OWNER	PANHANDLE EASTERN PL. CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	06/06/72	02/02/60	10/03/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	457	NOT GIVEN	658
FLOW,MCFD	NOT GIVEN	53000	60000
COMPONENT, MOLE PCT			
METHANE	65.6	88.9	89.1
ETHANE	6.2	0.3	6.3
PROPANE	3.8	1.8	0.8
N-BUTANE	1.1	0.2	0.0
ISOBUTANE	0.6	0.1	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.8	TRACE	0.0
NITROGEN	20.8	9.2	3.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.74	0.14	0.17
HEATING VALUE*	976	1071	1036
SPECIFIC GRAVITY	0.756	0.616	0.608

	INDEX 274 SAMPLE 15429	INDEX 275 SAMPLE 7001	INDEX 276 SAMPLE 7371
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	MOCANE-LAVERNE	SPARKS	SPARKS
PLANT NAME	MORTON CO. COMPRESSOR STA.	PIPELINE SAMPLE	MORTON CO. COMPRESSOR STA.
LOCATION	20 IN. INLET	SPARKS FIELD	12 IN. LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/18/78	03/99/59	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	674	NOT GIVEN	NOT GIVEN
FLOW,MCFD	19300	NOT GIVEN	22000
COMPONENT, MOLE PCT			
METHANE	90.0	82.6	81.9
ETHANE	3.0	3.9	4.0
PROPANE	0.4	2.4	1.2
N-BUTANE	0.1	0.7	0.6
ISOBUTANE	0.0	0.4	0.6
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.7	6.2	7.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.3	2.4	2.8
HELIUM	0.20	0.80	0.66
HEATING VALUE*	1022	1029	1001
SPECIFIC GRAVITY	0.604	0.670	0.671

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 277 SAMPLE 7379	INDEX 278 SAMPLE 7372	INDEX 279 SAMPLE 4502
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	PAWNEE
FIELD	SPARKS	SPARKS, GREENWOOD,& MOCANE	ASH CREEK
PLANT NAME	MORTON CO. COMPRESSOR STA.	MORTON CO. COMPRESSOR STA	A. R. JONES PLANT
LOCATION	12 IN. LINE	12 & 24 IN. LINES	INLET FROM ASH CREEK FIELD
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	A. R. JONES OIL & OPER. CO.
SAMPLED	02/04/60	02/02/60	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	390
FLOW,MCFD	25000	180000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.1	65.5	82.8
ETHANE	4.0	6.5	10.5
PROPANE	1.5	3.8	---
N-BUTANE	0.6	1.2	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	7.1	21.3	5.2
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	2.7	0.1	0.6
HELIUM	0.80	0.59	0.79
HEATING VALUE*	999	952	1107
SPECIFIC GRAVITY	0.665	0.743	0.631

	INDEX 280 SAMPLE 4507	INDEX 281 SAMPLE 4503	INDEX 282 SAMPLE 4070
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	NOT GIVEN	PAWNEE	PAWNEE ROCK
PLANT NAME	BRACK-SMITH SEPERATOR	A. R. JONES PLANT	PIPELINE SAMPLE
LOCATION	SEC. 1, T21S, R16W	INLET FROM PAWNEE FIELD	SEC. 13, T20S, R16W
OWNER	BEN F. BRACK OIL CO.	A. R. JONES OIL & OPER. CO.	STANOLIND OIL & GAS CO.
SAMPLED	06/--/48	06/--/48	09/21/45
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	300	30
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.5	80.4	48.7
ETHANE	13.4	12.4	47.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.7	5.9	2.1
OXYGEN	0.2	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.4	1.2
HELIUM	0.74	0.93	0.32
HEATING VALUE*	1056	1037	1348
SPECIFIC GRAVITY	0.643	0.641	0.810

	INDEX 283 SAMPLE 4501	INDEX 284 SAMPLE 4504	INDEX 285 SAMPLE 9268
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	RYAN	RYAN	SHADY
PLANT NAME	A. R. JONES PLANT	A. R. JONES PLANT	PIPELINE SAMPLE
LOCATION	INLET FROM RYAN FIELD	INLET FROM RYAN FIELD	T22 & 23S, R16W
OWNER	A. R. JONES OIL & OPER. CO.	A. R. JONES OIL & OPER. CO.	KANSAS POWER & LIGHT CO.
SAMPLED	06/--/48	06/--/48	03/--/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	385	40	430
FLOW,MCFD	NOT GIVEN	NOT GIVEN	1750
COMPONENT, MOLE PCT			
METHANE	73.8	69.2	84.5
ETHANE	12.4	17.4	3.8
PROPANE	---	---	1.6
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	11.3	11.0	7.7
OXYGEN	0.2	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.5	0.7	0.3
HELIUM	1.82	1.60	0.91
HEATING VALUE*	970	1013	1011
SPECIFIC GRAVITY	0.661	0.687	0.641

	INDEX 286 SAMPLE 2898	INDEX 287 SAMPLE 15507	INDEX 288 SAMPLE 15508
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	RICE	RICE
FIELD	CUNNINGHAM	ANADARKO BASIN	BEAVER
PLANT NAME	PIPE LINE SAMPLE	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STA.
LOCATION	SKELLY OIL CO. PLANT	26 IN. "C" FROM ANADARKO	30 IN. "D" FROM BEAVER
OWNER	SKELLY OIL CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	10/04/41	11/16/78	11/16/78
FORMATION	ORDO-VIOLA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	580	650
FLOW,MCFD	NOT GIVEN	400000	950000
COMPONENT, MOLE PCT			
METHANE	65.0	84.2	90.1
ETHANE	20.6	5.8	3.7
PROPANE	---	2.6	0.9
N-BUTANE	---	0.7	0.2
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	12.1	5.0	4.0
OXYGEN	0.5	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.5
HELIUM	1.10	0.20	0.16
HEATING VALUE*	1028	1089	1031
SPECIFIC GRAVITY	0.711	0.660	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 289 SAMPLE 15506	INDEX 290 SAMPLE 6281	INDEX 291 SAMPLE 6282
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	BURDETT	HUGOTON	HUGOTON
PLANT NAME	BUSHTON COMPRESSOR STA.	PIPELINE SAMPLE	MULLINVILLE COMPRESSOR STA.
LOCATION	20 IN. "B" FROM BURDETT	HOLCOMB GAS SAMPLE	MULLINVILLE-MACKSVILLE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	04/08/57	04/08/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	550	NOT GIVEN	NOT GIVEN
FLOW,MCFD	220000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.4	72.9	79.2
ETHANE	6.2	6.0	6.0
PROPANE	3.5	5.2	2.6
N-BUTANE	1.8	0.9	0.4
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	16.3	15.7	10.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.44	0.44	0.38
HEATING VALUE*	1004	991	1012
SPECIFIC GRAVITY	0.721	0.708	0.664

	INDEX 292 SAMPLE 6283	INDEX 293 SAMPLE 6807	INDEX 294 SAMPLE 13328
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	MULLINVILLE COMPRESSOR STA.	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STATION
LOCATION	NOT GIVEN	HOLCOMB LINE	26 IN. A INLET
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	04/08/57	--/--/58	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	340
FLOW,MCFD	NOT GIVEN	NOT GIVEN	290000
COMPONENT, MOLE PCT			
METHANE	79.2	78.7	76.3
ETHANE	6.9	5.9	6.2
PROPANE	2.6	2.9	3.3
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	10.2	10.8	12.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.36	0.35	0.37
HEATING VALUE*	1012	1018	1016
SPECIFIC GRAVITY	0.665	0.674	0.690

	INDEX 295 SAMPLE 15504	INDEX 296 SAMPLE 13326	INDEX 297 SAMPLE 2843
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	HUGOTON	HUGOTON ET AL.	LYONS
PLANT NAME	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STATION	PIPE LINE SAMPLE
LOCATION	26 IN. "A" FROM SUBLETTE	20 IN. B INLET	T19 & 20 S, R8W
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	11/16/78	07/26/72	09/06/40
FORMATION	NOT GIVEN	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	350	555	NOT GIVEN
FLOW,MCFD	170000	198000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.4	72.1	31.3
ETHANE	6.1	6.4	34.4
PROPANE	3.3	3.7	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	12.6	15.8	33.7
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.40	0.41	1.73
HEATING VALUE*	1034	999	934
SPECIFIC GRAVITY	0.701	0.713	0.871

	INDEX 298 SAMPLE 15505	INDEX 299 SAMPLE 13320	INDEX 300 SAMPLE 13321
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	MACKSVILLE	MACKSVILLE AREA ET AL	NOT GIVEN
PLANT NAME	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STATION	BUSHTON COMPRESSOR STATION
LOCATION	24 IN. "B" FROM MACKSVILLE	24 IN. B INLET	30 IN. E DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	07/26/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	350	560	990
FLOW,MCFD	115000	360000	835000
COMPONENT, MOLE PCT			
METHANE	78.7	86.7	90.0
ETHANE	6.9	5.7	4.2
PROPANE	3.2	1.4	1.0
N-BUTANE	0.9	0.2	0.1
ISOBUTANE	0.4	0.1	0.1
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	12.6	5.1	3.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	1.0
HELIUM	1.39	0.06	0.04
HEATING VALUE*	1032	1027	1029
SPECIFIC GRAVITY	0.702	0.629	0.611

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 301 SAMPLE 13323	INDEX 302 SAMPLE 13324	INDEX 303 SAMPLE 13325
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	BUSHTON COMPRESSOR STATION	BUSHTON COMPRESSOR STATION	BUSHTON COMPRESSOR STATION
LOCATION	HELIUM PLANT DISCHARGE	26 IN. A DISCHARGE	30 IN. D INLET
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	07/26/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	520	520	600
FLOW,MCFD	420000	235000	160000
COMPONENT, MOLE PCT			
METHANE	84.4	87.0	89.4
ETHANE	2.4	6.0	4.3
PROPANE	0.1	0.4	1.0
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	13.1	5.8	3.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	1.3
HELIUM	0.01	0.19	0.04
HEATING VALUE*	901	1003	1015
SPECIFIC GRAVITY	0.623	0.615	0.616

	INDEX 304 SAMPLE 13327	INDEX 305 SAMPLE 13329	INDEX 306 SAMPLE 13330
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	BUSHTON COMPRESSOR STATION	BUSHTON COMPRESSOR STATION	BUSHTON COMPRESSOR STATION
LOCATION	26 IN. C DISCHARGE	30 IN. D DISCHARGE	24 IN. B DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	07/26/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	800	860	797
FLOW,MCFD	425000	615000	350000
COMPONENT, MOLE PCT			
METHANE	85.8	85.7	86.4
ETHANE	4.6	3.4	5.2
PROPANE	0.6	0.4	1.0
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	8.6	9.9	6.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.6
HELIUM	0.09	0.04	0.07
HEATING VALUE*	970	939	1001
SPECIFIC GRAVITY	0.620	0.619	0.625

	INDEX 307 SAMPLE 15509	INDEX 308 SAMPLE 15510	INDEX 309 SAMPLE 15511
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STA.
LOCATION	A-26 IN. DISCHARGE	B-24 IN. DISCHARGE	C-26 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	11/16/78	11/16/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	520	650	800
FLOW,MCFD	150000	195000	285000
COMPONENT, MOLE PCT			
METHANE	87.5	86.3	86.7
ETHANE	5.2	4.8	4.5
PROPANE	0.4	0.7	0.7
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.1	7.1	7.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.19	0.16	0.15
HEATING VALUE*	999	994	993
SPECIFIC GRAVITY	0.615	0.623	0.623

	INDEX 310 SAMPLE 15512	INDEX 311 SAMPLE 15513	INDEX 312 SAMPLE 13322
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	OKLAHOMA-TEXAS AREA
PLANT NAME	BUSHTON COMPRESSOR STA	BUSHTON COMPRESSOR STA.	BUSHTON COMPRESSOR STATION
LOCATION	D-30 IN. DISCHARGE	E-30 IN. DISCHARGE	26 IN. C INLET
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	11/16/78	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	860	940	560
FLOW,MCFD	520000	650000	610000
COMPONENT, MOLE PCT			
METHANE	87.5	89.3	84.9
ETHANE	3.5	3.4	6.0
PROPANE	0.6	0.8	2.6
N-BUTANE	0.2	0.2	0.5
ISOBUTANE	0.1	TRACE	0.3
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	7.4	5.5	4.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.3
HELIUM	0.12	0.13	0.20
HEATING VALUE*	980	997	1080
SPECIFIC GRAVITY	0.617	0.611	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 313 SAMPLE 4812	INDEX 314 SAMPLE 4813	INDEX 315 SAMPLE 4811
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BRACK THALHEIM LEASE	BRACK-RANKIN ESTATE	CAMPBELL-KUHN-CHRISTIANSON
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	SEC. 27, T19S, R16W	SEC. 27, T19S, R16W	SEC. 28, T19S, R16W
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	01/09/50	01/09/50	01/99/50
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.0	69.6	53.0
ETHANE	3.8	5.2	3.6
PROPANE	2.0	2.9	1.7
N-BUTANE	0.7	1.2	0.6
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.4	0.7	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	30.5	16.9	36.5
OXYGEN	0.3	0.1	0.2
ARGON	0.2	0.1	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.6	0.3
HELIUM	3.07	1.88	3.29
HEATING VALUE*	729	974	692
SPECIFIC GRAVITY	0.757	0.726	0.754

	INDEX 316 SAMPLE 15487	INDEX 317 SAMPLE 13331	INDEX 318 SAMPLE 5914
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	CENTRAL KANSAS	CENTRAL KANSAS AREA	FLYNN
PLANT NAME	PAWNEE ROCK COMPRESSOR STA.	PAWNEE ROCK COMPRESSOR STA.	PIPELINE SAMPLE
LOCATION	8 IN. DISCHARGE	8 IN. DISCHARGE	NOT GIVEN
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS. CO	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	11/15/78	07/25/72	08/16/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	335	315	NOT GIVEN
FLOW,MCFD	18000	16500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.0	74.7	80.8
ETHANE	5.7	3.9	5.8
PROPANE	1.5	1.9	2.6
N-BUTANE	0.5	0.6	0.1
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	13.0	16.4	8.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.4
HELIUM	1.15	1.37	1.03
HEATING VALUE*	965	936	1009
SPECIFIC GRAVITY	0.663	0.684	0.654

	INDEX 319 SAMPLE 6345	INDEX 320 SAMPLE 6347	INDEX 321 SAMPLE 14642
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	HUGOTON, MCKINNEY & OTHERS	HUGOTON, MCKINNEY & OTHERS	INLET GAS
PLANT NAME	OTIS	RUSSELL LINE	OTIS PLANT
LOCATION	6 IN. LINE	8 IN. LINE	OTIS KANSAS
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS REFINED HELIUM CO.
SAMPLED	06/19/57	06/19/57	04/23/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	80.2	75.0
ETHANE	4.6	4.5	4.1
PROPANE	1.8	1.7	1.4
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.3	11.2	15.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	1.00	1.00	2.60
HEATING VALUE*	979	974	915
SPECIFIC GRAVITY	0.656	0.652	0.665

	INDEX 322 SAMPLE 4809	INDEX 323 SAMPLE 6588	INDEX 324 SAMPLE 6589
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	PIPELINE SAMPLE	TIMKEN BORDER STA.	OTIS TOWN BORDER STA.
LOCATION	SEC. 34, T19S, R16W	SEC. 22, T18S, R17W	SEC. 26, T17S, R16W
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	01/10/50	05/--/50	05/--/50
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.9	79.6	79.2
ETHANE	4.5	5.4	5.9
PROPANE	2.3	2.0	1.5
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.2	11.1	11.5
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	2.42	0.34	0.89
HEATING VALUE*	837	998	986
SPECIFIC GRAVITY	0.734	0.660	0.665

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 325 SAMPLE 6590	INDEX 326 SAMPLE 6803	INDEX 327 SAMPLE 7540
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	BISON-LACROSS REGULATOR STA.	BUSHTON COMPRESSOR STA.	KAN POWER & LIGHTS MTR HOUSE
LOCATION	SEC. 27, T17S, R17W	HOLCOMB LINE	OTIS, KANSAS
OWNER	KANSAS POWER & LIGHT CO.	NORTHERN NATURAL GAS CO.	KANSAS POWER & LIGHT CO.
SAMPLED	05/--/58	--/--/58	05/09/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	74.0	79.8
ETHANE	5.1	5.8	5.7
PROPANE	2.1	2.9	2.0
N-BUTANE	0.4	0.8	0.6
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.8	15.2	9.8
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.86	0.50	0.90
HEATING VALUE*	989	988	1023
SPECIFIC GRAVITY	0.667	0.701	0.670

	INDEX 328 SAMPLE 8075	INDEX 329 SAMPLE 8076	INDEX 330 SAMPLE 8077
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	OTIS KANSAS TREATING PLANT	OTIS HELIUM PLANT	OTIS TREATING PLANT
LOCATION	4 IN.	INLET	8 IN. LINE TO KNNG
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/19/61	07/19/61	07/19/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	240	238	240
FLOW,MCFD	1500	7000	6000
COMPONENT, MOLE PCT			
METHANE	68.8	73.6	74.1
ETHANE	3.4	5.4	5.8
PROPANE	1.2	2.6	2.8
N-BUTANE	0.4	0.8	0.8
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	22.8	15.5	13.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	2.20	0.90	0.90
HEATING VALUE*	838	980	1001
SPECIFIC GRAVITY	0.692	0.702	0.700

	INDEX 331 SAMPLE 8078	INDEX 332 SAMPLE 8079	INDEX 333 SAMPLE 8080
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	OTIS TREATING PLANT	DUNN-MAR PLANT	PIPELINE SAMPLE
LOCATION	8 IN. LINE TO KNNG	6 IN. LINE TO KNNG	NOT GIVEN
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/19/61	07/19/61	07/19/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	393	245	610
FLOW,MCFD	7000	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	74.5	74.1	69.2
ETHANE	5.4	7.4	6.3
PROPANE	2.6	3.8	3.5
N-BUTANE	0.8	1.8	0.9
ISOBUTANE	0.5	1.3	0.5
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	15.4	8.5	18.6
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	TRACE
HELIUM	0.20	0.90	0.40
HEATING VALUE*	986	1153	970
SPECIFIC GRAVITY	0.701	0.747	0.724

	INDEX 334 SAMPLE 8082	INDEX 335 SAMPLE 8093	INDEX 336 SAMPLE 8110
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	4 IN. LINE TO KNNG PLANT	TIE IN FROM NORTHERN NAT.	NOT GIVEN
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/19/61	07/20/61	08/04/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	270	NOT GIVEN	NOT GIVEN
FLOW,MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	69.8	69.4
ETHANE	4.1	6.0	6.2
PROPANE	1.6	3.3	3.4
N-BUTANE	0.5	0.8	0.8
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	6.1	18.8	19.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	TRACE
HELIUM	0.80	0.50	0.40
HEATING VALUE*	1034	958	960
SPECIFIC GRAVITY	0.642	0.721	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 337 SAMPLE 9265	INDEX 338 SAMPLE 14643	INDEX 339 SAMPLE 5245
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	PAWNEE & ASH CREEK
PLANT NAME	PIPELINE SAMPLE	OTIS PLANT	A. R. JONES PLANT
LOCATION	NOT GIVEN	PLANT OUTLET	DISCHARGE
OWNER	KANSAS POWER & LIGHT CO.	KANSAS REFINED HELIUM CO.	A. R. JONES OIL & OPER. CO.
SAMPLED	03/--/69	04/23/76	06/18/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	350	NOT GIVEN	NOT GIVEN
FLOW,MCFD	168	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.9	83.5	73.1
ETHANE	5.0	4.6	4.1
PROPANE	1.9	1.7	2.1
N-BUTANE	0.5	0.4	0.8
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	TRACE	0.0	0.3
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	9.2	9.5	16.2
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.0	0.6
HELIUM	0.562	0.05	1.74
HEATING VALUE*	1066	993	940
SPECIFIC GRAVITY	0.653	0.643	0.695

	INDEX 340 SAMPLE 8081	INDEX 341 SAMPLE 5915	INDEX 342 SAMPLE 5944
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	PAWNEE ROCK	REICHEL	REICHEL
PLANT NAME	STA. AT PAWNEE ROCK	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	6 IN. LINE TO KNNG PLANT	FIELD LINE	REICHEL WELLS
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	U. S. BUREAU OF MINES
SAMPLED	09/19/61	08/16/55	09/22/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	252	NOT GIVEN	NOT GIVEN
FLOW,MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	72.4	72.4
ETHANE	5.3	3.4	3.3
PROPANE	2.5	1.4	1.4
N-BUTANE	1.0	0.5	0.5
ISOBUTANE	0.8	0.4	0.3
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	9.1	19.2	20.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.2
HELIUM	1.20	1.88	0.162
HEATING VALUE*	1065	888	883
SPECIFIC GRAVITY	0.695	0.685	0.696

	INDEX 343 SAMPLE 8381	INDEX 344 SAMPLE 8517	INDEX 345 SAMPLE 8083
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	SWEENEY
PLANT NAME	OTIS PLANT	REICHEL COMPRESSOR STA.	SWEENEY COMPRESSOR STA
LOCATION	6 & 8 IN. OUTLET	8 IN. DISCH. TO OTIS PLANT	4 IN. INLET
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	01/24/62	04/19/62	07/19/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	280	280	112
FLOW,MCFD	2000	3000	2000
COMPONENT, MOLE PCT			
METHANE	71.5	70.0	84.4
ETHANE	5.0	5.1	4.7
PROPANE	1.2	1.4	1.9
N-BUTANE	0.4	0.4	0.7
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	20.9	22.3	5.8
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	TRACE
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	2.02	2.09	0.70
HEATING VALUE*	851	857	1056
SPECIFIC GRAVITY	0.680	0.686	0.654

	INDEX 346 SAMPLE 13332	INDEX 347 SAMPLE 15496	INDEX 348 SAMPLE 7377
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	BRADSHAW	BRADSHAW	HUGOTON
PLANT NAME	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.	STA. IN SEC. 16, T16S, R33W
LOCATION	10 IN. SYRACUSE INLET	SYRACUSE 10 IN. INLET	8-12 IN. OUTLET LINES
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/25/72	11/1/78	02/05/60
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	385	365	800
FLOW,MCFD	16000	12000	136016
COMPONENT, MOLE PCT			
METHANE	59.9	57.0	70.3
ETHANE	3.4	3.9	6.1
PROPANE	3.5	3.7	3.1
N-BUTANE	1.0	1.2	0.9
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	32.1	30.6	18.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.72	0.69	0.80
HEATING VALUE*	427	873	961
SPECIFIC GRAVITY	0.780	0.791	0.718

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 349 SAMPLE 7378	INDEX 350 SAMPLE 13333	INDEX 351 SAMPLE 13334
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	STA. IN SEC. 16; T18S, R33W	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.
LOCATION	12 & 16 IN. INLET	12 IN. DEERFIELD INLET	12 IN. LAKIN INLET
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	02/05/60	07/25/72	07/25/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	330	385	385
FLOW,MCFD	136016	30000	85975
COMPONENT, MOLE PCT			
METHANE	69.7	73.2	71.8
ETHANE	6.2	6.4	6.5
PROPANE	3.3	3.5	3.6
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	18.3	14.8	15.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.40	0.40	0.43
HEATING VALUE*	966	1000	1002
SPECIFIC GRAVITY	0.720	0.704	0.714

	INDEX 352 SAMPLE 13337	INDEX 353 SAMPLE 15492	INDEX 354 SAMPLE 15497
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.
LOCATION	12 IN. HOLCOMB INLET	DEERFIELD 12 IN. INLET	HOLCOMB 12 IN. INLET
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/25/72	11/15/78	11/15/78
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	385	365	365
FLOW,MCFD	51000	18350	67300
COMPONENT, MOLE PCT			
METHANE	69.5	72.4	68.5
ETHANE	6.3	6.3	5.8
PROPANE	3.6	3.6	3.5
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	18.3	15.4	19.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.44	0.42	0.48
HEATING VALUE*	979	1006	971
SPECIFIC GRAVITY	0.727	0.713	0.734

	INDEX 355 SAMPLE 15498	INDEX 356 SAMPLE 13336	INDEX 357 SAMPLE 15490
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON & BRADSHAW	HUGOTON & BRADSHAW
PLANT NAME	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.	SCOTT CITY COMPRESSOR STA.
LOCATION	LAKIN 12 IN. INLET	HELIUM PLANT INLET	20 IN. DISCHARGE
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	11/15/78	07/25/72	11/15/78
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	365	385	320
FLOW,MCFD	121300	NOT GIVEN	215500
COMPONENT, MOLE PCT			
METHANE	72.1	66.8	77.0
ETHANE	6.5	6.1	6.5
PROPANE	3.8	3.6	1.5
N-BUTANE	1.1	1.0	0.1
ISOBUTANE	0.4	0.5	0.0
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	TRACE
NITROGEN	15.1	20.6	14.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.41	0.49	0.30
HEATING VALUE*	1027	962	939
SPECIFIC GRAVITY	0.723	0.740	0.659

	INDEX 358 SAMPLE 15493	INDEX 359 SAMPLE 13335	INDEX 360 SAMPLE 15655
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SEWARD
FIELD	HUGOTON & BRADSHAW	HUGOTON + BRADSHAW	ANADARKO AREA
PLANT NAME	SCOTT CITY HELIUM PLANT	SCOTT CITY COMPRESSOR STA.	LIBERAL COMPRESSOR STA.
LOCATION	12 IN. HELIUM PLANT INLET	20 IN. DISCHARGE	20 IN. HUBER LINE
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	11/15/78	07/25/72	06/18/79
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	365	NOT GIVEN	400
FLOW,MCFD	200300	186000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.0	75.0	85.4
ETHANE	5.8	6.7	3.6
PROPANE	3.6	2.1	1.8
N-BUTANE	1.0	0.2	0.5
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	20.6	15.4	6.5
OXYGEN	0.0	0.0	1.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.2
HELIUM	0.50	0.26	0.11
HEATING VALUE*	963	944	1026
SPECIFIC GRAVITY	0.741	0.674	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 361 SAMPLE 13235	INDEX 362 SAMPLE 5528	INDEX 363 SAMPLE 5539
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	FIELDS S OF LIBERAL INLET	HUGOTON	HUGOTON
PLANT NAME	LIBERAL COMPRESSOR STATION	SUBLETTE COMPRESSOR STA.	SUBLETTE COMPRESSOR STA.
LOCATION	TEXAS 100 & 200 LINES	20 & 24 IN. DISCHARGE	20 & 24 IN. LINE
OWNER	PANHANDLE EASTERN PL. CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	06/05/72	08/13/53	08/13/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	518	NOT GIVEN	NOT GIVEN
FLOW,MCFD	193800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.6	73.0	74.5
ETHANE	7.3	6.9	6.2
PROPANE	2.6	3.3	3.4
N-BUTANE	0.2	0.6	0.6
ISOBUTANE	0.1	0.5	0.3
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	5.8	15.1	14.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.22	0.47	0.52
HEATING VALUE*	1050	972	990
SPECIFIC GRAVITY	0.643	0.701	0.692

	INDEX 364 SAMPLE 5540	INDEX 365 SAMPLE 5545	INDEX 366 SAMPLE 13231
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	LIBERAL COMPRESSOR STA.	HUGOTON & SATANTA STA.	LIBERAL COMPRESSOR STATION
LOCATION	20 IN. DISCHARGE	22 IN. DISCHARGE	GRANT CO. INLET
OWNER	NORTHERN NATURAL GAS CO.	PANHANDLE EASTERN PL CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	08/13/53	08/13/53	06/05/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	509
FLOW,MCFD	NOT GIVEN	NOT GIVEN	761000
COMPONENT, MOLE PCT			
METHANE	76.9	73.0	71.6
ETHANE	6.0	7.0	6.3
PROPANE	2.2	3.7	4.0
N-BUTANE	0.2	1.0	1.2
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	0.0	0.2	0.4
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	13.9	13.7	14.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.45	0.39	0.21
HEATING VALUE*	957	1033	1057
SPECIFIC GRAVITY	0.668	0.716	0.739

	INDEX 367 SAMPLE 13232	INDEX 368 SAMPLE 13313	INDEX 369 SAMPLE 13338
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	LIBERAL COMPRESSOR STATION	SUBLETTE COMPRESSOR STATION	SUBLETTE COMPRESSOR STATION
LOCATION	SEWARD CO. LINE	20 IN. A DISCHARGE	24 IN. B DISCHARGE
OWNER	PANHANDLE EASTERN PL. CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	06/05/72	07/25/72	07/25/72
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	190	500	780
FLOW,MCFD	16200	80000	210000
COMPONENT, MOLE PCT			
METHANE	82.1	73.3	74.2
ETHANE	8.6	5.9	6.8
PROPANE	2.2	3.5	3.9
N-BUTANE	0.2	0.8	0.9
ISOBUTANE	0.2	0.5	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	6.0	15.4	12.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.30	0.46	0.57
HEATING VALUE*	1056	987	1040
SPECIFIC GRAVITY	0.651	0.702	0.710

	INDEX 370 SAMPLE 15486	INDEX 371 SAMPLE 15489	INDEX 372 SAMPLE 15654
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
PLANT NAME	SUBLETTE COMPRESSOR STA.	SUBLETTE COMPRESSOR STA.	LIBERAL COMPRESSOR STA.
LOCATION	A-20 IN.	B-24 IN. DISCHARGE	16 IN. SEWARD CO. LINE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	11/14/78	11/14/78	06/18/79
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	500	800	190
FLOW,MCFD	70000	140000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	73.7	75.5
ETHANE	9.4	6.6	5.3
PROPANE	3.0	4.2	2.6
N-BUTANE	0.9	1.2	0.8
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	13.4	12.2	14.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.47	0.36	0.45
HEATING VALUE*	996	1080	992
SPECIFIC GRAVITY	0.707	0.725	0.691

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 373 SAMPLE 15656	INDEX 374 SAMPLE 13237	INDEX 375 SAMPLE 13238
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON + PANHANDLE	HUGOTON + PANHANDLE
PLANT NAME	LIBERAL COMPRESSOR STA.	LIBERAL COMPRESSOR STATION	LIBERAL COMPRESSOR STATION
LOCATION	26 IN. GRANT CO. INLET	100,300&400 DISCHARGE LINES	200 DISCHARGE LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/18/79	06/05/72	06/05/72
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	490	800	800
FLOW,MCFD	NOT GIVEN	441000	305000
COMPONENT, MOLE PCT			
METHANE	76.0	84.1	70.7
ETHANE	6.4	6.5	8.6
PROPANE	2.8	1.2	5.7
N-BUTANE	0.7	0.0	0.6
ISOBUTANE	0.3	0.0	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	12.8	8.0	13.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.38	TRACE	0.02
HEATING VALUE*	1009	955	1061
SPECIFIC GRAVITY	0.689	0.634	0.730

	INDEX 376 SAMPLE 15652	INDEX 377 SAMPLE 13236	INDEX 378 SAMPLE 13617
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON, GREENWOOD & KEYES	HUGOTON, GREENWOOD + KEYES	HUGOTON-GRANT CO.
PLANT NAME	LIBERAL COMPRESSOR STA.	LIBERAL COMPRESSOR STATION	LIBERAL COMPRESSOR STA.
LOCATION	26 IN. HUGOTON INLET	HUGOTON INLET	16 IN. INLET
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/18/79	06/05/72	06/04/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	490	509	525
FLOW,MCFD	NOT GIVEN	243900	86000
COMPONENT, MOLE PCT			
METHANE	75.6	73.3	73.3
ETHANE	6.8	6.8	6.1
PROPANE	3.1	3.7	3.6
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.3	13.8	14.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.37	0.44	0.42
HEATING VALUE*	1024	1029	1015
SPECIFIC GRAVITY	0.696	0.711	0.710

	INDEX 379 SAMPLE 13616	INDEX 380 SAMPLE 11049	INDEX 381 SAMPLE 7093
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON-SEWARD CO.	KISMET	NOT GIVEN
PLANT NAME	LIBERAL COMPRESSOR STA.	NOT GIVEN	LIBERAL COMPRESSOR STA.
LOCATION	18 IN. INLET	NOT GIVEN	NOT GIVEN
OWNER	PANHANDLE EASTERN PL. CO.	A. L. ABERCROMBIE, INC.	PANHANDLE EASTERN PL CO.
SAMPLED	06/04/73	08/04/67	06/17/59
FORMATION	NOT GIVEN	-COMMINGLED	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	160	NOT GIVEN	470
FLOW,MCFD	23000	NOT GIVEN	425
COMPONENT, MOLE PCT			
METHANE	77.2	76.1	78.8
ETHANE	5.3	5.9	6.8
PROPANE	2.9	4.1	3.2
N-BUTANE	0.6	1.5	0.5
ISOBUTANE	0.4	0.9	0.3
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.6	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	12.6	9.8	9.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.42	0.25	0.40
HEATING VALUE*	1004	1121	1040
SPECIFIC GRAVITY	0.682	0.728	0.676

	INDEX 382 SAMPLE 7095	INDEX 383 SAMPLE 12134	INDEX 384 SAMPLE 13233
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	12 MI. NE OF LIBERAL	HELIUM PLANT	LIBERAL COMPRESSOR STATION
LOCATION	18 & 26 IN. INLET	PLANT INLET	HUBER LINE INLET
OWNER	PANHANDLE EASTERN PL CO.	NATIONAL HELIUM CORP.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/17/59	11/26/69	06/05/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	500	NOT GIVEN	320
FLOW,MCFD	375	NOT GIVEN	35500
COMPONENT, MOLE PCT			
METHANE	72.5	78.2	88.4
ETHANE	6.7	6.6	5.9
PROPANE	3.7	3.2	2.4
N-BUTANE	1.0	0.6	0.4
ISOBUTANE	0.8	0.2	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	14.1	10.4	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.40	0.35	0.13
HEATING VALUE*	1038	1034	1105
SPECIFIC GRAVITY	0.723	0.680	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 385 SAMPLE 13234	INDEX 386 SAMPLE 13745	INDEX 387 SAMPLE 15653
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	NOT GIVEN	NOT GIVEN	PANHANDLE AREA
PLANT NAME	LIBERAL COMPRESSOR STATION	NATIONAL HELIUM PLANT	LIBERAL COMPRESSOR STA.
LOCATION	TEXAS 300 INLET LINE	LIBERAL PLANT INLET LINE	24 & 26 IN. TEXAS 300 INLET
OWNER	PANHANDLE EASTERN PL. CO.	NATIONAL HELIUM CORP.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/05/72	10/09/73	06/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	524	500	500
FLOW,MCFD	196100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	77.5	87.4
ETHANE	7.6	6.8	4.5
PROPANE	2.9	3.2	1.0
N-BUTANE	0.2	0.6	0.1
ISOBUTANE	0.2	0.4	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	8.6	10.8	6.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.37	0.37	0.22
HEATING VALUE*	1028	1037	1000
SPECIFIC GRAVITY	0.653	0.686	0.616

	INDEX 388 SAMPLE 9269	INDEX 389 SAMPLE 9270	INDEX 390 SAMPLE 8518
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	BELPRE	DILLWIN W	MACKSVILLE
PLANT NAME	STA. IN SECS. 586. T25N.R15W	STA. IN SECS.18&19.T24S.R14W	PIPELINE SAMPLE
LOCATION	NOT GIVEN	NOT GIVEN	FIELD OUTLET TO OTIS PLANT
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	03/--/64	03/--/64	04/19/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	450	420	300
FLOW,MCFD	1250	1250	4000
COMPONENT, MOLE PCT			
METHANE	76.6	87.2	81.0
ETHANE	4.5	3.8	3.9
PROPANE	2.3	1.5	1.6
N-BUTANE	0.9	0.5	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	13.9	5.9	10.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.35	0.71	1.26
HEATING VALUE*	991	1035	981
SPECIFIC GRAVITY	0.691	0.630	0.654

	INDEX 391 SAMPLE 9267	INDEX 392 SAMPLE 9266	INDEX 393 SAMPLE 9273
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	NOT GIVEN	RATTLESNAKE
PLANT NAME	STA. IN SEC. 3, T24S, R15W	PIPELINE SAMPLE	STA. IN T24S, R13&14W
LOCATION	NOT GIVEN	FARMINGTON & FOLEY GAS COMP.	NOT GIVEN
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	03/--/64	03/--/64	03/--/64
FORMATION	ORDO-VIOLA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
PRESSURE,PSIG	430	430	420
FLOW,MCFD	1500	2200	750
COMPONENT, MOLE PCT			
METHANE	87.7	83.1	76.3
ETHANE	3.9	4.0	5.5
PROPANE	1.6	1.6	2.8
N-BUTANE	0.6	0.6	1.1
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.4	8.5	12.0
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.72	0.67	1.20
HEATING VALUE*	1055	1016	1014
SPECIFIC GRAVITY	0.633	0.654	0.687

	INDEX 394 SAMPLE 5751	INDEX 395 SAMPLE 1109	INDEX 396 SAMPLE 10057
STATE	KANSAS	KANSAS	KENTUCKY
COUNTY	STEVENS	SUMNER	CLARK
FIELD	HUGOTON	AREA COMPOSITE	TRAPP GAS
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	KANSAS 12 IN. LINE	ARK. CITY COMPRESSOR STA.	TRAPP, KENTUCKY
OWNER	HUGOTON-PLAINS GAS & OIL CO.	EMPIRE GAS & FUEL CO.	MELCHER-ATKINS OIL CO., LTD.
SAMPLED	01/07/55	12/10/25	08/12/65
FORMATION	NOT GIVEN	NOT GIVEN	ORDO-ST. PETER
GEOLOGIC PROVINCE CODE	360	375	300
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	600
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	57.2	87.7
ETHANE	4.6	30.4	1.5
PROPANE	1.9	---	0.7
N-BUTANE	0.6	---	0.2
ISOBUTANE	0.3	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.2	---	0.0
NITROGEN	12.2	11.4	6.9
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	0.1
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.4	2.3
HELIUM	0.50	0.30	0.20
HEATING VALUE*	979	1124	940
SPECIFIC GRAVITY	0.663	0.756	0.626

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 397 SAMPLE 13008	INDEX 398 SAMPLE 11827	INDEX 399 SAMPLE 11818
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON E BLK. 265	CAMERON E BLK. 64	CAMERON W BLK. 110
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	MOBIL OIL CORP.	MOBIL OIL CORP.
SAMPLED	08/12/71	04/08/69	04/08/69
FORMATION	PLIO-8500 B SAND	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
PRESSURE,PSIG	NOT GIVEN	1050	1060
FLOW,MCFD	72000	55000	35000
COMPONENT, MOLE PCT			
METHANE	96.5	92.5	96.7
ETHANE	1.9	3.7	1.4
PROPANE	0.6	1.3	0.3
N-BUTANE	0.1	0.4	0.2
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.3	0.4	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1050	1089	1037
SPECIFIC GRAVITY	0.582	0.617	0.585

	INDEX 400 SAMPLE 11750	INDEX 401 SAMPLE 11736	INDEX 402 SAMPLE 11749
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON	LAFOURCHE	PLAQUEMINES
FIELD	GRAND ISLE BLOCK 16	BAY MARCHAND BLOCK 2	W. DELTA BLOCK 73
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	CHEVRON OIL CO.	HUMBLE OIL & REFINING CO.
SAMPLED	01/28/69	01/07/69	01/28/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
PRESSURE,PSIG	1050	NOT GIVEN	1075
FLOW,MCFD	24000	NOT GIVEN	46000
COMPONENT, MOLE PCT			
METHANE	91.8	92.0	93.2
ETHANE	3.6	3.2	3.3
PROPANE	1.6	1.4	1.3
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.9	1.3	0.6
OXYGEN	TRACE	0.3	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1098	1072	1083
SPECIFIC GRAVITY	0.624	0.614	0.609

	INDEX 403 SAMPLE 1659	INDEX 404 SAMPLE 1660	INDEX 405 SAMPLE 11823
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RICHLAND	RICHLAND	ST. MARY
FIELD	NOT GIVEN	NOT GIVEN	EUGENE ISLAND BLK. 126
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	NOT GIVEN
LOCATION	RICHLAND PARISH FIELD	RICHLAND PARISH FIELD	NOT GIVEN
OWNER	NAT. GAS & FUEL CORP. ARK.	NAT. GAS & FUEL CORP. ARK.	TRANSCO PIPELINE
SAMPLED	06/26/28	06/26/28	01/28/69
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	230	230	220
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	900
FLOW,MCFD	NOT GIVEN	NOT GIVEN	16134
COMPONENT, MOLE PCT			
METHANE	89.0	90.5	90.9
ETHANE	5.6	4.6	4.7
PROPANE	---	---	1.8
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	4.7	4.3	0.4
OXYGEN	0.4	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.10	0.10	TRACE
HEATING VALUE*	1002	999	1101
SPECIFIC GRAVITY	0.605	0.599	0.624

	INDEX 406 SAMPLE 11824	INDEX 407 SAMPLE 11745	INDEX 408 SAMPLE 14828
STATE	LOUISIANA	LOUISIANA	MARYLAND
PARISH	ST. MARY	TERREBONNE	GARRETT
FIELD	EUGENE ISLAND BLK. 128	TIMBALIER S. BLOCK 135	NEGRO MOUNTAIN
PLANT NAME	NOT GIVEN	NOT GIVEN	NO. 4863
LOCATION	NOT GIVEN	NOT GIVEN	6 IN. WELLHEAD
OWNER	TRANSCO PIPELINE	GULF OIL CO.	COLUMBIA GAS TRANSMISSION
SAMPLED	01/13/69	01/23/69	10/22/76
FORMATION	MIOC-	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	951	160
PRESSURE,PSIG	900	1300	2200
FLOW,MCFD	7000	210000	200
COMPONENT, MOLE PCT			
METHANE	89.8	88.0	98.0
ETHANE	6.1	4.4	1.3
PROPANE	2.3	2.4	TRACE
N-BUTANE	0.5	0.8	0.0
ISOBUTANE	0.5	0.7	0.0
N-PENTANE	0.2	0.4	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	0.0	2.0	0.5
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1134	1124	1016
SPECIFIC GRAVITY	0.636	0.655	0.565

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 409 SAMPLE 11481	INDEX 410 SAMPLE 7431	INDEX 411 SAMPLE 11480
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KENT	NEWAYGO	OSCEOLA
FIELD	WALKER	ENSLEY	MIDDLE BRANCH
PLANT NAME	NOT GIVEN	COMPOSITE FIELD SAMPLE	NOT GIVEN
LOCATION	NOT GIVEN	SEC. 7 & 17, T11N, R11W	NOT GIVEN
OWNER	SMITH PETROLEUM	HESS & RYDER	MICHIGAN CONSOLIDATED GAS CO
SAMPLED	05/07/68	03/05/60	05/06/68
FORMATION	DEVO-DUNDEE	MISS-	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
PRESSURE,PSIG	NOT GIVEN	314	NOT GIVEN
FLOW,MCFD	NOT GIVEN	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	65.4	80.0
ETHANE	2.5	8.2	8.9
PROPANE	2.8	2.2	3.0
N-BUTANE	0.7	0.3	0.9
ISOBUTANE	TRACE	0.2	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	9.1	23.5	6.6
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	1.70	0.35
HEATING VALUE*	1143	852	1078
SPECIFIC GRAVITY	0.662	0.707	0.670

	INDEX 412 SAMPLE 11478	INDEX 413 SAMPLE 11497	INDEX 414 SAMPLE 11484
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTSEGO	ST. CLAIR	WEXFORD
FIELD	OTSEGO	HESSEN	CHERRY GROVE
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	R. FRUEHAUF	CONSUMERS POWER CO.	NORTHERN GAS CO.
SAMPLED	05/08/68	05/07/68	05/07/68
FORMATION	DEVO-ANTRIM	SILU-NIAGARA	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.7	88.1	78.5
ETHANE	0.2	4.2	9.2
PROPANE	0.1	1.6	3.4
N-BUTANE	0.0	0.8	1.1
ISOBUTANE	0.0	0.9	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.2	3.5	6.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	5.7	TRACE	0.4
HELIUM	0.02	0.12	0.24
HEATING VALUE*	952	1046	1082
SPECIFIC GRAVITY	0.612	0.646	0.682

	INDEX 415 SAMPLE 14211	INDEX 416 SAMPLE 15855	INDEX 417 SAMPLE 11920
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	BOLIVAR	BOLIVAR	BOLIVAR
FIELD	GULF COAST AREA	GULF COAST AREA	NOT GIVEN
PLANT NAME	SHAW COMPRESSOR STA. NO.990	SHAW COMPRESSOR STA. NO.990	SHAW, MISS, COMPRESSOR STA.
LOCATION	26, 30, & 36 IN.	26,30&36 IN. LINES	26, 30 & 36 IN. LINES
OWNER	TRUNKLINE GAS CO.	TRUNKLINE GAS CO.	TRUNKLINE GAS CO.
SAMPLED	11/07/74	12/12/79	06/04/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	240	240
PRESSURE,PSIG	810	900	900
FLOW,MCFD	1049000	1500000	800000
COMPONENT, MOLE PCT			
METHANE	96.9	97.2	95.9
ETHANE	1.2	1.6	2.5
PROPANE	0.2	0.5	0.4
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.3	0.3	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1024	1030	1027
SPECIFIC GRAVITY	0.576	0.574	0.581

	INDEX 418 SAMPLE 14215	INDEX 419 SAMPLE 15859	INDEX 420 SAMPLE 14212
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CALHOUN	CALHOUN	COAHOMA
FIELD	GULF COAST AREA	LOUISIANA	GULF COAST AREA
PLANT NAME	BANNER COMPRESSOR STA. NO. 6	BANNER COMPRESSOR STA. NO. 6	CLARKSDALE COMPRESSOR NO. 5
LOCATION	2-30 IN. & 1-36 IN.	2-30&1-36 IN.	2-26 IN. & 1-30 IN.
OWNER	COLUMBIA GULF TRANS. CO.	COLUMBIA GULF TRANS. CO.	TEXAS GAS TRANSMISSION CORP.
SAMPLED	11/08/74	12/13/79	11/07/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	240
PRESSURE,PSIG	1000	710	804
FLOW,MCFD	1500000	1325000	1600000
COMPONENT, MOLE PCT			
METHANE	96.8	97.4	94.1
ETHANE	1.2	1.4	2.6
PROPANE	0.2	0.2	0.9
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.8	0.2	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	1.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1029	1020	1013
SPECIFIC GRAVITY	0.574	0.569	0.595

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 421 SAMPLE 15856	INDEX 422 SAMPLE 11919	INDEX 423 SAMPLE 14214
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	COAHOMA	DE SOTO	GRENADA
FIELD	GULF COAST AREA	NOT GIVEN	GULF COAST AREA
PLANT NAME	CLARKSDALE COMPRESSOR NO. 5	NEAR LAKE CORMORANT MISS.	NORTH GRENADA METER STA.
LOCATION	2-26,1-30&1-36 IN. LINES	2-26 IN. LINES	30 IN.
OWNER	TEXAS GAS TRANSMISSION CORP.	TEXAS GAS TRANSMISSION CO.	TENNESSEE GAS PIPELINE CO.
SAMPLED	12/12/79	06/04/69	11/07/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	250	200
PRESSURE,PSIG	650	800	565
FLOW,MCFD	1640000	1614000	560000
COMPONENT, MOLE PCT			
METHANE	96.2	95.1	97.0
ETHANE	2.0	2.8	1.8
PROPANE	0.2	0.3	0.1
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.5	0.7	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	0.8
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1024	1021	1017
SPECIFIC GRAVITY	0.581	0.583	0.573

	INDEX 424 SAMPLE 15858	INDEX 425 SAMPLE 14217	INDEX 426 SAMPLE 15861
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	GRENADA	LOWNDES	LOWNDES
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	COFFEEVILLE COMPRESSOR NO. 8	COMPRESSOR STA. NO. 546	COLUMBUS COMPRESSOR STATION
LOCATION	30 IN.	30 & 36 IN.	1-30&1-36 IN.
OWNER	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.
SAMPLED	12/13/79	11/08/74	12/14/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
PRESSURE,PSIG	610	875	680
FLOW,MCFD	528000	1693000	636000
COMPONENT, MOLE PCT			
METHANE	97.2	97.3	97.6
ETHANE	1.5	1.8	1.5
PROPANE	0.3	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1019	1020	1018
SPECIFIC GRAVITY	0.573	0.571	0.568

	INDEX 427 SAMPLE 14216	INDEX 428 SAMPLE 15860	INDEX 429 SAMPLE 14213
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	PANOLA
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	EGYPT COMPRESSOR STA.	EGYPT COMPRESSOR STATION	BATESVILLE COMPRESSOR NO. 63
LOCATION	3-30 IN. & 1-36 IN.	2-30 & 1-36 IN.	24, 28 & 2-26 IN.
OWNER	TEXAS EASTERN TRANS. CORP.	TEXAS EASTERN TRANS. CORP.	TENNESSEE GAS PIPELINE CO.
SAMPLED	11/08/74	12/13/79	11/07/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	250
PRESSURE,PSIG	838	1000	653
FLOW,MCFD	1500000	1850000	1200000
COMPONENT, MOLE PCT			
METHANE	96.4	97.0	95.8
ETHANE	2.1	1.6	2.7
PROPANE	0.3	0.3	0.3
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1029	1031	1033
SPECIFIC GRAVITY	0.578	0.578	0.581

	INDEX 430 SAMPLE 15857	INDEX 431 SAMPLE 11924	INDEX 432 SAMPLE 14221
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PANOLA	PERRY	PERRY
FIELD	TEXAS AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	BATESVILLE COMPRESSOR NO. 63	WIGGINS COMP. STA. NO. 10	WIGGINS COMP. STA. NO. 10
LOCATION	1-26, 1-24&2-30 IN.	24 & 30 IN. LINES	24 & 30 IN.
OWNER	TENNESSEE GAS PIPELINE CO.	FLORIDA GAS TRANSMISSION CO.	FLORIDA GAS TRANSMISSION CO.
SAMPLED	12/12/79	06/09/69	11/12/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	250	210	210
PRESSURE,PSIG	694	972	920
FLOW,MCFD	1275000	660000	476000
COMPONENT, MOLE PCT			
METHANE	95.6	94.5	95.1
ETHANE	2.2	3.3	2.6
PROPANE	0.5	0.7	0.6
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.0	0.2
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.5	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1033	1041	1036
SPECIFIC GRAVITY	0.585	0.590	0.587

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 433 SAMPLE 15866	INDEX 434 SAMPLE 14141	INDEX 435 SAMPLE 14210
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PERRY	RANKIN	WASHINGTON
FIELD	TEXAS, LA. & OFFSHORE	PINEY WOODS & THOMASVILLE	GULF COAST AREA
PLANT NAME	WIGGENS COMPRESSOR STA.	THOMASVILLE	GREENVILLE COMPRESSOR STA.
LOCATION	1-24 IN. & 1-30 IN.	PLANT RESIDUE	2-30 IN. & 1-36 IN. LINES
OWNER	FLORIDA GAS TRANSMISSION CO.	SHELL OIL CO.	MICHIGAN WISCONSIN PL CO.
SAMPLED	12/18/79	09/11/74	11/06/74
FORMATION	NOT GIVEN	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
PRESSURE,PSIG	780	NOT GIVEN	850
FLOW,MCFD	745000	40000	1300000
COMPONENT, MOLE PCT			
METHANE	96.1	98.3	97.5
ETHANE	2.1	0.1	2.1
PROPANE	0.6	0.0	0.1
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.3	1.4	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1038	998	1028
SPECIFIC GRAVITY	0.583	0.561	0.567

	INDEX 436 SAMPLE 2168	INDEX 437 SAMPLE 2172	INDEX 438 SAMPLE 14463
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BIG HORN	BLAINE	DAWSON
FIELD	HARDIN	BOWES	BOWDOIN SYSTEM
PLANT NAME	PIPE LINE SAMPLE	PIPELINE SAMPLE	MORGAN CREEK
LOCATION	T1S, R33E	CHINOOK	8 IN. LINE
OWNER	BIG HORN OIL&GAS DEV. CO.	MONTANA GAS CORP.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	09/22/30	09/17/30	09/09/75
FORMATION	NOT GIVEN	NOT GIVEN	CRET-BOWDOIN & PHILLIPS
GEOLOGIC PROVINCE CODE	515	395	395
PRESSURE,PSIG	115	55	350
FLOW,MCFD	NOT GIVEN	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	97.1	98.1	93.3
ETHANE	0.0	0.0	0.2
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	2.7	5.6	6.3
OXYGEN	0.1	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.10	0.07
HEATING VALUE*	984	953	949
SPECIFIC GRAVITY	0.567	0.579	0.582

	INDEX 439 SAMPLE 9418	INDEX 440 SAMPLE 14462	INDEX 441 SAMPLE 14461
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	PLEVNA	TIOGA AND BEAVER LODGE	WYOMING N AND S MONTANA
PLANT NAME	PIPELINE SAMPLE	CABIN CREEK PLANT	CABIN CREEK PLANT
LOCATION	SEC. VARIOUS, T5N, R60E	16 IN. LINE	12 IN. LINE
OWNER	FRANK A WARNER	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	06/22/64	09/09/75	09/09/75
FORMATION	CRET-JUDITH RIVER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	395	395
PRESSURE,PSIG	NOT GIVEN	350	300
FLOW,MCFD	NOT GIVEN	6000	20000
COMPONENT, MOLE PCT			
METHANE	94.4	82.6	94.4
ETHANE	0.2	10.1	3.1
PROPANE	0.1	1.0	0.2
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	5.1	6.0	1.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.5
HELIUM	0.09	0.09	0.02
HEATING VALUE*	964	1044	1020
SPECIFIC GRAVITY	0.576	0.638	0.581

	INDEX 442 SAMPLE 14465	INDEX 443 SAMPLE 14464	INDEX 444 SAMPLE 14466
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CARWAY,KOEN & CUTBANK EXPORT	CUT BANK	VARIOUS FIELDS
PLANT NAME	7 POINTS	7 POINTS	7 POINTS
LOCATION	20IN. DISCH.-MAIN LINE NO. 1	20 IN INLET-MAIN LINE NO. 1	16IN. INLET-MAIN LINE NO. 1
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	MONTANA POWER CO.
SAMPLED	09/11/75	09/11/75	09/11/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	500	500
PRESSURE,PSIG	559	212	380
FLOW,MCFD	110000	14400	28100
COMPONENT, MOLE PCT			
METHANE	92.6	88.2	95.5
ETHANE	2.9	5.0	0.6
PROPANE	0.7	1.4	0.1
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	2.9	2.6	3.2
OXYGEN	0.6	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	2.4	0.5
HELIUM	0.10	0.07	0.11
HEATING VALUE*	1010	1030	984
SPECIFIC GRAVITY	0.600	0.632	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 445 SAMPLE 14467	INDEX 446 SAMPLE 2265	INDEX 447 SAMPLE 2180
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	LIBERTY	PHILLIPS
FIELD	WATERTON IN CANADA	IMPERIAL & WHITLASH	BOWDOIN
PLANT NAME	T POINTS	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	16IN INLET-MAIN LINE NO. 1	NOT GIVEN	T31N, R34E
OWNER	MONTANA POWER CO.	CITIES SERVICE GAS CO.	BOWDOIN UTILITIES CO.
SAMPLED	09/11/75	01/14/31	09/19/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	500	395
PRESSURE,PSIG	717	NOT GIVEN	200
FLOW,MCFD	67300	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	91.9	96.9	96.2
ETHANE	4.5	1.5	0.0
PROPANE	1.4	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	1.5	0.7	3.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.0	0.8	0.2
HELIUM	0.02	0.07	0.06
HEATING VALUE*	1068	1008	975
SPECIFIC GRAVITY	0.605	0.573	0.571

	INDEX 448 SAMPLE 2183	INDEX 449 SAMPLE 2196	INDEX 450 SAMPLE 16009
STATE	MONTANA	MONTANA	NEBRASKA
COUNTY	PHILLIPS	PONDERA	CHEYENNE
FIELD	BOWDOIN	PONDERA	WYOMING-PINE BLUFF AREA
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	HUNTSMAN COMPRESSOR STA.
LOCATION	T32N, R32E	SEC.8,9,10,15,16,17,T27N,R4W	OUTLET
OWNER	BOWDOIN UTILITIES CO.	MIDWEST REFINING CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	09/29/30	10/10/30	07/14/80
FORMATION	NOT GIVEN	MISS-MADISON	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	500	540
PRESSURE,PSIG	220	NOT GIVEN	555
FLOW,MCFD	1000	NOT GIVEN	27000
COMPONENT, MOLE PCT			
METHANE	93.8	65.6	89.4
ETHANE	0.0	31.0	6.3
PROPANE	---	---	1.1
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	5.6	2.4	0.9
OXYGEN	0.1	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.4	0.9	1.5
HELIUM	0.07	0.25	0.02
HEATING VALUE*	950	1020	1078
SPECIFIC GRAVITY	0.582	0.727	0.629

	INDEX 451 SAMPLE 16008	INDEX 452 SAMPLE 12065	INDEX 453 SAMPLE 16123
STATE	NEBRASKA	NEW MEXICO	NEW MEXICO
COUNTY	DEUEL	CHAVES	CHAVES
FIELD	HUNTSMAN & CASPER AREA	PANHANDLE & PERMIAN BASIN	PERMIAN
PLANT NAME	BIG SPRINGS COMPRESSOR STA.	ROSWELL COMPRESSOR STATION	ROSWELL COMPRESSOR STA.
LOCATION	12 IN.	COMPOSITE	30 IN. OUTLET
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	07/14/80	09/29/69	10/23/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	430	430
PRESSURE,PSIG	895	850	1008
FLOW,MCFD	100000	700000	700000
COMPONENT, MOLE PCT			
METHANE	89.7	90.4	94.1
ETHANE	6.0	4.7	2.8
PROPANE	1.0	1.2	0.7
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.1	TRACE	TRACE
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.4
NITROGEN	1.1	1.6	1.0
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	0.6
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1069	1050	1057
SPECIFIC GRAVITY	0.625	0.616	0.602

	INDEX 454 SAMPLE 12062	INDEX 455 SAMPLE 14476	INDEX 456 SAMPLE 14483
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PERMIAN BASIN	PERMIAN BASIN	PERMIAN BASIN
PLANT NAME	ROSWELL COMPRESSOR STATION	ROSWELL COMPRESSOR STA.	ROSWELL COMPRESSOR STA.
LOCATION	NOT GIVEN	30 IN.	30 IN. MAIN LINE
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	09/29/69	10/02/75	10/02/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	800	750	750
FLOW,MCFD	650000	550000	638000
COMPONENT, MOLE PCT			
METHANE	85.2	88.9	92.0
ETHANE	8.9	7.0	3.5
PROPANE	1.7	0.9	0.9
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	3.6	2.5	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	2.3
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1067	1056	1038
SPECIFIC GRAVITY	0.633	0.615	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 457 SAMPLE 16113	INDEX 458 SAMPLE 12064	INDEX 459 SAMPLE 12063
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PERMIAN BASIN	PERMIAN BASIN &S.E. N.MEX.	TEXAS PANHANDLE
PLANT NAME	ROSWELL COMPRESSOR STA.	ROSWELL COMPRESSOR STATION	ROSWELL COMPRESSOR STATION
LOCATION	30 IN.	NOT GIVEN	NOT GIVEN
OWNER	EL PASO NATURAL GAS CO.	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	10/23/80	09/29/69	09/29/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	718	600	650
FLOW,MCFD	600000	540000	148000
COMPONENT, MOLE PCT			
METHANE	88.7	91.3	86.7
ETHANE	6.7	4.5	5.2
PROPANE	0.8	0.8	2.5
N-BUTANE	0.1	0.2	0.4
ISOBUTANE	0.1	0.0	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.9	1.3	2.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.5	0.6
HELIUM	0.04	0.03	0.06
HEATING VALUE*	1051	1042	1096
SPECIFIC GRAVITY	0.617	0.611	0.646

	INDEX 460 SAMPLE 1386	INDEX 461 SAMPLE 1387	INDEX 462 SAMPLE 2001
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	SEC. --, T18S, R27E	SEC. --, T18S, R27E	T18S,R28E
OWNER	PHILLIPS PETROLEUM CO.	NOT GIVEN	PHILLIPS PETROLEUM CO.
SAMPLED	05/04/27	05/05/27	06/03/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	30
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	29.2	45.0	40.3
ETHANE	60.6	44.6	52.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.9	8.7	6.4
OXYGEN	1.1	1.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.04	0.03	0.01
HEATING VALUE*	1382	1255	1356
SPECIFIC GRAVITY	0.899	0.822	0.847

	INDEX 463 SAMPLE 2719	INDEX 464 SAMPLE 1384	INDEX 465 SAMPLE 1385
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	MALJAMAR	MALJAMAR
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	SEC. 3, 10, T17S, R28E	SEC. 22NE, T17S, R31E	SEC. 22NE, T17S, R31E
OWNER	TIGNER, ETZ, & KEYES	SWELLY OIL CO.	SWELLY OIL CO.
SAMPLED	07/23/36	05/04/27	05/04/27
FORMATION	-STRAY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.8	28.8	57.3
ETHANE	15.7	14.2	30.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	32.1	56.0	10.7
OXYGEN	0.4	0.8	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	1.3	0.2	0.5
HELIUM	0.07	0.09	0.09
HEATING VALUE*	792	546	1151
SPECIFIC GRAVITY	0.779	0.862	0.760

	INDEX 466 SAMPLE 2718	INDEX 467 SAMPLE 2556	INDEX 468 SAMPLE 2720
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	LEA	LEA
FIELD	ROBINSON	HOBBS	JAL
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	SEC. 25, T16S, R31E	RESIDUE FROM GASOLINE PLT.	6 IN.
OWNER	HARRY LEONARD	SWELLY GASOLINE CO.	PECOS VALLEY GAS CO.
SAMPLED	07/23/36	10/25/32	07/23/36
FORMATION	PERM-MALJAMAR	PERM-HOBBS	PERM-JAL PAY
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	50.6	87.8
ETHANE	23.1	45.7	10.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.3	0.0	0.5
OXYGEN	0.3	0.7	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.9	3.0	1.1
HELIUM	0.09	0.00	0.03
HEATING VALUE*	1106	1332	1069
SPECIFIC GRAVITY	0.709	0.814	0.620

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 469 SAMPLE 9220	INDEX 470 SAMPLE 8300	INDEX 471 SAMPLE 8301
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MESA	NOT GIVEN	NOT GIVEN
PLANT NAME	COMPOSITE SAMPLE	EUNICE COMPRESSOR STA.	EUNICE COMPRESSOR STA.
LOCATION	SEC. 16 & 17, T16S, R32E	26 IN. OUTLET	EUNICE PLANT INLET
OWNER	SHELL OIL CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	01/19/64	11/29/61	11/29/61
FORMATION	PERM-QUEEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	500	815	530
FLOW,MCFD	NOT GIVEN	380000	140000
COMPONENT, MOLE PCT			
METHANE	36.4	86.7	89.9
ETHANE	6.1	8.0	6.7
PROPANE	3.2	1.4	0.9
N-BUTANE	1.5	0.1	TRACE
ISOBUTANE	0.3	TRACE	TRACE
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	50.9	3.4	2.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.10	0.03	0.02
HEATING VALUE*	679	1066	1049
SPECIFIC GRAVITY	0.882	0.624	0.602

	INDEX 472 SAMPLE 8302	INDEX 473 SAMPLE 8303	INDEX 474 SAMPLE 12066
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	WEST TEXAS AREA
PLANT NAME	MONUMENT COMPRESSOR STA.	CAP ROCK COMPRESSOR STA.	CARLSBAD COMPRESSOR STATION
LOCATION	MONUMENT PLANT OUTLET	SUCTION LINE	NOT GIVEN
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	11/29/61	11/30/61	09/30/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	565	624	964
FLOW,MCFD	113000	648000	555000
COMPONENT, MOLE PCT			
METHANE	83.3	87.0	92.7
ETHANE	5.8	7.6	3.8
PROPANE	1.9	1.3	0.9
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	8.5	3.7	1.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	1.5
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1009	1059	1031
SPECIFIC GRAVITY	0.641	0.626	0.601

	INDEX 475 SAMPLE 12067	INDEX 476 SAMPLE 14482	INDEX 477 SAMPLE 14475
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	FOUR CORNERS AREA	FOUR CORNERS AREA	FROM SAN JUAN RIVER PLANT
PLANT NAME	STAR LAKE COMPRESSOR STATION	STAR LAKE COMPRESSOR STA.	GALLUP COMPRESSOR STA.
LOCATION	NOT GIVEN	18 & 20 IN.	24 IN. GALLUP "B"
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/02/69	10/01/75	09/30/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	373	300	756
FLOW,MCFD	86400	150000	198000
COMPONENT, MOLE PCT			
METHANE	87.2	92.0	88.4
ETHANE	8.9	6.1	7.5
PROPANE	1.5	0.4	2.0
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	1.5	0.4	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.9
HELIUM	0.05	0.03	0.04
HEATING VALUE*	1062	1058	1099
SPECIFIC GRAVITY	0.627	0.602	0.631

	INDEX 478 SAMPLE 6634	INDEX 479 SAMPLE 6635	INDEX 480 SAMPLE 16109
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	NOT GIVEN	NOT GIVEN	O'KUTZ & JICARILLA
PLANT NAME	GALLUP COMPRESSOR STA.	GALLUP COMPRESSOR STA.	STAR LAKE COMPRESSOR
LOCATION	34 IN. CHACO-BLANCO SUCTION	MAINLINE DISCHARGE	OUTLET 20 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	06/--/58	06/--/58	10/24/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	600
FLOW,MCFD	NOT GIVEN	NOT GIVEN	150000
COMPONENT, MOLE PCT			
METHANE	89.9	90.1	94.9
ETHANE	6.9	6.6	3.6
PROPANE	2.0	1.9	0.4
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.2	0.2	TRACE
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	TRACE	0.1	0.4
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.5
HELIUM	0.10	0.10	0.03
HEATING VALUE*	1096	1095	1044
SPECIFIC GRAVITY	0.622	0.621	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 481 SAMPLE 12068	INDEX 482 SAMPLE 12069	INDEX 483 SAMPLE 14474
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	SAN JUAN BASIN	SAN JUAN BASIN	SAN JUAN BASIN
PLANT NAME	GALLUP COMPRESSOR STATION	GALLUP COMPRESSOR STATION	GALLUP COMPRESSOR STA.
LOCATION	GALLUP-B LINE	GALLUP A LINE	34 IN. FROM CHACO
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/03/69	10/03/69	09/30/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	838	888	680
FLOW,MCFD	300000	700000	893000
COMPONENT, MOLE PCT			
METHANE	86.1	86.6	89.1
ETHANE	7.9	8.3	7.6
PROPANE	2.5	2.5	1.7
N-BUTANE	0.2	0.3	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	1.9	1.3	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	0.9
HELIUM	0.109	0.03	0.03
HEATING VALUE*	1103	1099	1090
SPECIFIC GRAVITY	0.645	0.636	0.623

	INDEX 484 SAMPLE 16111	INDEX 485 SAMPLE 8322	INDEX 486 SAMPLE 8327
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	SAN JUAN	SAN JUAN
FIELD	SAN JUAN BASIN	ANETH, BOUNDARY BUTTE & ETC.	BALLARD, LINDRITH & BLANCO
PLANT NAME	GALLUP COMPRESSOR STA.	SAN JUAN RIVER COMP. STA.	CHACO GASOLINE PLANT
LOCATION	24 IN. GALLUP "B"	16 IN.	30 IN. INLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/27/80	12/04/61	12/05/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	560	775	257
FLOW,MCFD	400000	85400	202500
COMPONENT, MOLE PCT			
METHANE	89.1	77.3	85.1
ETHANE	7.5	15.6	7.7
PROPANE	1.6	3.8	3.2
N-BUTANE	0.1	0.1	0.8
ISOBUTANE	0.1	0.1	0.7
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.5	2.4	1.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.4
HELIUM	0.02	0.13	0.03
HEATING VALUE*	1085	1172	1158
SPECIFIC GRAVITY	0.622	0.687	0.669

	INDEX 487 SAMPLE 4701	INDEX 488 SAMPLE 8321	INDEX 489 SAMPLE 8539
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER DOME & ALKALI GULCH	BASIN-DAKOTA, BALLARD, ETC.
PLANT NAME	PIPE LINE SAMPLE	SAN JUAN RIVER COMP. STA.	NOT GIVEN
LOCATION	NOT GIVEN	24 IN.	10 & 12 IN.
OWNER	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	03/09/49	12/04/61	04/15/62
FORMATION	NOT GIVEN	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	NOT GIVEN	825	425
FLOW,MCFD	NOT GIVEN	25100	30000
COMPONENT, MOLE PCT			
METHANE	95.3	86.5	85.9
ETHANE	1.4	0.7	7.4
PROPANE	0.5	0.6	3.3
N-BUTANE	0.1	0.1	0.8
ISOBUTANE	0.2	TRACE	0.7
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	2.0	0.6	1.0
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	---	0.1	0.0
CARBON DIOXIDE	0.1	10.8	0.3
HELIUM	0.26	0.19	0.02
HEATING VALUE*	1015	913	1161
SPECIFIC GRAVITY	0.581	0.676	0.665

	INDEX 490 SAMPLE 8328	INDEX 491 SAMPLE 8326	INDEX 492 SAMPLE 8329
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BISTI	BLANCO	BLANCO
PLANT NAME	CHACO GASOLINE PLANT	BLANCO COMPRESSOR STA.	CHACO GASOLINE PLANT
LOCATION	16 IN. INLET	24 IN.	24 IN. COMP
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	12/05/61	12/05/61	12/05/61
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	253	450	NOT GIVEN
FLOW,MCFD	39900	119400	117000
COMPONENT, MOLE PCT			
METHANE	76.5	82.9	80.4
ETHANE	10.4	2.9	11.4
PROPANE	7.4	3.5	4.0
N-BUTANE	1.9	0.8	0.9
ISOBUTANE	0.9	0.6	0.7
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.4	6.9	1.4
OXYGEN	TRACE	0.6	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.8	0.6
HELIUM	0.13	0.10	0.05
HEATING VALUE*	1240	1178	1247
SPECIFIC GRAVITY	0.748	0.681	0.699

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 493 SAMPLE 8330	INDEX 494 SAMPLE 8536	INDEX 495 SAMPLE 8540
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	CHA CHA	CRANDALL & LA PLATA	FULCHER-KUTZ
PLANT NAME	CHA CHA FIELD COMPRESSOR STA	PIPELINE SAMPLE	STA. AT KUTZ CANYON
LOCATION	4 IN.	12 IN.	8 IN.
OWNER	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	12/05/61	04/15/62	04/15/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	238	460	85
FLOW,MCFD	11100	18000	2500
COMPONENT, MOLE PCT			
METHANE	74.4	84.0	89.8
ETHANE	11.6	9.0	5.5
PROPANE	7.5	3.5	2.2
N-BUTANE	2.2	0.9	0.5
ISOBUTANE	0.9	0.6	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.6	0.6	0.6
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.5
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1313	1160	1114
SPECIFIC GRAVITY	0.771	0.677	0.633

	INDEX 496 SAMPLE 8512	INDEX 497 SAMPLE 8537	INDEX 498 SAMPLE 8538
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HORSESHOE	KUTZ CANYON	KUTZ CANYON
PLANT NAME	METER NO. 77-152-01	STA. AT KUTZ CANYON	NOT GIVEN
LOCATION	NOT GIVEN	6 & 8 IN.	6,8 & 10 IN.
OWNER	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	04/12/62	04/15/62	04/15/62
FORMATION	CRET-GALLUP	CRET-PICTURED CLIFFS	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	880	100	530
FLOW,MCFD	NOT GIVEN	7500	27500
COMPONENT, MOLE PCT			
METHANE	74.4	88.9	82.0
ETHANE	19.3	6.3	10.4
PROPANE	4.3	2.4	4.0
N-BUTANE	0.0	0.6	0.9
ISOBUTANE	0.0	0.5	0.6
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.6	0.5	0.6
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	1.0
HELIUM	0.03	0.02	0.06
HEATING VALUE*	1211	1131	1194
SPECIFIC GRAVITY	0.703	0.642	0.691

	INDEX 499 SAMPLE 8320	INDEX 500 SAMPLE 1517	INDEX 501 SAMPLE 8780
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	RATTLESNAKE	TABLE MESA
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	NAVAJO HELIUM PLANT
LOCATION	HORSESHOE GALLUP	SHIPROCK	PLANT INLET
OWNER	EL PASO NATURAL GAS CO.	CONTINENTAL OIL CO.	U.S. BUREAU OF MINES
SAMPLED	12/04/61	10/13/27	11/29/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	780	NOT GIVEN	4000
FLOW,MCFD	2000	NOT GIVEN	700
COMPONENT, MOLE PCT			
METHANE	68.7	0.0	18.4
ETHANE	24.8	13.3	3.0
PROPANE	4.0	75.5	1.8
N-BUTANE	TRACE	---	0.8
ISOBUTANE	TRACE	---	0.4
N-PENTANE	0.0	---	0.3
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	1.1	10.3	68.3
OXYGEN	0.1	0.8	TRACE
ARGON	TRACE	---	0.7
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.99	0.00	5.46
HEATING VALUE*	1248	2193	354
SPECIFIC GRAVITY	0.723	1.423	0.886

	INDEX 502 SAMPLE 8781	INDEX 503 SAMPLE 8782	INDEX 504 SAMPLE 8783
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
PLANT NAME	NAVAJO HELIUM PLANT	NAVAJO HELIUM PLANT	NAVAJO HELIUM PLANT
LOCATION	PLANT INLET	PLANT INLET	PLANT INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	11/29/62	11/29/62	11/29/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	4000	4000	4000
FLOW,MCFD	700	700	700
COMPONENT, MOLE PCT			
METHANE	18.3	18.3	18.3
ETHANE	3.0	3.0	3.1
PROPANE	1.8	1.8	1.7
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	68.4	68.5	68.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	5.47	5.42	5.51
HEATING VALUE*	356	349	348
SPECIFIC GRAVITY	0.888	0.883	0.882

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 505 SAMPLE 8784	INDEX 506 SAMPLE 8785	INDEX 507 SAMPLE 8787
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
PLANT NAME	NAVAJO HELIUM PLANT	NAVAJO HELIUM PLANT	NAVAJO HELIUM PLANT
LOCATION	PLANT INLET	PLANT INLET	PLANT INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	11/29/62	11/29/62	11/29/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	4000	4000	4000
FLOW,MCFD	700	700	700
COMPONENT, MOLE PCT			
METHANE	18.4	18.4	18.1
ETHANE	3.0	3.0	3.0
PROPANE	1.8	1.9	1.9
N-BUTANE	0.8	0.7	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	68.3	68.3	68.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	5.51	5.52	5.48
HEATING VALUE*	330	326	329
SPECIFIC GRAVITY	0.883	0.886	0.886

	INDEX 508 SAMPLE 9843	INDEX 509 SAMPLE 11988	INDEX 510 SAMPLE 11989
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
PLANT NAME	NAVAJO HELIUM PLANT	NOT GIVEN	NOT GIVEN
LOCATION	PLANT INLET	NOT GIVEN	NOT GIVEN
OWNER	U.S. BUREAU OF MINES	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	04/15/65	05/07/69	05/07/69
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	15.6	13.4	13.3
ETHANE	2.5	2.5	2.5
PROPANE	1.4	1.7	1.9
N-BUTANE	0.5	0.8	0.9
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	TRACE	0.4	0.5
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	73.1	73.6	73.1
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.8	0.7
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.5
HELIUM	5.30	5.50	5.33
HEATING VALUE*	299	296	320
SPECIFIC GRAVITY	0.886	0.908	0.916

	INDEX 511 SAMPLE 9668	INDEX 512 SAMPLE 8331	INDEX 513 SAMPLE 12503
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	TOTAH	UTE DOME
PLANT NAME	PIPELINE SAMPLE	STA. AT TOTAH FIELD	NOT GIVEN
LOCATION	NOT GIVEN	4 IN.	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.	PAN AMERICAN PETROLEUM CORP.
SAMPLED	12/17/64	12/05/61	11/03/70
FORMATION	PENN-D	NOT GIVEN	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
PRESSURE,PSIG	100	460	NOT GIVEN
FLOW,MCFD	NOT GIVEN	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.3	73.3	72.9
ETHANE	17.7	13.2	0.5
PROPANE	6.4	7.6	0.2
N-BUTANE	1.1	1.9	TRACE
ISOBUTANE	1.2	0.8	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.1	1.6	1.6
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	1.1
CARBON DIOXIDE	1.3	0.5	23.1
HELIUM	0.02	0.06	0.21
HEATING VALUE*	1286	1306	1172
SPECIFIC GRAVITY	0.766	0.765	0.802

	INDEX 514 SAMPLE 366	INDEX 515 SAMPLE 14829	INDEX 516 SAMPLE 10566
STATE	NEW YORK	NEW YORK	NORTH DAKOTA
COUNTY	CATTARAUGUS	STEUBEN	BURKE
FIELD	SHERIDAN E	THOMAS CORNERS	RIVAL
PLANT NAME	PIPELINE SAMPLE	NOT GIVEN	BATTERY NO. 3
LOCATION	NOT GIVEN	8 IN. AT CAMERON	RIVAL UNIT
OWNER	HENRY DOHERTY	COLUMBIA GAS TRANSMISSION	PAN AMERICAN PETROLEUM CORP.
SAMPLED	06/23/20	10/26/76	05/09/66
FORMATION	NOT GIVEN	NOT GIVEN	MISS-RIVAL
GEOLOGIC PROVINCE CODE	160	160	395
PRESSURE,PSIG	800	660	NOT GIVEN
FLOW,MCFD	6000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.2	93.0	68.0
ETHANE	14.8	5.6	19.1
PROPANE	---	0.6	6.7
N-BUTANE	---	0.1	2.4
ISOBUTANE	---	TRACE	0.7
N-PENTANE	---	TRACE	0.9
ISOPENTANE	---	0.0	0.6
CYCLOPENTANE	---	0.0	0.3
HEXANES PLUS	---	0.1	0.8
NITROGEN	3.8	0.4	1.7
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.2
CARBON DIOXIDE	0.0	TRACE	2.6
HELIUM	0.10	0.03	0.02
HEATING VALUE*	1088	1067	1355
SPECIFIC GRAVITY	0.645	0.593	0.831

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 517 SAMPLE 10494	INDEX 518 SAMPLE 14832	INDEX 519 SAMPLE 14831
STATE	NORTH DAKOTA	OHIO	OHIO
COUNTY	WILLIAMS	FAIRFIELD	HOLMES
FIELD	CAPA	BUCKEYE LAKE AREA	HOLMES COUNTY GAS
PLANT NAME	1-210 BATTERY	CRAWFORD COMPRESSOR STA.	MILEY COMPRESSOR STA.
LOCATION	NOT GIVEN	6 LINE-8IN. SUCTION	8 IN. DISCHARGE
OWNER	AMERADA PETROLEUM CORP.	COLUMBIA GAS TRANSMISSION	COLUMBIA GAS TRANSMISSION
SAMPLED	03/02/66	10/29/76	10/28/76
FORMATION	MISS-MADISON	NOT GIVEN	SILU-CLINTON
GEOLOGIC PROVINCE CODE	395	160	160
PRESSURE,PSIG	NOT GIVEN	17	190
FLOW,MCFD	NOT GIVEN	1200	7000
COMPONENT, MOLE PCT			
METHANE	66.1	90.8	83.9
ETHANE	16.8	3.9	6.6
PROPANE	8.0	1.0	2.3
N-BUTANE	2.1	0.4	0.6
ISOBUTANE	1.1	0.2	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	2.0	2.6	5.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	1.1	0.0	0.0
CARBON DIOXIDE	2.0	0.4	0.1
HELIUM	0.02	0.08	0.14
HEATING VALUE*	1329	1064	1076
SPECIFIC GRAVITY	0.818	0.620	0.654

	INDEX 520 SAMPLE 14830	INDEX 521 SAMPLE 14833	INDEX 522 SAMPLE 10462
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MEIGS	MORROW
FIELD	TRUMBULL	GALLIA, MEIGS AND WASHINGTON	JOHNSVILLE
PLANT NAME	TRUMBULL COMPRESSOR STA.	MEIGS COMPRESSOR STA.	EDISON PLANT
LOCATION	10 IN. FV-341	10 IN. DISCHARGE	MT. GILEAD
OWNER	COLUMBIA GAS TRANSMISSION	COLUMBIA GAS TRANSMISSION	MCWOOD CORP.
SAMPLED	10/27/76	10/29/76	03/14/66
FORMATION	SILU-CLINTON	MISS-BEREA	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	170	180	NOT GIVEN
FLOW,MCFD	3000	4000	9000
COMPONENT, MOLE PCT			
METHANE	91.5	81.1	75.6
ETHANE	4.1	7.7	5.4
PROPANE	1.1	4.5	1.3
N-BUTANE	0.3	1.2	0.5
ISOBUTANE	0.1	0.4	0.5
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.6	4.3	15.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.09	0.18	0.61
HEATING VALUE*	1052	1156	983
SPECIFIC GRAVITY	0.606	0.691	0.684

	INDEX 523 SAMPLE 10475	INDEX 524 SAMPLE 10463	INDEX 525 SAMPLE 10478
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	JOHNSVILLE	NOT GIVEN	NOT GIVEN
PLANT NAME	EDISON PLANT	EDISON PLANT	EDISON PLANT
LOCATION	MT. GILEAD	MT. GILEAD	MT. GILEAD
OWNER	MCWOOD CORP.	MCWOOD CORP.	MCWOOD CORP.
SAMPLED	03/16/66	03/14/66	03/18/66
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	9000	9000
COMPONENT, MOLE PCT			
METHANE	75.5	75.2	74.8
ETHANE	5.3	15.6	16.5
PROPANE	1.5	1.0	1.3
N-BUTANE	0.6	TRACE	TRACE
ISOBUTANE	0.4	TRACE	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	15.2	7.6	7.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.64	0.17	0.19
HEATING VALUE*	964	1076	1092
SPECIFIC GRAVITY	0.688	0.674	0.679

	INDEX 526 SAMPLE 14842	INDEX 527 SAMPLE 10159	INDEX 528 SAMPLE 10160
STATE	OHIO	OHIO	OHIO
COUNTY	TUSCARAWAS	WASHINGTON	WASHINGTON
FIELD	GUERNSEY	BARLOW	BARLOW & WATERTOWN
PLANT NAME	GUERNSEY COMPRESSOR STA.	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	16 IN. SUCTION	BARLOW, OHIO	GEPHART FARM
OWNER	EAST OHIO GAS CO.	RIVER GAS CO.	RIVER GAS CO.
SAMPLED	10/28/76	09/16/65	09/16/65
FORMATION	SILU-CLINTON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	230	NOT GIVEN	NOT GIVEN
FLOW,MCFD	50000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	82.0	89.6
ETHANE	5.9	9.7	4.7
PROPANE	1.7	4.0	1.9
N-BUTANE	0.5	0.8	0.7
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	4.4	2.5	2.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.13	0.16	0.40
HEATING VALUE*	1073	1163	1065
SPECIFIC GRAVITY	0.639	0.678	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 529 SAMPLE 10541	INDEX 530 SAMPLE 10537	INDEX 531 SAMPLE 10535
STATE	OHIO	OHIO	OHIO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	BARLOW & WATERTOWN	BELPRE	LOWELL
PLANT NAME	NOT GIVEN	HALL GRINDSTONE CO.	BURKE FARM
LOCATION	BARLOW	8 IN. RT 32	NOT GIVEN
OWNER	RIVER GAS CO.	RIVER GAS CO.	RIVER GAS CO.
SAMPLED	04/19/66	04/15/66	04/18/66
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.6	87.7	76.5
ETHANE	9.9	5.4	11.7
PROPANE	4.2	2.0	6.2
N-BUTANE	1.0	0.5	1.5
ISOBUTANE	0.5	0.2	0.6
N-PENTANE	0.2	0.1	0.6
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	2.4	3.3	0.1
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.14	0.31	0.21
HEATING VALUE*	1117	1074	1273
SPECIFIC GRAVITY	0.685	0.632	0.742

	INDEX 532 SAMPLE 10536	INDEX 533 SAMPLE 10539	INDEX 534 SAMPLE 15494
STATE	OHIO	OHIO	OKLAHOMA
COUNTY	WASHINGTON	WASHINGTON	BEAVER
FIELD	LOWELL	LOWELL	ANADARKO BASIN
PLANT NAME	BURKE FARM	HUCK FARM	BEAVER COMPRESSOR STA.
LOCATION	RF 305 LINE	4 IN. LINE	A-24 IN. DISCHARGE
OWNER	RIVER GAS CO.	RIVER GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	04/18/66	04/21/66	11/13/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	450
FLOW,MCFD	NOT GIVEN	NOT GIVEN	75000
COMPONENT, MOLE PCT			
METHANE	76.5	77.4	84.1
ETHANE	11.9	11.4	6.2
PROPANE	6.2	5.9	1.9
N-BUTANE	1.6	1.5	0.4
ISOBUTANE	0.6	0.4	0.1
N-PENTANE	0.5	0.7	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	1.8	1.9	6.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.10	0.12	0.24
HEATING VALUE*	1261	1269	1043
SPECIFIC GRAVITY	0.743	0.736	0.645

	INDEX 535 SAMPLE 15500	INDEX 536 SAMPLE 12862	INDEX 537 SAMPLE 13315
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	ANADARKO BASIN	CAMRICK	ELMWOOD-CAMP CREEK AREA
PLANT NAME	BEAVER COMPRESSOR STA.	PIPELINE	BEAVER COMPRESSOR STATION
LOCATION	B-26 IN. DISCHARGE	NOT GIVEN	24 IN. A DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	EXXON CO., U.S.A.	NORTHERN NATURAL GAS CO.
SAMPLED	11/13/78	06/22/71	07/24/72
FORMATION	NOT GIVEN	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	790	690	460
FLOW,MCFD	237000	NOT GIVEN	96000
COMPONENT, MOLE PCT			
METHANE	88.8	78.5	85.5
ETHANE	5.6	6.4	6.1
PROPANE	2.6	7.0	3.0
N-BUTANE	0.6	2.0	0.7
ISOBUTANE	0.2	1.0	0.4
N-PENTANE	0.2	0.7	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	2.0	1.0	3.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.13	0.04	0.15
HEATING VALUE*	1110	1100	1017
SPECIFIC GRAVITY	0.640	0.751	0.662

	INDEX 538 SAMPLE 13316	INDEX 539 SAMPLE 15499	INDEX 540 SAMPLE 13318
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	HIGH PRESS GATHERING SYSTEM	KERMIT	NOT GIVEN
PLANT NAME	BEAVER COMPRESSOR STATION	BEAVER COMPRESSOR STA.	BEAVER COMPRESSOR STATION
LOCATION	26 IN. B DISCHARGE	OE-30 IN. DISCHARGE	30 IN. DE DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/24/72	11/13/78	07/24/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	760	960	890
FLOW,MCFD	230000	336000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.0	91.7	88.5
ETHANE	5.6	3.2	4.8
PROPANE	2.4	0.9	1.1
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.3	TRACE	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	2.0	3.1	4.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	1.1
HELIUM	0.11	0.10	0.04
HEATING VALUE*	1095	1012	1018
SPECIFIC GRAVITY	0.638	0.600	0.620

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 541 SAMPLE 6711	INDEX 542 SAMPLE 6712	INDEX 543 SAMPLE 15484
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	PANHANDLE	PANHANDLE & W. TEXAS	PERMIAN BASIN
PLANT NAME	STA. IN SEC.24,T2N,R24ECM	STA. IN SEC.24,T2N,R24ECM	BEAVER COMPRESSOR STA.
LOCATION	24 IN. SKELLEYTOWN AREA	30 IN. SUNRAY LINE	"C" 30 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/17/58	07/17/58	11/13/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	300	850	830
FLOW,MCFD	NOT GIVEN	NOT GIVEN	508000
COMPONENT, MOLE PCT			
METHANE	80.4	83.2	88.7
ETHANE	8.2	5.5	4.7
PROPANE	3.1	2.0	1.1
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.3	7.1	4.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.30	0.30	0.17
HEATING VALUE*	1064	1038	1031
SPECIFIC GRAVITY	0.666	0.649	0.617

	INDEX 544 SAMPLE 13319	INDEX 545 SAMPLE 13317	INDEX 546 SAMPLE 15426
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	CIMARRON
FIELD	PERMIAN BASIN AREA	RESIDUE FROM AMOCO PLANT	COMPOSITE
PLANT NAME	BEAVER COMPRESSOR STATION	BEAVER COMPRESSOR STATION	KEYES COMPRESSOR STA.
LOCATION	36 IN. KERMIT SUCTION	30 IN. C DISCHARGE	20 IN. DISCHARGE TO NORTH
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	COLORADO,INTERSTATE GAS CO.
SAMPLED	07/24/72	07/24/72	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	435
PRESSURE,PSIG	720	800	700
FLOW,MCFD	594000	598000	62000
COMPONENT, MOLE PCT			
METHANE	95.4	84.8	77.2
ETHANE	1.4	6.8	6.9
PROPANE	0.4	2.1	2.4
N-BUTANE	0.1	0.4	0.3
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	4.8	12.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.5	0.4
HELIUM	0.02	0.06	0.10
HEATING VALUE*	1005	1069	991
SPECIFIC GRAVITY	0.591	0.649	0.677

	INDEX 547 SAMPLE 15427	INDEX 548 SAMPLE 13436	INDEX 549 SAMPLE 5484
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	COMPOSITE	KEYES + PANHANDLE W	KEYES DISTRICT
PLANT NAME	KEYES COMPRESSOR STA.	KEYES COMPRESSOR STATION	NOT GIVEN
LOCATION	20 IN. DISCHARGE TO SOUTH	20 IN. DISCHARGE	12 IN. LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/17/78	10/04/72	05/26/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
PRESSURE,PSIG	400	800	NOT GIVEN
FLOW,MCFD	18300	200000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	74.0	61.7
ETHANE	6.4	6.8	3.3
PROPANE	2.4	2.1	2.3
N-BUTANE	0.4	0.2	0.7
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	15.7	27.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.8
HELIUM	0.11	0.54	2.14
HEATING VALUE*	972	945	808
SPECIFIC GRAVITY	0.690	0.683	0.737

	INDEX 550 SAMPLE 5479	INDEX 551 SAMPLE 5776	INDEX 552 SAMPLE 5781
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
PLANT NAME	STA. IN SEC.7,T5N,R22ECM	KEYES COMPRESSOR STA.	KEYES COMPRESSOR STA.
LOCATION	6 IN. LINE	LINE F-3	F-3 INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	05/26/53	01/27/55	03/04/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	530
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.8	66.0	64.8
ETHANE	3.3	3.2	3.1
PROPANE	1.8	2.1	1.3
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	28.6	24.2	25.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	1.1
HELIUM	1.92	2.03	2.13
HEATING VALUE*	791	837	805
SPECIFIC GRAVITY	0.724	0.716	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 553 SAMPLE 6390	INDEX 554 SAMPLE 6439	INDEX 555 SAMPLE 6445
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
PLANT NAME	STA. IN SEC. 19, T3N, R8E	MAIN LINE METER STA.	MAIN LINE METER STA.
LOCATION	MAIN LINE SAMPLE	NOT GIVEN	MAIN LINE METER STATION
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/20/57	11/06/57	11/26/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
PRESSURE,PSIG	NOT GIVEN	600	555
FLOW,MCFD	NOT GIVEN	50000	46000
COMPONENT, MOLE PCT			
METHANE	69.0	63.7	65.5
ETHANE	3.7	3.0	3.8
PROPANE	2.2	4.7	2.3
N-BUTANE	0.7	0.8	0.5
ISOBUTANE	0.4	0.0	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	23.9	23.2	24.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.0	0.7
HELIUM	1.95	2.10	2.10
HEATING VALUE*	836	862	846
SPECIFIC GRAVITY	0.730	0.730	0.719

	INDEX 556 SAMPLE 6624	INDEX 557 SAMPLE 8923	INDEX 558 SAMPLE 8924
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
PLANT NAME	PIPELINE SAMPLE	KEYES HELIUM PLANT	KEYES HELIUM PLANT
LOCATION	6 INCH METER RUN	OUTLET	INLET
OWNER	COLORADO INTERSTATE GAS CO.	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	06/--/58	04/05/63	04/05/63
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
PRESSURE,PSIG	NOT GIVEN	488	463
FLOW,MCFD	NOT GIVEN	500000	550000
COMPONENT, MOLE PCT			
METHANE	65.0	67.2	64.9
ETHANE	3.8	3.1	3.0
PROPANE	2.1	2.0	1.8
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	24.7	23.7	25.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.7
HELIUM	1.90	0.05	2.17
HEATING VALUE*	853	857	814
SPECIFIC GRAVITY	0.728	0.729	0.717

	INDEX 559 SAMPLE 15428	INDEX 560 SAMPLE 15503	INDEX 561 SAMPLE 13307
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CREEK	CREEK
FIELD	KEYES GAS AREA	WESTERN OKLAHOMA	WESTERN OKLAHOMA AREA
PLANT NAME	KEYES COMPRESSOR STA.	DEPEW STORAGE	DEPEW STORAGE
LOCATION	16 IN. INLET	24 IN. DISCHARGE	24 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	OKLAHOMA NATURAL GAS CO.	OKLAHOMA NATURAL GAS CO.
SAMPLED	10/17/78	11/20/78	07/28/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	353	355
PRESSURE,PSIG	488	540	1180
FLOW,MCFD	28000	250000	63000
COMPONENT, MOLE PCT			
METHANE	64.8	90.8	88.0
ETHANE	3.8	3.1	7.6
PROPANE	2.5	1.1	1.9
N-BUTANE	0.9	0.2	0.1
ISOBUTANE	0.5	0.1	0.1
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.4	2.0	1.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.3
HELIUM	0.17	0.05	0.04
HEATING VALUE*	876	1055	1093
SPECIFIC GRAVITY	0.747	0.609	0.628

	INDEX 562 SAMPLE 3906	INDEX 563 SAMPLE 1512	INDEX 564 SAMPLE 8095
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GRADY	GRADY
FIELD	PAULS VALLEY	CHICKASHA	KNOX
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	KNOX PLANT
LOCATION	SEC. 31, T4N, R1E	GUTHRIE LINE	SEC. 33, T3N, R5W
OWNER	OTHA H. GRIMES	OKLAHOMA NATURAL GAS CORP.	BRITISH AMERICAN OIL PROD.
SAMPLED	06/13/44	10/11/27	07/19/61
FORMATION	ORDO-BROMIDE & PENN	NOT GIVEN	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	970
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.7	83.5	92.0
ETHANE	59.7	11.3	6.0
PROPANE	---	---	1.1
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	0.0	4.0	0.1
OXYGEN	0.9	1.1	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.7	0.2	0.7
HELIUM	0.02	0.05	0.02
HEATING VALUE*	1462	1048	1071
SPECIFIC GRAVITY	0.862	0.635	0.604

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 565 SAMPLE 15672		INDEX 566 SAMPLE 13256		INDEX 567 SAMPLE 15674	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	KAY		KAY		KAY	
FIELD	CENTRAL OKLAHOMA		GUYMON-HUGOTON GAS AREA		HUGOTON, OKLAHOMA	
PLANT NAME	BLACKWELL COMPRESSOR STA.		BLACKWELL COMPRESSOR STATION		BLACKWELL COMPRESSOR STA.	
LOCATION	20 IN. OKLAHOMA CITY LINE		26 IN. GUYMON LINE		26 IN. GUYMON	
OWNER	CITIES SERVICE GAS CO.		CITIES SERVICE GAS CO.		CITIES SERVICE GAS CO.	
SAMPLED	06/22/79		06/09/72		06/22/79	
FORMATION	NOT GIVEN		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	355		355		355	
PRESSURE, PSIG	255		630		563	
FLOW, MCFD	180000		330000		234000	
COMPONENT, MOLE PCT						
METHANE	92.0		85.2		84.9	
ETHANE	4.6		6.3		6.0	
PROPANE	0.9		1.6		1.6	
N-BUTANE	0.2		0.0		0.1	
ISOBUTANE	0.1		0.0		TRACE	
N-PENTANE	0.1		0.0		0.1	
ISOPENTANE	TRACE		0.0		0.1	
CYCLOPENTANE	TRACE		0.0		0.1	
HEXANES PLUS	0.1		0.0		0.1	
NITROGEN	1.6		6.4		6.5	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.3		0.3	
HELIUM	0.04		0.23		0.22	
HEATING VALUE*	1057		1017		1030	
SPECIFIC GRAVITY	0.606		0.630		0.639	

	INDEX 568 SAMPLE 13622		INDEX 569 SAMPLE 13254		INDEX 570 SAMPLE 15673	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	KAY		KAY		KAY	
FIELD	NOT GIVEN		PANHANDLE W		PANHANDLE, W & C OKLAHOMA	
PLANT NAME	BLACKWELL COMPRESSOR STA.		BLACKWELL COMPRESSOR STATION		BLACKWELL COMPRESSOR STA.	
LOCATION	20 IN. INLET		WEST PANHANDLE LINE		26 IN. FROM CANADIAN TEXAS	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		CITIES SERVICE GAS CO.	
SAMPLED	06/05/73		06/09/72		06/22/79	
FORMATION	NOT GIVEN		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	355		355		355	
PRESSURE, PSIG	344		680		563	
FLOW, MCFD	131000		145000		163000	
COMPONENT, MOLE PCT						
METHANE	90.9		86.7		89.5	
ETHANE	6.1		7.9		5.2	
PROPANE	0.8		2.2		1.7	
N-BUTANE	0.1		0.3		0.4	
ISOBUTANE	0.1		0.2		0.2	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	TRACE		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		0.1		0.1	
NITROGEN	1.6		1.6		1.5	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.8		0.9	
HELIUM	0.06		0.05		0.07	
HEATING VALUE*	1058		1103		1078	
SPECIFIC GRAVITY	0.605		0.641		0.626	

	INDEX 571 SAMPLE 1927		INDEX 572 SAMPLE 1928		INDEX 573 SAMPLE 232	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	LOGAN		LOGAN		NOWATA	
FIELD	LOGAN		LOGAN		LUDOWICI-CELADON	
PLANT NAME	PIPELINE SAMPLE		PIPELINE SAMPLE		PIPELINE SAMPLE	
LOCATION	SEC. 5, T18N, R4W		SEC. 5, T18N, R4W		SEC. 16, T28N, R16E	
OWNER	J. S. COSDEN, INC.		J. S. COSDEN, INC.		LUDOWICI-CELADON TILE CO.	
SAMPLED	01/27/30		01/27/30		04/30/20	
FORMATION	ORDO-WILCOX		ORDO-WILCOX		NOT GIVEN	
GEOLOGIC PROVINCE CODE	355		355		355	
PRESSURE, PSIG	1300		1300		30	
FLOW, MCFD	2990		2990		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	36.0		61.2		96.6	
ETHANE	58.5		33.5		2.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	5.3		5.0		0.6	
OXYGEN	0.0		0.2		0.7	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE	---		---		---	
CARBON DIOXIDE	0.2		0.2		0.3	
HELIUM	0.05		0.05		0.09	
HEATING VALUE*	1413		1220		1014	
SPECIFIC GRAVITY	0.868		0.745		0.575	

	INDEX 574 SAMPLE 3310		INDEX 575 SAMPLE 325		INDEX 576 SAMPLE 1203	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	OKFUSKEE		OKFUSKEE		OSAGE	
FIELD	MID-WEST AREA		MORGAN		BURBANK	
PLANT NAME	PIPELINE SAMPLE		PIPELINE SAMPLE		PIPELINE SAMPLE	
LOCATION	SEC. 34, T12N, R9E		NOT GIVEN		T27N, R5E	
OWNER	DAVON OIL CO.		EAGLE PICHER LEAD CO.		PHILLIPS PETROLEUM CO.	
SAMPLED	04/24/42		06/03/20		11/15/25	
FORMATION	NOT GIVEN		NOT GIVEN		PENN-BURBANK	
GEOLOGIC PROVINCE CODE	355		355		355	
PRESSURE, PSIG	NOT GIVEN		145		130	
FLOW, MCFD	NOT GIVEN		NOT GIVEN		6000	
COMPONENT, MOLE PCT						
METHANE	65.1		72.4		13.9	
ETHANE	29.4		9.9		83.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	4.9		15.9		1.4	
OXYGEN	0.3		1.6		1.1	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE	---		---		---	
CARBON DIOXIDE	0.1		0.2		0.7	
HELIUM	0.16		0.06		0.07	
HEATING VALUE*	1196		911		1628	
SPECIFIC GRAVITY	0.722		0.680		0.984	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 577 SAMPLE 15006	INDEX 578 SAMPLE 15007	INDEX 579 SAMPLE 1754
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	POTTAWATOMIE
FIELD	DOGA	DOGA	EARLSBORO
PLANT NAME	TANK BATTERY	TANK BATTERY	PIPELINE SAMPLE
LOCATION	NOT GIVEN	NOT GIVEN	GASOLINE PLANT DISCHARGE
OWNER	CEJA CORP.	CEJA CORP.	MOBIL OIL CORP.
SAMPLED	05/12/77	05/12/77	04/24/29
FORMATION	MISS-CHAT	MISS-CHAT	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	1300	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.8	56.5	39.8
ETHANE	11.5	11.0	48.7
PROPANE	8.6	7.0	---
N-BUTANE	4.2	2.9	---
ISOBUTANE	1.4	0.9	---
N-PENTANE	1.4	0.8	---
ISOPENTANE	1.1	0.7	---
CYCLOPENTANE	0.2	0.2	---
HEXANES PLUS	0.8	0.5	---
NITROGEN	14.3	18.9	10.6
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.32	0.28	0.06
HEATING VALUE*	1339	1177	1276
SPECIFIC GRAVITY	0.916	0.861	0.844

	INDEX 580 SAMPLE 15260	INDEX 581 SAMPLE 15259	INDEX 582 SAMPLE 1758
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGERS	ROGERS	SEMINOLE
FIELD	AMMONIA PLANT	NOT GIVEN	BOWLEGS
PLANT NAME	AMONIA PLANT	AGRICO CHEMICAL CO.	GASOLINE PLANT
LOCATION	NOT GIVEN	OKLAHOMA NATURAL GAS CO.	LOW COMPRESSOR DISCHARGE
OWNER	AGRICO CHEMICAL CO.	AGRICO CHEMICAL CO.	SHELL OIL CO.
SAMPLED	04/13/78	04/13/78	04/25/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	10.2	92.6	15.3
ETHANE	0.0	4.2	74.0
PROPANE	TRACE	0.6	---
N-BUTANE	0.0	0.2	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	TRACE	---
NITROGEN	20.4	1.5	10.5
OXYGEN	TRACE	0.1	0.2
ARGON	1.5	TRACE	---
HYDROGEN	61.6	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.5	0.2
HELIUM	0.24	0.04	TRACE
HEATING VALUE*	303	1044	1481
SPECIFIC GRAVITY	0.400	0.599	0.968

	INDEX 583 SAMPLE 1759	INDEX 584 SAMPLE 1761	INDEX 585 SAMPLE 1760
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	LITTLE RIVER	MAUD	MISSION
PLANT NAME	GASOLINE PLANT	GASOLINE PLANT	GASOLINE PLANT
LOCATION	PLANT INLET	PLANT DISCHARGE	PLANT INLET
OWNER	GYPSY OIL CO.	AMERADA HESS CORP.	GYPSY OIL CO.
SAMPLED	04/25/29	04/26/29	04/26/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	8500	1974
COMPONENT, MOLE PCT			
METHANE	33.0	40.0	46.2
ETHANE	54.3	49.1	44.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.1	10.1	8.6
OXYGEN	0.3	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.07	TRACE	TRACE
HEATING VALUE*	1307	1285	1271
SPECIFIC GRAVITY	0.878	0.845	0.816

	INDEX 586 SAMPLE 1763	INDEX 587 SAMPLE 1764	INDEX 588 SAMPLE 1766
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	SEARIGHT	SEARIGHT	SEARIGHT
PLANT NAME	GASOLINE PLANT	GASOLINE PLANT	STEWART GASOLINE PLANT
LOCATION	PLANT DISCHARGE	PLANT DISCHARGE	PLANT INLET
OWNER	CARTER OIL CO.	GYPSY OIL CO.	CARTER OIL CO.
SAMPLED	04/26/29	04/27/29	04/27/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	11000		
COMPONENT, MOLE PCT			
METHANE	16.5	30.3	47.7
ETHANE	78.3	41.6	39.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.0	27.4	11.4
OXYGEN	0.6	0.6	1.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.2	0.6
HELIUM	TRACE	0.19	0.11
HEATING VALUE*	1570	1092	1187
SPECIFIC GRAVITY	0.968	0.879	0.808

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 589 SAMPLE 3458	INDEX 590 SAMPLE 1757	INDEX 591 SAMPLE 1762
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	SEARIGHT	SEMINOLE	SEMINOLE
PLANT NAME	PIPELINE SAMPLE	GASOLINE PLANT	GASOLINE PLANT
LOCATION	SEC. 11, T9N, R6E	PLANT DISCHARGE	PLANT DISCHARGE
OWNER	CARTER OIL CO.	UNION OIL CO. OF CAL.	CARTER OIL CO.
SAMPLED	05/26/42	04/24/29	04/26/29
FORMATION	DEVO-HUNTON & ORDO-WILCOX	DEVO-HUNTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	20000
COMPONENT, MOLE PCT			
METHANE	93.8	9.3	35.4
ETHANE	0.0	86.0	55.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.2	3.4	8.6
OXYGEN	0.7	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.8	0.5
HELIUM	0.05	TRACE	0.09
HEATING VALUE*	950	1635	1348
SPECIFIC GRAVITY	0.581	1.005	0.870

	INDEX 592 SAMPLE 1767	INDEX 593 SAMPLE 1755	INDEX 594 SAMPLE 1756
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	SEMINOLE	ST. LOUIS	ST. LOUIS
PLANT NAME	GRISSO GASOLINE PLANT	GASOLINE PLANT	MAGNOLIA GASOLINE PLANT
LOCATION	PLANT INLET	PLANT DISCHARGE	PLANT INLET
OWNER	CARTER OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
SAMPLED	04/27/29	04/24/29	04/24/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.5	51.7	63.2
ETHANE	45.1	38.3	24.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.9	8.6	11.6
OXYGEN	0.9	1.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.08	0.06	0.07
HEATING VALUE*	1249	1210	1081
SPECIFIC GRAVITY	0.829	0.788	0.729

	INDEX 595 SAMPLE 5532	INDEX 596 SAMPLE 5588	INDEX 597 SAMPLE 5707
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	STRAIGHT COMPRESSOR STA.	TYRONE GASOLINE PLANT	HOOKER GASOLINE PLANT
LOCATION	26 IN. OUTLET	12 IN. OUTLET	PLANT INLET
OWNER	CITIES SERVICE OIL CO.	HUGOTON-PLAINS GAS & OIL CO.	DORCHESTER CORP.
SAMPLED	08/13/53	01/15/54	10/14/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	232
FLOW,MCFD	NOT GIVEN	NOT GIVEN	65000
COMPONENT, MOLE PCT			
METHANE	74.8	74.6	76.0
ETHANE	7.0	4.1	5.9
PROPANE	3.8	2.3	3.3
N-BUTANE	1.0	0.6	0.9
ISOBUTANE	0.4	0.2	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	12.1	17.2	12.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.37	0.56	0.40
HEATING VALUE*	1052	929	1030
SPECIFIC GRAVITY	0.709	0.687	0.697

	INDEX 598 SAMPLE 5708	INDEX 599 SAMPLE 5749	INDEX 600 SAMPLE 5750
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	HOOKER GASOLINE PLANT	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	PLANT OUTLET	OKLAHOMA 24 IN. LINE	OKLAHOMA 12 IN. LINE
OWNER	DORCHESTER CORP.	HUGOTON-PLAINS GAS & OIL CO.	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	10/14/54	01/07/55	01/07/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	680	NOT GIVEN	NOT GIVEN
FLOW,MCFD	50000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.0	75.8	75.2
ETHANE	6.3	5.8	4.6
PROPANE	1.8	3.2	2.3
N-BUTANE	0.3	0.9	0.7
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	13.7	12.7	15.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.42	0.40	0.50
HEATING VALUE*	960	1033	959
SPECIFIC GRAVITY	0.659	0.702	0.688

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 601 SAMPLE 5752	INDEX 602 SAMPLE 5753	INDEX 603 SAMPLE 6713
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	HOOD NO. 1	CLANCY NO. 1 WELL	STA. IN SEC.19,T6N,R19ECM
LOCATION	SEC. 16, T6N, R19ECM	SEC. 15, T6N, R18ECM	12 IN. LINE
OWNER	HUGOTON-PLAINS GAS & OIL CO.	HUGOTON-PLAINS GAS & OIL CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	01/07/55	01/07/55	07/17/58
FORMATION	PERM-CHASE GROUP	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	780
FLOW,MCFD	NOT GIVEN	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	75.1	75.3	86.6
ETHANE	3.8	3.8	5.4
PROPANE	0.9	1.8	3.3
N-BUTANE	0.2	0.5	0.9
ISOBUTANE	TRACE	0.2	0.5
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	20.3	17.2	2.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.70	0.60	0.20
HEATING VALUE*	840	915	1129
SPECIFIC GRAVITY	0.661	0.675	0.657

	INDEX 604 SAMPLE 6714	INDEX 605 SAMPLE 6716	INDEX 606 SAMPLE 6717
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	STA. IN SEC.19,T6N,R19ECM	STA. IN SEC.8,T4N,R17ECM	STA. IN SEC.8,T4N,R17ECM
LOCATION	8 IN. LINE	26 IN. LINE	20 IN. LINE
OWNER	KANSAS-NEBRASKA NAT. GAS CO.	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	07/17/58	07/17/58	07/17/58
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	780	670	NOT GIVEN
FLOW,MCFD	10000	90000	50000
COMPONENT, MOLE PCT			
METHANE	74.8	71.8	68.5
ETHANE	5.3	6.1	6.0
PROPANE	2.9	3.4	3.4
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.6	15.5	18.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.50	0.50	0.60
HEATING VALUE*	998	1014	973
SPECIFIC GRAVITY	0.700	0.724	0.734

	INDEX 607 SAMPLE 6718	INDEX 608 SAMPLE 6723	INDEX 609 SAMPLE 6724
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	STA. IN SEC.8,T4N,R17ECM	STA. IN SEC.11,T6N,R18ECM	STA. IN SEC.11,T6N,R18ECM
LOCATION	26 IN. LINE	12 IN. LINE	12 & 24 IN. LINES
OWNER	NATURAL GAS PL CO OF AMERICA	HUGOTON PLAINS OIL & GAS CO.	HUGOTON PLAINS OIL & GAS CO.
SAMPLED	07/17/58	07/16/58	07/16/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	260	260
FLOW,MCFD	40000	13000	55000
COMPONENT, MOLE PCT			
METHANE	76.0	77.9	75.4
ETHANE	6.4	4.6	5.6
PROPANE	3.5	2.1	3.0
N-BUTANE	1.0	0.7	0.8
ISOBUTANE	0.6	0.3	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0	0.1	0.1
NITROGEN	11.5	13.3	13.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.50	0.40
HEATING VALUE*	1057	978	1005
SPECIFIC GRAVITY	0.705	0.676	0.694

	INDEX 610 SAMPLE 6909	INDEX 611 SAMPLE 7348	INDEX 612 SAMPLE 7349
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	GATHERING SYSTEM	STRAIGHT COMPRESSOR STA.	STRAIGHT COMPRESSOR STA.
LOCATION	12 & 24 IN.	26 IN. DISCHARGE	20 IN. INLET
OWNER	REPUBLIC NATURAL GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	12/17/58	01/22/60	01/22/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	749	239
FLOW,MCFD	NOT GIVEN	165000	8000
COMPONENT, MOLE PCT			
METHANE	78.6	78.8	74.7
ETHANE	6.6	6.4	6.4
PROPANE	3.9	3.5	3.4
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	11.8	12.7	12.9
OXYGEN	TRACE	0.0	TRACE
ARGON	0.5	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.30	0.40	0.40
HEATING VALUE*	1047	1029	1026
SPECIFIC GRAVITY	0.719	0.701	0.701

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 613 SAMPLE 7350	INDEX 614 SAMPLE 7351	INDEX 615 SAMPLE 13230
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
PLANT NAME	STRAIGHT COMPRESSOR STA.	STRAIGHT COMPRESSOR STA.	BAKER COMPRESSOR STATION
LOCATION	20 & 22 IN. LOOP FROM THE S	20 IN. INLET	NOT GIVEN
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	01/22/60	01/22/60	06/05/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	239	243	160
FLOW,MCFD	30000	85000	11000
COMPONENT, MOLE PCT			
METHANE	74.8	74.3	76.4
ETHANE	6.4	6.4	5.6
PROPANE	3.6	3.5	2.8
N-BUTANE	1.0	1.0	0.7
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	12.4	13.0	13.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.40	0.43
HEATING VALUE*	1051	1031	1006
SPECIFIC GRAVITY	0.711	0.705	0.689

	INDEX 616 SAMPLE 15651	INDEX 617 SAMPLE 6393	INDEX 618 SAMPLE 8084
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	WOODS
FIELD	HUGOTON, OKLAHOMA	NOT GIVEN	NOT GIVEN
PLANT NAME	BAKER COMPRESSOR STA.	STRAIGHT COMPRESSOR STA.	PIPELINE SAMPLE
LOCATION	26 IN. MAINLINE	INLET	ALVA, OKLAHOMA
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.
SAMPLED	06/18/79	08/20/57	07/19/61
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	607	NOT GIVEN	300
FLOW,MCFD	96000	NOT GIVEN	100000
COMPONENT, MOLE PCT			
METHANE	75.0	75.5	88.1
ETHANE	6.2	6.5	5.2
PROPANE	2.7	3.6	2.1
N-BUTANE	0.7	1.0	0.7
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	14.0	11.8	2.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.45	0.35	0.10
HEATING VALUE*	1000	1052	1104
SPECIFIC GRAVITY	0.695	0.706	0.641

	INDEX 619 SAMPLE 14834	INDEX 620 SAMPLE 14841	INDEX 621 SAMPLE 10378
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ELK
FIELD	INDIANA, ARMSTRONG & CLARION	SAGAMORE, COCHRAN MILLS,ETAL	ELK COUNTY
PLANT NAME	VALLEY COMPRESSOR STA.	CROOKED CREEK COMPRESSOR STA	ROYSTONE STATION
LOCATION	20 IN. DISCHARGE	8 IN. DISCHARGE	8 IN. LINE J.
OWNER	PEOPLES NATURAL GAS CO.	EQUITABLE GAS CO.	PENNSYLVANIA GAS CO.
SAMPLED	10/25/76	10/25/76	01/27/66
FORMATION	DEVO-BRADFORD	NOT GIVEN	PENN-KANE & DEVO-ELK
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	252	34	40
FLOW,MCFD	25000	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	94.0	84.5
ETHANE	3.2	4.0	9.7
PROPANE	0.6	0.8	3.2
N-BUTANE	0.1	0.2	0.9
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.7	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.08	0.09	0.07
HEATING VALUE*	1048	1064	1181
SPECIFIC GRAVITY	0.584	0.593	0.669

	INDEX 622 SAMPLE 14827	INDEX 623 SAMPLE 14844	INDEX 624 SAMPLE 10474
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	INDIANA	MCKEAN
FIELD	WAYNESBURG	INDIANA & JEFFERSON COUNTY	LUDLOW
PLANT NAME	HUFFMAN FARM METER	ROCHESTER MILLS COMP. STA.	ROYSTONE STATION
LOCATION	10 IN. AT METER STATION	8 IN. DISCHARGE	8 IN. LINE
OWNER	COLUMBIA GAS TRANSMISSION	CONSOLIDATED GAS SUPPLY CORP	PENNSYLVANIA GAS CO.
SAMPLED	10/22/76	10/25/76	03/22/66
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-COOPER & BALLTOWN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	15	675	10
FLOW,MCFD	9	17000	500
COMPONENT, MOLE PCT			
METHANE	86.8	95.7	67.4
ETHANE	6.8	3.0	14.6
PROPANE	2.3	0.4	7.4
N-BUTANE	0.7	0.1	2.8
ISOBUTANE	0.4	0.1	1.2
N-PENTANE	0.3	TRACE	0.6
ISOPENTANE	0.2	0.0	0.9
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.7
NITROGEN	1.9	0.4	3.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.14	0.07	0.10
HEATING VALUE*	1143	1045	1384
SPECIFIC GRAVITY	0.658	0.579	0.832

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 625 SAMPLE 358	INDEX 626 SAMPLE 359	INDEX 627 SAMPLE 1991
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	VENANGO	VENANGO	VENANGO
FIELD	OIL CITY	OIL CITY	PEW GASOLINE PLANT
PLANT NAME	HAMPTON STATION	STRONG STATION	CRAWFORD LINE
LOCATION	PLANT INLET	PLANT INLET	MCCALLMONT-CRAWFORD LINE
OWNER	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
SAMPLED	06/15/20	06/15/20	03/20/30
FORMATION	DEVO-SPEECHLEY	DEVO-SPEECHLEY	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	40	40	165
FLOW,MCFD	100000	100000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	66.8	84.8
ETHANE	28.3	28.6	14.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.4	3.3	0.6
OXYGEN	1.1	1.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.13	0.11	0.12
HEATING VALUE*	1176	1189	1115
SPECIFIC GRAVITY	0.719	0.716	0.631

	INDEX 628 SAMPLE 14460	INDEX 629 SAMPLE 11918	INDEX 630 SAMPLE 11915
STATE	SOUTH DAKOTA	TENNESSEE	TENNESSEE
COUNTY	BUTTE	HAYWOOD	MACON
FIELD	BELL CREEK, RECLUSE, UTE	GULF COAST AREA	GULF COAST AREA
PLANT NAME	BELLE FOURCHE COMPRESSOR STA	NEAR BROWNSVILLE TENN.	HARTSVILLE COMPRESSOR STA.
LOCATION	NOT GIVEN	2-30 IN. LINES	NO.100-30 IN. LINE
OWNER	MONTANA-DAKOTA UTILITIES CO.	MICHIGAN WISCONSIN PL CO.	COLUMBIA GULF TRANSMISSION
SAMPLED	09/09/75	06/04/69	06/05/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	250	300
PRESSURE,PSIG	400	840	700
FLOW,MCFD	15000	800000	500000
COMPONENT, MOLE PCT			
METHANE	82.0	94.4	96.1
ETHANE	8.8	3.4	2.3
PROPANE	0.5	0.7	0.2
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	6.8	0.5	0.5
OXYGEN	1.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.9
HELIUM	0.04	0.01	TRACE
HEATING VALUE*	1005	1051	1020
SPECIFIC GRAVITY	0.646	0.592	0.579

	INDEX 631 SAMPLE 11916	INDEX 632 SAMPLE 11917	INDEX 633 SAMPLE 11920
STATE	TENNESSEE	TENNESSEE	TENNESSEE
COUNTY	MACON	SUMNER	WILSON
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
PLANT NAME	HARTSVILLE COMPRESSOR STA.	PORTLAND, TENN. STA. 87	GLADEVILLE COMPRESSOR STA.
LOCATION	NO.200-30 IN. LINE	2-24,26,30&36 IN. LINES	3-30 IN. LINES
OWNER	COLUMBIA GULF TRANSMISSION	TENNESSEE GAS PIPELINE CO.	TEXAS EASTERN TRANSMISSION
SAMPLED	06/05/69	06/05/69	06/05/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	300	300
PRESSURE,PSIG	700	750	930
FLOW,MCFD	720000	2400000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.2	94.4	95.8
ETHANE	2.6	3.0	2.3
PROPANE	0.3	1.1	0.3
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.6	0.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1029	1055	1026
SPECIFIC GRAVITY	0.576	0.595	0.582

	INDEX 634 SAMPLE 2279	INDEX 635 SAMPLE 15176	INDEX 636 SAMPLE 8166
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	BRAZORIA	BROWN
FIELD	BOGGY CREEK	OYSTER CREEK	BROWNWOOD AREA
PLANT NAME	GASOLINE ABSORPTION	NOT GIVEN	STA. IN BROWNWOOD AREA
LOCATION	RESIDUE GAS	NOT GIVEN	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	HILLIARD OIL & GAS, INC.	LONE STAR GAS CO.
SAMPLED	02/09/31	12/27/77	08/12/61
FORMATION	NOT GIVEN	OLIG-FRIO	NOT GIVEN
GEOLOGIC PROVINCE CODE	260	220	425
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	20
FLOW,MCFD	3000	2030	1200
COMPONENT, MOLE PCT			
METHANE	81.6	95.7	77.3
ETHANE	12.9	2.3	8.1
PROPANE	---	0.7	5.6
N-BUTANE	---	0.2	1.0
ISOBUTANE	---	0.2	0.7
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	3.6	0.4	7.8
OXYGEN	1.2	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.4
HELIUM	TRACE	TRACE	0.27
HEATING VALUE*	1058	1056	1114
SPECIFIC GRAVITY	0.687	0.589	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 637 SAMPLE 10891	INDEX 638 SAMPLE 2846	INDEX 639 SAMPLE 5443
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	CARSON	CARSON
FIELD	VARIOUS	PANHANDLE W	PANHANDLE W
PLANT NAME	NOT GIVEN	PIPE LINE SAMPLE	HAIDUK COMPRESSOR STA.
LOCATION	NOT GIVEN	12 IN. LINE-NE OF WHITE DEER	NOT GIVEN
OWNER	GULF GAS CO.	NORTHERN NATURAL GAS CO.	PANOMA CORP.
SAMPLED	02/28/67	09/20/40	04/16/53
FORMATION	-COMMINGLED	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	153
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.9	69.5	80.5
ETHANE	10.6	19.0	6.0
PROPANE	6.1	---	3.4
N-BUTANE	1.3	---	1.1
ISOBUTANE	0.6	---	0.5
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.7	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	10.0	10.4	7.2
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE	0.0	---	TRACE
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.22	0.46	0.22
HEATING VALUE*	1160	1045	1101
SPECIFIC GRAVITY	0.758	0.693	0.688

	INDEX 640 SAMPLE 5444	INDEX 641 SAMPLE 5445	INDEX 642 SAMPLE 5446
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	MCCONNEL COMPRESSOR STA.	BOBBITT COMPRESSOR STA.	CARGRAY PLANT
LOCATION	INLET	INLET	NOT GIVEN
OWNER	PANOMA CORP.	PANOMA CORP.	PANOMA CORP.
SAMPLED	04/16/53	04/16/53	04/16/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	102	169	290
FLOW,MCFD	35000	NOT GIVEN	90000
COMPONENT, MOLE PCT			
METHANE	80.7	76.6	79.6
ETHANE	6.2	5.2	5.9
PROPANE	3.7	3.4	3.4
N-BUTANE	1.3	1.1	1.1
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	6.3	11.8	8.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.19	0.49	0.28
HEATING VALUE*	1133	1052	1098
SPECIFIC GRAVITY	0.696	0.704	0.695

	INDEX 643 SAMPLE 5538	INDEX 644 SAMPLE 6501	INDEX 645 SAMPLE 6746
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SKELLYTOWN COMPRESSOR STA.	PIPELINE SAMPLE	HAIDUK STATION
LOCATION	24 IN. OUTLET	NOT GIVEN	24 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	J. M. HUBER CORP.	NORTHERN NATURAL GAS CO.
SAMPLED	08/12/53	02/07/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	210
FLOW,MCFD	NOT GIVEN	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	79.9	72.4	80.8
ETHANE	6.7	4.8	6.4
PROPANE	3.4	2.5	3.5
N-BUTANE	0.3	0.7	1.1
ISOBUTANE	0.2	0.4	0.7
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	8.9	16.7	6.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.1
HELIUM	0.30	1.20	0.20
HEATING VALUE*	1039	948	1134
SPECIFIC GRAVITY	0.669	0.703	0.697

	INDEX 646 SAMPLE 6747	INDEX 647 SAMPLE 6748	INDEX 648 SAMPLE 6749
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	BOBBITT STATION	MCCONNELL PLANT	STA. IN SEC.92,BLK.4,I&GN
LOCATION	24 IN. DISCHARGE	20 IN. DISCHARGE	8 IN. LINE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/28/58	07/22/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	210	210	215
FLOW,MCFD	16000	19000	4000
COMPONENT, MOLE PCT			
METHANE	76.3	81.6	78.6
ETHANE	9.4	6.1	6.8
PROPANE	3.2	3.4	4.0
N-BUTANE	1.1	1.3	1.5
ISOBUTANE	0.6	0.7	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.5	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	12.0	5.5	6.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.50	0.20	0.30
HEATING VALUE*	1050	1141	1153
SPECIFIC GRAVITY	0.705	0.695	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 649 SAMPLE 6750	INDEX 650 SAMPLE 6751	INDEX 651 SAMPLE 7135
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SKELLEYTOWN COMPRESSOR STA.	SKELLEYTOWN COMPRESSOR STA.	NOT GIVEN
LOCATION	20 IN. LINE	24 IN. DISCHARGE	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	J. M. HUBER CORP.
SAMPLED	07/22/58	07/22/58	06/25/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	215	425	NOT GIVEN
FLOW,MCFD	73000	185000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	80.9	77.1
ETHANE	9.8	8.3	6.4
PROPANE	4.0	3.2	3.7
N-BUTANE	0.2	0.2	1.3
ISOBUTANE	0.2	0.1	0.7
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.1	0.2	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.3
NITROGEN	5.8	6.7	8.8
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.20	0.20	0.30
HEATING VALUE*	1100	1070	1109
SPECIFIC GRAVITY	0.676	0.664	0.713

	INDEX 652 SAMPLE 7382	INDEX 653 SAMPLE 7950	INDEX 654 SAMPLE 7951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	POWELL METER STATION	ROXANA GATE	BENNETT,SEC.7,BLK.S,H&GN SUR
LOCATION	24 IN. LINE	SEC. 40, BLK. 4, I&GN SUR.	8 IN.
OWNER	COLORADO INTERSTATE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	02/09/60	05/08/61	05/08/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.7	79.0	75.4
ETHANE	6.3	6.2	5.8
PROPANE	3.6	3.8	3.2
N-BUTANE	1.2	1.2	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	10.8	7.9	12.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.40	0.30	0.80
HEATING VALUE*	1076	1109	1023
SPECIFIC GRAVITY	0.704	0.702	0.700

	INDEX 655 SAMPLE 7952	INDEX 656 SAMPLE 7953	INDEX 657 SAMPLE 8000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	DEAHL, SEC.7,BLK.S,H&GN SUR.	STA. IN SEC.39,BLK.5,I&GN	STA. IN SEC.34,BLK.4,I&GN
LOCATION	12 IN.	END OF LOOP 16 IN.	20 IN. MAINLINE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	05/08/61	05/08/61	06/01/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	147
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	77.5	79.1
ETHANE	6.3	6.1	6.3
PROPANE	3.5	3.3	3.5
N-BUTANE	1.2	1.1	1.2
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.8	9.9	8.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.50	0.60	0.37
HEATING VALUE*	1081	1068	1101
SPECIFIC GRAVITY	0.708	0.698	0.697

	INDEX 658 SAMPLE 8001	INDEX 659 SAMPLE 8201	INDEX 660 SAMPLE 8202
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.44,BLK.5,I&GN	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	26 IN. MAINLINE DRIP	NOT GIVEN	SEC. 72, BLK. 7, I&GN SUR.
OWNER	CITIES SERVICE GAS CO.	NORTHERN NATURAL GAS CO.	CONSOLIDATED GAS & EQUIP. CO
SAMPLED	06/01/61	09/22/61	09/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	147	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	75.7	61.9
ETHANE	6.1	5.1	5.6
PROPANE	3.3	2.9	4.1
N-BUTANE	1.1	1.1	1.3
ISOBUTANE	0.7	0.6	0.8
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.6	12.9	23.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.1	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.51	0.56	1.19
HEATING VALUE*	1083	1022	940
SPECIFIC GRAVITY	0.706	0.703	0.772

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 661 SAMPLE 8204	INDEX 662 SAMPLE 8206	INDEX 663 SAMPLE 8367
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.24,BLK.7,I&GN	PIPELINE SAMPLE	BOBBITT STATION
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	NATURAL GAS PL CO OF AMERICA	CONSOLIDATED GAS & EQUIP. CO	NORTHERN NATURAL GAS CO.
SAMPLED	09/22/61	09/22/61	01/17/62
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.5	59.7	75.9
ETHANE	3.4	8.0	4.9
PROPANE	2.0	6.7	3.1
N-BUTANE	0.7	2.2	1.1
ISOBUTANE	0.5	1.2	0.6
N-PENTANE	0.1	0.5	0.2
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	28.5	19.4	13.0
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	1.42	0.97	0.57
HEATING VALUE*	804	1098	1129
SPECIFIC GRAVITY	0.734	0.819	0.703

	INDEX 664 SAMPLE 8467	INDEX 665 SAMPLE 8472	INDEX 666 SAMPLE 8473
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	SEC. 63, BLK. 7, I&GN SUR.	SEC. 63, BLK. 7, I&GN SUR.	SEC. 72, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
SAMPLED	03/26/62	03/26/62	03/26/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	61.5	62.1
ETHANE	6.6	7.9	5.5
PROPANE	5.4	6.1	4.2
N-BUTANE	1.7	1.9	1.4
ISOBUTANE	0.9	1.2	0.7
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.5	0.4	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	24.3	18.6	23.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	1.23	0.92	1.17
HEATING VALUE*	991	1095	961
SPECIFIC GRAVITY	0.802	0.811	0.773

	INDEX 667 SAMPLE 8491	INDEX 668 SAMPLE 8492	INDEX 669 SAMPLE 8509
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	BOBBITT COMPRESSOR STA.	BOBBITT COMPRESSOR STA.	HAIDUK COMPRESSOR STA.
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	DORCHESTER GAS PROD. CO.
SAMPLED	04/11/62	04/11/62	04/13/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	75.3	78.3
ETHANE	5.5	5.2	6.1
PROPANE	3.9	3.3	3.9
N-BUTANE	1.5	1.1	1.8
ISOBUTANE	0.7	0.5	0.8
N-PENTANE	0.3	0.2	0.6
ISOPENTANE	0.5	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	12.5	13.1	6.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.44	0.59	0.22
HEATING VALUE*	1074	1026	1189
SPECIFIC GRAVITY	0.725	0.705	0.736

	INDEX 670 SAMPLE 8511	INDEX 671 SAMPLE 9232	INDEX 672 SAMPLE 7949
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
PLANT NAME	PIPELINE SAMPLE	FRITCH STA. 111	STA. IN SEC.35,BLK.5,I&GN
LOCATION	BOBBITT & HAIDUK STATIONS	INLET	16 IN. LINE
OWNER	DORCHESTER GAS PROD. CO.	NATURAL GAS PL CO OF AMERICA	CITIES SERVICE GAS CO.
SAMPLED	04/23/62	01/21/64	05/08/61
FORMATION	NOT GIVEN	NOT GIVEN	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	223	185	NOT GIVEN
FLOW,MCFD	33700	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	62.9	78.5
ETHANE	5.6	4.0	8.7
PROPANE	3.4	3.0	3.6
N-BUTANE	1.1	1.2	1.2
ISOBUTANE	0.7	0.3	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.1	25.9	5.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.43	1.40	0.60
HEATING VALUE*	1076	891	1148
SPECIFIC GRAVITY	0.703	0.754	0.703

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 673 SAMPLE 8306	INDEX 674 SAMPLE 12444	INDEX 675 SAMPLE 8158
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASTRO	CHEROKEE	COKE
FIELD	NOT GIVEN	TECULA	NOT GIVEN
PLANT NAME	24 IN PIPELINE	NOT GIVEN	JAMISON PLANT
LOCATION	DIMMITT TO DUMAS	NOT GIVEN	DISCHARGE GAS
OWNER	EL PASO NATURAL GAS CO.	ARCADIA REFINING CO.	LONE STAR GAS CO.
SAMPLED	11/30/61	10/14/70	08/11/61
FORMATION	NOT GIVEN	CRET-EAGLE FORD	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	260	430
PRESSURE,PSIG	339	NOT GIVEN	635
FLOW,MCFD	78000	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	78.3	92.9	70.9
ETHANE	7.2	2.6	16.9
PROPANE	1.2	1.0	5.2
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	0.0	0.2	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	TRACE	0.2	TRACE
NITROGEN	12.5	2.2	5.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.03	0.03	0.10
HEATING VALUE*	969	1053	1201
SPECIFIC GRAVITY	0.661	0.606	0.735

	INDEX 676 SAMPLE 7985	INDEX 677 SAMPLE 12631	INDEX 678 SAMPLE 8165
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	SANTA ANNA	SANTA ANNA	SANTA ANNA N
PLANT NAME	PIPELINE SAMPLE	COMPRESSOR STATION	PIPELINE SAMPLE
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	COLEMAN GAS CO.	LONE STAR PRODUCING CO.	LONE STAR GAS CO.
SAMPLED	05/23/61	01/14/71	08/12/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
PRESSURE,PSIG	NOT GIVEN	310	125
FLOW,MCFD	NOT GIVEN	2500	450
COMPONENT, MOLE PCT			
METHANE	80.8	79.5	70.2
ETHANE	5.9	7.5	7.9
PROPANE	1.5	2.8	4.8
N-BUTANE	0.2	0.5	1.3
ISOBUTANE	0.3	0.4	1.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	10.7	8.4	13.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.29	0.47
HEATING VALUE*	984	1056	1090
SPECIFIC GRAVITY	0.654	0.673	0.749

	INDEX 679 SAMPLE 11119	INDEX 680 SAMPLE 11120	INDEX 681 SAMPLE 11008
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CONCHO
FIELD	PAINT ROCK	PAINT ROCK	PAINT ROCK-SPECK N-SPECK S
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	J. W. OPERATING CO.	J. W. OPERATING CO.	SUNRAY DX OIL CO.
SAMPLED	09/18/67	09/18/67	06/20/67
FORMATION	PENN-STRAWN	NOT GIVEN	PENN-STRAWN & CANYON
GEOLOGIC PROVINCE CODE	410	410	410
PRESSURE,PSIG	680	600	448
FLOW,MCFD	4000	2000	10400
COMPONENT, MOLE PCT			
METHANE	75.3	75.0	77.2
ETHANE	7.4	7.4	7.8
PROPANE	3.8	4.1	2.9
N-BUTANE	1.1	1.1	0.1
ISOBUTANE	0.5	0.6	0.2
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	10.3	10.2	10.7
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.35	0.34	0.36
HEATING VALUE*	1080	1088	1011
SPECIFIC GRAVITY	0.713	0.719	0.678

	INDEX 682 SAMPLE 11121	INDEX 683 SAMPLE 11122	INDEX 684 SAMPLE 2054
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CRANE
FIELD	SPECK N	SPECK N	CRANE
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	PHILLIPS GASOLINE PLANT
LOCATION	NOT GIVEN	NOT GIVEN	RESIDUE GAS
OWNER	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.	PHILLIPS PETROLEUM CO.
SAMPLED	09/18/67	09/19/67	06/17/30
FORMATION	PENN-STRAWN & CANYON	PENN-CANYON & STRAWN	NOT GIVEN
GEOLOGIC PROVINCE CODE	410	410	430
PRESSURE,PSIG	350	600	NOT GIVEN
FLOW,MCFD	4000	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.9	69.0	42.7
ETHANE	7.8	10.0	44.1
PROPANE	4.5	6.8	---
N-BUTANE	1.3	2.3	---
ISOBUTANE	0.6	1.3	---
N-PENTANE	0.3	0.9	---
ISOPENTANE	0.3	0.6	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	0.3	0.6	---
NITROGEN	10.1	7.9	4.0
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE	0.2	0.0	---
CARBON DIOXIDE	0.6	0.6	8.9
HELIUM	0.31	0.22	0.00
HEATING VALUE*	1117	1270	1227
SPECIFIC GRAVITY	0.733	0.806	0.878

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 685 SAMPLE 8288	INDEX 686 SAMPLE 16116	INDEX 687 SAMPLE 14485
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	PUCKETT & TERRELL	WEST TEXAS AREA	WEST TEXAS FIELDS
PLANT NAME	PIPELINE SAMPLE	CRANE COMPRESSOR STA.	CRANE COMPRESSOR STA.
LOCATION	EL PASO, TEXAS	36 IN.	36 IN. LINE
OWNER	EL PASO NATURAL GAS CO.	VALERO TRANSMISSION CO.	COASTAL STATES GAS PROD. CO.
SAMPLED	11/28/61	10/21/80	10/07/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE, PSIG	780	925	875
FLOW, MCFD	104000	350000	410000
COMPONENT, MOLE PCT			
METHANE	87.2	96.4	95.7
ETHANE	1.5	1.5	1.6
PROPANE	0.6	0.2	0.2
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.6	0.8	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	8.8	1.0	1.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	933	1012	1003
SPECIFIC GRAVITY	0.663	0.583	0.582

	INDEX 688 SAMPLE 12773	INDEX 689 SAMPLE 12071	INDEX 690 SAMPLE 8150
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CULBERSON	EASTLAND
FIELD	OZONA	WEST TEXAS PERMIAN BASIN	NOT GIVEN
PLANT NAME	NOT GIVEN	GUADALUPE COMPRESSOR STA.	PUEBLO GASOLINE PLANT
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ATLANTIC RICHFIELD CO.	EL PASO NATURAL GAS CO.	LONE STAR GAS CO.
SAMPLED	04/20/71	09/30/69	08/10/61
FORMATION	PENN-CANYON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	425
PRESSURE, PSIG	NOT GIVEN	830	330
FLOW, MCFD	4500	1048000	9000
COMPONENT, MOLE PCT			
METHANE	78.5	87.0	73.8
ETHANE	10.5	7.6	13.0
PROPANE	5.8	1.7	5.7
N-BUTANE	1.6	0.3	0.6
ISOBUTANE	0.6	0.0	0.6
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.5	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	1.5	3.4	5.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.4
HELIUM	0.04	0.03	0.10
HEATING VALUE*	1256	1072	1178
SPECIFIC GRAVITY	0.732	0.628	0.725

	INDEX 691 SAMPLE 8136	INDEX 692 SAMPLE 8291	INDEX 693 SAMPLE 8292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	ECTOR	ECTOR
FIELD	SIPE SPRINGS	NOT GIVEN	NOT GIVEN
PLANT NAME	PHILLIPS X-RAY PLANT	GOLDSMITH COMPRESSOR STA.	GOLDSMITH COMPRESSOR STA.
LOCATION	INLET	12 IN. INLET	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	08/09/61	11/29/61	11/29/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	430	430
PRESSURE, PSIG	410	NOT GIVEN	522
FLOW, MCFD	7000	11000	147000
COMPONENT, MOLE PCT			
METHANE	72.4	72.1	84.0
ETHANE	13.3	2.0	11.1
PROPANE	6.7	1.0	0.9
N-BUTANE	1.7	0.1	TRACE
ISOBUTANE	0.8	TRACE	TRACE
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	4.1	6.5	3.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.10	0.04	0.05
HEATING VALUE*	1266	1119	1074
SPECIFIC GRAVITY	0.761	0.503	0.631

	INDEX 694 SAMPLE 8293	INDEX 695 SAMPLE 2055	INDEX 696 SAMPLE 7172
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ECTOR	ECTOR	ECTOR
FIELD	NOT GIVEN	PENWELL	TXL
PLANT NAME	GOLDSMITH COMPRESSOR STA.	PIPELINE SAMPLE	TXL GASOLINE PLANT
LOCATION	20 IN. LINE	SEC. 2, BLK. 35, UNIV. LAND	SEC. 17, BLK. 45, T&PRR SUR.
OWNER	EL PASO NATURAL GAS CO.	LANDRETH PRODUCTION CORP.	SHELL OIL CO.
SAMPLED	11/29/61	06/17/30	08/11/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	900		60000
COMPONENT, MOLE PCT			
METHANE	83.9	36.2	78.5
ETHANE	10.8	56.8	13.3
PROPANE	2.0	---	3.3
N-BUTANE	0.1	---	TRACE
ISOBUTANE	TRACE	---	TRACE
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.0
NITROGEN	2.7	3.2	3.8
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.2	3.3	0.8
HELIUM	0.05	0.00	0.05
HEATING VALUE*	1103	1385	1127
SPECIFIC GRAVITY	0.643	0.884	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. • SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 697 SAMPLE 14477	INDEX 698 SAMPLE 16114	INDEX 699 SAMPLE 16115
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EL PASO	EL PASO	EL PASO
FIELD	PERMIAN BASIN	PERMIAN BASIN N.	WAHA AREA S.
PLANT NAME	EL PASO COMPRESSOR STA.	EL PASO COMPRESSOR STA.	EL PASO COMPRESSOR STA.
LOCATION	A & B LINE 26 TO 30 IN.	A & B LINES	C LINE 30 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/03/75	10/22/80	10/22/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	465	465	465
PRESSURE,PSIG	550	552	812
FLOW,MCFD	1150000	1179000	623000
COMPONENT, MOLE PCT			
METHANE	90.0	91.0	96.1
ETHANE	6.3	4.8	1.4
PROPANE	1.4	1.1	0.4
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	2.0	1.7	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1068	1060	1017
SPECIFIC GRAVITY	0.612	0.605	0.583

	INDEX 700 SAMPLE 12073	INDEX 701 SAMPLE 14478	INDEX 702 SAMPLE 8137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EL PASO	EL PASO	ERATH
FIELD	WEST TEXAS & NEW MEXICO	WEST TEXAS PERMIAN BASIN	SIPE SPRINGS
PLANT NAME	EL PASO COMPRESSOR STATION	EL PASO COMPRESSOR STA.	PHILLIPS X-RAY PLANT
LOCATION	NOT GIVEN	C LINE 30 IN.	OUTLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	LONE STAR GAS CO.
SAMPLED	10/01/69	10/03/75	08/09/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	465	465	415
PRESSURE,PSIG	837	1040	410
FLOW,MCFD	1000000	564000	18000
COMPONENT, MOLE PCT			
METHANE	87.0	95.4	83.2
ETHANE	7.7	2.6	12.0
PROPANE	1.6	0.5	1.3
N-BUTANE	0.2	TRACE	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	3.2	0.9	2.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.2
HELIUM	0.03	0.02	0.10
HEATING VALUE*	1077	1029	1103
SPECIFIC GRAVITY	0.629	0.582	0.644

	INDEX 703 SAMPLE 8135	INDEX 704 SAMPLE 8154	INDEX 705 SAMPLE 2445
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ERATH	FISHER	FORT BEND
FIELD	X-RAY	ROUND TOP	THOMPSON
PLANT NAME	PHILLIPS X-RAY PLANT	CONOCO PLANT W OF HAMLIN	PIPELINE SAMPLE
LOCATION	INLET	OUTLET	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	CONTINENTAL OIL CO.	CULLEN & WEST & GULF PROD.
SAMPLED	08/09/61	08/11/61	01/06/32
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	415	430	220
PRESSURE,PSIG	420	380	NOT GIVEN
FLOW,MCFD	11000	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	74.9	88.7
ETHANE	11.5	12.8	9.2
PROPANE	4.7	3.7	---
N-BUTANE	1.1	0.5	---
ISOBUTANE	0.7	0.2	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.1	7.2	1.3
OXYGEN	TRACE	TRACE	0.5
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.10	0.20	0.00
HEATING VALUE*	1219	1117	1063
SPECIFIC GRAVITY	0.712	0.700	0.611

	INDEX 706 SAMPLE 8290	INDEX 707 SAMPLE 8289	INDEX 708 SAMPLE 6197
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GLASSCOCK	GLASSCOCK	GRAY
FIELD	NOT GIVEN	SPRABERRY	NOT GIVEN
PLANT NAME	TEX-HARVEY-JAMESON PLANT	TEX-HARVEY COMPRESSOR STA.	PAMPA GASOLINE
LOCATION	16 IN. INLET	30 IN. LINE	20 IN. INLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	11/29/61	11/28/61	12/99/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	440
PRESSURE,PSIG	830	750	NOT GIVEN
FLOW,MCFD	78000	92000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	82.6	76.9
ETHANE	11.9	10.3	5.9
PROPANE	1.8	1.8	4.3
N-BUTANE	0.1	0.1	1.7
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.3	0.0	0.4
ISOPENTANE	TRACE	TRACE	0.4
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	3.1	5.1	9.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.07	0.07	0.34
HEATING VALUE*	1093	1056	1098
SPECIFIC GRAVITY	0.645	0.641	0.710

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 709 SAMPLE 6198	INDEX 710 SAMPLE 6199	INDEX 711 SAMPLE 6201
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	PAMPA GASOLINE	ANNIE BOOSTER STA.	PIPELINE SAMPLE
LOCATION	20 IN. INLET	INLET	PIPELINE NO. 5
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	12/99/56	12/99/56	12/28/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.3	76.0	73.1
ETHANE	6.2	5.7	4.6
PROPANE	1.6	1.8	1.6
N-BUTANE	0.9	1.4	0.9
ISOBUTANE	0.7	0.3	1.0
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.7	0.7	0.7
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	6.7	12.2	16.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.19	0.40	0.61
HEATING VALUE*	1071	1034	959
SPECIFIC GRAVITY	0.671	0.707	0.707

	INDEX 712 SAMPLE 6202	INDEX 713 SAMPLE 6203	INDEX 714 SAMPLE 8824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	PAMPA GASOLINE	PIPELINE SAMPLE	COLTEXO CORP. GASOLINE PLANT
LOCATION	PIPELINE NO. 6	PIPELINE NO. 7	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	12/28/56	01/02/57	01/14/63
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN		20000
COMPONENT, MOLE PCT			
METHANE	79.8	84.9	75.0
ETHANE	6.0	5.7	8.7
PROPANE	1.9	1.4	5.8
N-BUTANE	1.3	1.1	0.7
ISOBUTANE	1.0	0.4	0.8
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	1.1	0.8	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	7.7	5.0	7.7
OXYGEN	0.0	0.0	1.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.2	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.1
HELIUM	0.21	0.14	0.09
HEATING VALUE*	1100	1084	1121
SPECIFIC GRAVITY	0.701	0.660	0.718

	INDEX 715 SAMPLE 2513	INDEX 716 SAMPLE 2601	INDEX 717 SAMPLE 2602
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
PLANT NAME	FRITCH STA.	FRITCH STA.	FRITCH STA.
LOCATION	INLET	INLET	OUTLET
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.
SAMPLED	07/12/32	01/19/33	01/19/33
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	580
FLOW,MCFD	NOT GIVEN	22500	60000
COMPONENT, MOLE PCT			
METHANE	71.2	74.4	78.0
ETHANE	21.4	17.1	13.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.8	7.2	7.9
OXYGEN	0.1	0.7	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.24	0.29	0.36
HEATING VALUE*	1105	1060	1023
SPECIFIC GRAVITY	0.691	0.674	0.655

	INDEX 718 SAMPLE 2637	INDEX 719 SAMPLE 6814	INDEX 720 SAMPLE 8348
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE E
PLANT NAME	FRITCH STA.	PIPELINE SAMPLE	MCLEAN COMPRESSOR STA.
LOCATION	INLET	PAMPA COMPOSITE SAMPLE NO. 1	20 IN.
OWNER	TEXOMA NATURAL GAS CO.	PIONEER NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	07/22/33	--/-/58	12/28/61
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	600
FLOW,MCFD	18000		28000
COMPONENT, MOLE PCT			
METHANE	72.6	84.1	83.5
ETHANE	19.9	5.9	4.2
PROPANE	---	3.0	2.4
N-BUTANE	---	0.8	0.8
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.3	0.7
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	6.9	4.5	7.4
OXYGEN	0.3	0.1	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.26	0.10	0.27
HEATING VALUE*	1092	1118	1060
SPECIFIC GRAVITY	0.683	0.672	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 721 SAMPLE 15650	INDEX 722 SAMPLE 13229	INDEX 723 SAMPLE 5529
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E & W	PANHANDLE E&W	PANHANDLE W
PLANT NAME	PAMPA COMPRESSOR STA.	PAMPA COMPRESSOR STATION	PAMPA COMPRESSOR STA.
LOCATION	20 IN.	NOT GIVEN	20 IN. OUTLET
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/16/79	06/05/72	08/14/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	350	160	NOT GIVEN
FLOW,MCFD	44000	82000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.7	77.8	78.8
ETHANE	6.4	6.1	6.4
PROPANE	4.3	4.0	3.4
N-BUTANE	1.6	1.4	1.1
ISOBUTANE	0.7	0.8	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	8.8	8.3	8.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.43	0.40	0.38
HEATING VALUE*	1116	1124	1086
SPECIFIC GRAVITY	0.713	0.713	0.693

	INDEX 724 SAMPLE 6200	INDEX 725 SAMPLE 6597	INDEX 726 SAMPLE 6652
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	PIPELINE SAMPLE	COMBS NO.67,66,68,74,75	STA. IN SEC.56,BLK.25,H&GN
LOCATION	PIPELINE NO. 4	SEC. 60, BLK. 3, H&GN SUR.	20 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	WILCOX OIL CO.	CONSOLIDATED GAS UTILITIES
SAMPLED	12/99/56	05/21/58	06/27/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	57
FLOW,MCFD	NOT GIVEN	NOT GIVEN	35000
COMPONENT, MOLE PCT			
METHANE	73.5	67.2	80.5
ETHANE	5.3	11.1	8.0
PROPANE	1.9	9.8	5.0
N-BUTANE	1.3	3.9	1.3
ISOBUTANE	0.7	1.9	0.7
N-PENTANE	0.0	0.8	0.0
ISOPENTANE	1.9	1.3	0.3
CYCLOPENTANE	0.0	0.2	0.0
HEXANES PLUS	0.0	0.7	TRACE
NITROGEN	15.1	2.9	3.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.0	TRACE
HELIUM	0.47	0.10	0.10
HEATING VALUE*	995	1463	1169
SPECIFIC GRAVITY	0.739	0.868	0.696

	INDEX 727 SAMPLE 6654	INDEX 728 SAMPLE 6655	INDEX 729 SAMPLE 6656
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.94,BLK.B-2, H&GN	STA. IN SEC.94,BLK.B-2,H&GN	STA. IN SEC.94,BLK.B-2,H&GN
LOCATION	SEC. 94, BLK. B-2, H&GN SUR.	20 IN. LINE	20 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/27/58	06/02/58	06/27/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	135	131	131
FLOW,MCFD	20000	30000	45000
COMPONENT, MOLE PCT			
METHANE	78.0	79.5	74.1
ETHANE	10.8	6.4	6.9
PROPANE	5.0	5.6	4.6
N-BUTANE	0.1	1.0	1.5
ISOBUTANE	0.1	0.6	0.9
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	5.2	8.0	10.4
OXYGEN	0.3	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.20	0.20	0.30
HEATING VALUE*	1128	1098	1124
SPECIFIC GRAVITY	0.688	0.693	0.736

	INDEX 730 SAMPLE 6658	INDEX 731 SAMPLE 6659	INDEX 732 SAMPLE 6660
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.189,BLK.B-2,H&GN	STA. IN SEC.84,BLK.B-2,H&GN	STA. IN SEC.84,BLK.B-2,H&GN
LOCATION	16 IN. LINE	16 IN. LINE	12 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/27/58	06/27/58	06/27/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	147	140	140
FLOW,MCFD	20000	15000	15000
COMPONENT, MOLE PCT			
METHANE	70.9	75.8	82.1
ETHANE	9.8	5.8	6.4
PROPANE	5.6	3.5	3.1
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	11.9	12.1	6.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.65	0.40	0.20
HEATING VALUE*	981	1068	1108
SPECIFIC GRAVITY	0.724	0.736	0.680

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 733 SAMPLE 6743	INDEX 734 SAMPLE 6745	INDEX 735 SAMPLE 6904
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	PANOMA PLANT	PAMPA PLANT	NOT GIVEN
LOCATION	WEST LINE	20 IN. DISCHARGE	SO. SYSTEM 10 IN. BLOCKGATE
OWNER	EL PASO NATURAL GAS CO.	CITIES SERVICE GAS CO.	CABOT CARBON CO.
SAMPLED	07/22/58	07/22/58	12/10/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	190	NOT GIVEN	NOT GIVEN
FLOW,MCFD	56000	115000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	79.3	66.9
ETHANE	4.5	5.6	6.6
PROPANE	2.3	3.3	4.5
N-BUTANE	0.8	1.1	1.2
ISOBUTANE	0.4	0.7	0.7
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	11.2	9.1	18.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.30	0.40	0.50
HEATING VALUE*	1016	1092	1012
SPECIFIC GRAVITY	0.677	0.644	0.752

	INDEX 736 SAMPLE 6911	INDEX 737 SAMPLE 7347	INDEX 738 SAMPLE 8027
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	PIPELINE SAMPLE	26 IN.	POINT NO. 1, NORTH 8 IN
LOCATION	SO. SYSTEM 10 IN. BLOCKGATE	SEC. 90, BLK. 3, I&GN SUR.	SEC. 3, ROCKWELL CO. SCHOOL
OWNER	CABOT CARBON CO.	CITIES SERVICE GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	12/1/58	01/20/60	06/22/61
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	151	155
FLOW,MCFD	NOT GIVEN	120100	3050
COMPONENT, MOLE PCT			
METHANE	67.3	78.6	59.0
ETHANE	6.4	6.1	9.9
PROPANE	4.3	3.3	6.7
N-BUTANE	1.1	1.0	1.8
ISOBUTANE	0.9	0.5	1.3
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	18.6	9.0	17.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.40	0.40
HEATING VALUE*	1006	1077	1102
SPECIFIC GRAVITY	0.749	0.693	0.821

	INDEX 739 SAMPLE 8028	INDEX 740 SAMPLE 8029	INDEX 741 SAMPLE 8030
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	POINT 2, 10 IN.	POINT NO. 3, 8 IN.	POINT NO.
LOCATION	SEC. 17, BLK. B-2, H&GN SUR.	SEC. 17, BLK. B-2, H&GN SUR.	POINT NO. 4, 8 IN.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/22/61	06/22/61	06/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	152	151	138
FLOW,MCFD	5550	1600	3100
COMPONENT, MOLE PCT			
METHANE	66.3	79.7	65.3
ETHANE	9.3	6.8	5.8
PROPANE	5.9	4.0	4.2
N-BUTANE	1.5	1.1	1.1
ISOBUTANE	1.1	0.8	0.8
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	14.7	6.7	21.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.30	0.20	0.60
HEATING VALUE*	1119	1120	961
SPECIFIC GRAVITY	0.778	0.694	0.752

	INDEX 742 SAMPLE 8031	INDEX 743 SAMPLE 8032	INDEX 744 SAMPLE 8033
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	POINT 5, 10 IN.	POINT NO. 6, 8 IN.	POINT NO. 7, 12 IN.
LOCATION	SEC. 198, BLK. B-2, H&GN SUR.	SEC. 168, BLK. B-2, H&GN SUR	SEC. 198, BLK. B-2, H&GN SUR
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/22/61	06/22/61	06/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	137	138	137
FLOW,MCFD	3800	1750	9080
COMPONENT, MOLE PCT			
METHANE	66.4	70.5	70.5
ETHANE	5.9	5.2	4.9
PROPANE	4.3	3.7	3.4
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.8	0.8	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	20.1	17.3	18.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.60	0.50	0.70
HEATING VALUE*	985	1003	986
SPECIFIC GRAVITY	0.750	0.731	0.730

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 745 SAMPLE 8034	INDEX 746 SAMPLE 8035	INDEX 747 SAMPLE 9237
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	POINT NO. 8, 12 IN.	POINT NO. 9, 16 IN.	PIPELINE SAMPLE
LOCATION	SEC. 199, BLK. B-2, H&GN SUR	SEC. 189, BLK. B-2, H&GN SUR	GRAY CO. CHECK
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	NATURAL GAS PL CO OF AMERICA
SAMPLED	06/22/61	06/22/61	01/27/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	135	133	155
FLOW,MCFD	10000	14000	102700
COMPONENT, MOLE PCT			
METHANE	70.5	72.4	77.6
ETHANE	4.9	5.2	7.1
PROPANE	3.3	3.6	3.6
N-BUTANE	1.1	1.1	1.4
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	18.0	15.9	8.2
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.60	0.60	0.40
HEATING VALUE*	971	998	1113
SPECIFIC GRAVITY	0.723	0.717	0.709

	INDEX 748 SAMPLE 6653	INDEX 749 SAMPLE 6204	INDEX 750 SAMPLE 6974
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	HALE
FIELD	QUINDUNO	TAYLOR SE	ANTON-IRISH
PLANT NAME	24 IN. LINE	PIPELINE SAMPLE	ANTON-IRISH PLANT
LOCATION	SEC. 162, BLK. 3, H&GN SUR.	PIPELINE NO. 8	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.
SAMPLED	06/27/58	12/28/56	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	435
PRESSURE,PSIG	110	NOT GIVEN	NOT GIVEN
FLOW,MCFD	15000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.0	81.0	68.1
ETHANE	8.8	6.2	7.6
PROPANE	4.8	1.6	4.3
N-BUTANE	1.4	0.0	1.0
ISOBUTANE	0.9	1.8	0.0
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.4	0.3	0.6
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	4.7	8.2	15.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	TRACE
HYDROGEN SULFIDE	0.0	0.0	TRACE
CARBON DIOXIDE	0.1	0.5	3.1
HELIUM	0.10	0.21	0.20
HEATING VALUE*	1199	1047	997
SPECIFIC GRAVITY	0.723	0.671	0.753

	INDEX 751 SAMPLE 8138	INDEX 752 SAMPLE 15421	INDEX 753 SAMPLE 15424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HAMILTON	HANSFORD	HANSFORD
FIELD	ENERGY, POTTSVILLE & ETC.	CARTHAGE GAS AREA	COMPOSITE
PLANT NAME	STA. W OF POTTSVILLE TEX.	SHER-MAN	SHER-MAN
LOCATION	LINE X	24 IN. INLET	20 IN. DISCHARGE
OWNER	LONE STAR GAS CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	08/09/61	10/17/78	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	415	360	360
PRESSURE,PSIG	340	200	350
FLOW,MCFD	1950	16900	80000
COMPONENT, MOLE PCT			
METHANE	89.1	70.3	84.1
ETHANE	4.5	6.8	5.6
PROPANE	0.8	4.8	1.3
N-BUTANE	0.3	1.5	0.0
ISOBUTANE	0.4	0.7	0.0
N-PENTANE	TRACE	0.4	0.0
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	4.2	14.0	8.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.62	0.20
HEATING VALUE*	1045	1081	986
SPECIFIC GRAVITY	0.622	0.748	0.632

	INDEX 754 SAMPLE 15425	INDEX 755 SAMPLE 5696	INDEX 756 SAMPLE 5697
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	COMPOSITE	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SHER-MAN	SHER-MAN	SHER-MAN
LOCATION	24 IN. DISCHARGE	LINE G	LINE H
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/17/78	10/12/54	10/12/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	200	220	220
FLOW,MCFD	155000	20000	15000
COMPONENT, MOLE PCT			
METHANE	84.7	74.9	68.7
ETHANE	4.8	5.9	5.9
PROPANE	1.3	3.2	3.7
N-BUTANE	0.0	0.8	1.0
ISOBUTANE	0.0	0.6	0.6
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	9.0	13.9	18.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	0.46	0.72
HEATING VALUE*	978	1017	979
SPECIFIC GRAVITY	0.630	0.702	0.733

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 757 SAMPLE 5699	INDEX 758 SAMPLE 6266	INDEX 759 SAMPLE 6268
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SHER-HAN PLANT	E.G.HILL BOOSTER STA.	SHER-HAN PLANT
LOCATION	LINE J	24 IN. INLET	LINE H
OWNER	PHILLIPS PETROLEUM CO.	MICHIGAN WISCONSIN PL CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/12/54	03/12/57	03/12/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	255	NOT GIVEN	NOT GIVEN
FLOW,MCFD	40000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	72.8	68.7
ETHANE	6.0	6.8	6.2
PROPANE	3.6	3.4	3.6
N-BUTANE	1.0	0.5	1.1
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	15.6	15.3	18.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.58	0.70	0.67
HEATING VALUE*	1013	979	980
SPECIFIC GRAVITY	0.723	0.699	0.731

	INDEX 760 SAMPLE 6269	INDEX 761 SAMPLE 6270	INDEX 762 SAMPLE 6271
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SHER-HAN PLANT	SHER-HAN PLANT	SHER-HAN PLANT
LOCATION	LINE J	LINE L	LINE G
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	03/12/57	03/12/57	03/12/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	70.5	75.1
ETHANE	6.3	6.7	6.4
PROPANE	3.6	3.9	3.5
N-BUTANE	1.1	1.2	1.0
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.7	15.5	12.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.63	0.77	0.45
HEATING VALUE*	1014	1028	1037
SPECIFIC GRAVITY	0.725	0.731	0.702

	INDEX 763 SAMPLE 6272	INDEX 764 SAMPLE 6273	INDEX 765 SAMPLE 6689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SHER-HAN PLANT	SHER-HAN PLANT	SHER-HAN PLANT
LOCATION	LINES A-F	LINE L-1	16 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	03/12/57	03/12/57	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	190
FLOW,MCFD	NOT GIVEN	NOT GIVEN	40000
COMPONENT, MOLE PCT			
METHANE	75.5	70.5	76.1
ETHANE	6.6	6.5	6.2
PROPANE	3.5	3.8	3.4
N-BUTANE	1.0	1.2	1.0
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	11.8	15.9	11.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.74	0.40
HEATING VALUE*	1059	1022	1050
SPECIFIC GRAVITY	0.710	0.732	0.704

	INDEX 766 SAMPLE 6690	INDEX 767 SAMPLE 6692	INDEX 768 SAMPLE 6694
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SHER-HAN PLANT	SHER-HAN PLANT	SHER-HAN PLANT
LOCATION	PL. DISCHARGE	24 IN.	24 IN. G LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	200	380	210
FLOW,MCFD	355000	75000	31000
COMPONENT, MOLE PCT			
METHANE	73.1	75.5	75.5
ETHANE	6.4	6.4	6.1
PROPANE	3.6	3.4	3.4
N-BUTANE	0.6	1.0	1.0
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	14.9	12.0	12.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.70	0.40	0.40
HEATING VALUE*	983	1048	1040
SPECIFIC GRAVITY	0.698	0.705	0.705

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 769 SAMPLE 6698	INDEX 770 SAMPLE 13792	INDEX 771 SAMPLE 15423
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS & OKLAHOMA
PLANT NAME	SHER-MAN PLANT	SHERMAN-HANSFORD PLANT	SHER-MAN PLANT
LOCATION	16 IN. M LINE	PLANT INLET	20 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	10/03/73	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	210	200	350
FLOW,MCFD	11000	NOT GIVEN	60000
COMPONENT, MOLE PCT			
METHANE	69.2	72.6	77.6
ETHANE	5.9	6.5	7.1
PROPANE	3.7	4.2	4.8
N-BUTANE	1.1	1.2	1.2
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	16.1	13.4	7.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.70	0.64	0.27
HEATING VALUE*	987	1048	1135
SPECIFIC GRAVITY	0.733	0.721	0.713

	INDEX 772 SAMPLE 13419	INDEX 773 SAMPLE 12129	INDEX 774 SAMPLE 15422
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON,TEXAS & OKLAHOMA	PANHANDLE W	TEX. DEEP & OKLAHOMA HUGOTON
PLANT NAME	SHERMAN HELIUM PLANT	HELIUM PLANT	SHER-MAN PLANT
LOCATION	INLET	INLET	24 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/04/72	12/03/69	10/17/78
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	365	NOT GIVEN	200
FLOW,MCFD	200000	NOT GIVEN	42000
COMPONENT, MOLE PCT			
METHANE	71.6	71.5	82.6
ETHANE	7.0	6.3	8.1
PROPANE	4.3	4.2	4.7
N-BUTANE	1.3	1.1	1.2
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	13.8	14.7	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.55	0.71	0.09
HEATING VALUE*	1058	1035	1201
SPECIFIC GRAVITY	0.732	0.729	0.693

	INDEX 775 SAMPLE 2071	INDEX 776 SAMPLE 2296	INDEX 777 SAMPLE 2378
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARTLEY	HARTLEY
FIELD	SUGARLAND	PANHANDLE W	PANHANDLE W
PLANT NAME	SUGARLAND COMPRESSOR	CHANNING REGULATOR STA.	CHANNING REGULATOR STA.
LOCATION	INLET	INLET	CHANNING, TEXAS
OWNER	HUMBLE OIL & REFINING CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	06/19/30	02/06/31	08/26/31
FORMATION	OLIG-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	435	435
PRESSURE,PSIG	1300	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	60	30
COMPONENT, MOLE PCT			
METHANE	77.6	69.1	58.5
ETHANE	21.1	11.3	18.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	17.5	21.3
OXYGEN	0.2	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.6	0.1
HELIUM	0.02	1.36	1.28
HEATING VALUE*	1164	902	928
SPECIFIC GRAVITY	0.668	0.683	0.731

	INDEX 778 SAMPLE 2597	INDEX 779 SAMPLE 2627	INDEX 780 SAMPLE 11854
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	CHANNING REGULATOR STA.	PIPELINE SAMPLE	STATION NO. 3
LOCATION	NOT GIVEN	TOWN GATE, CHANNING	SEC. 6, BLK. 2, GAM SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	01/20/33	07/21/33	05/09/69
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	50	15	5000
COMPONENT, MOLE PCT			
METHANE	63.5	62.8	70.3
ETHANE	14.4	16.2	5.8
PROPANE	---	---	3.2
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	20.0	18.8	16.4
OXYGEN	0.3	0.3	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.5	0.7	0.9
HELIUM	1.27	1.18	0.87
HEATING VALUE*	901	926	991
SPECIFIC GRAVITY	0.709	0.716	0.732

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 781 SAMPLE 6980	INDEX 782 SAMPLE 6931	INDEX 783 SAMPLE 2063
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOCKLEY	HOCKLEY	HOWARD
FIELD	LEVELLAND	SLAUGHTER	CHALK
PLANT NAME	LEVELLAND GASOLINE PLANT	SLAUGHTER GASOLINE PLANT	GASOLINE PLANT
LOCATION	NOT GIVEN	NOT GIVEN	PLANT RESIDUE
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	MAGNOLIA PETROLEUM CO.
SAMPLED	03/05/59	02/11/59	06/14/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.1	79.8	50.6
ETHANE	12.2	9.1	26.3
PROPANE	0.9	1.4	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	16.4	9.6	21.7
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.10	0.05	0.05
HEATING VALUE*	952	1008	984
SPECIFIC GRAVITY	0.691	0.654	0.783

	INDEX 784 SAMPLE 15485	INDEX 785 SAMPLE 5352	INDEX 786 SAMPLE 10953
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	BUFFALO WALLOW ET AL	HENDERSON TRUST CO.	NOT GIVEN
PLANT NAME	FRITCH STATION 111	SANFORD GASOLINE PLANT	NOT GIVEN
LOCATION	30 IN. DISCHARGE	PLANT RESIDUE	NOT GIVEN
OWNER	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE GAS CO.	MAPCO PRODUCTION CO.
SAMPLED	11/13/70	12/11/52	05/09/67
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	485	NOT GIVEN	175
FLOW,MCFD	140000	NOT GIVEN	106000
COMPONENT, MOLE PCT			
METHANE	97.1	76.7	75.9
ETHANE	0.9	6.7	6.6
PROPANE	0.1	4.6	3.9
N-BUTANE	0.1	1.0	1.1
ISOBUTANE	0.0	0.6	0.8
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.1	9.4	9.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.03	0.40	0.46
HEATING VALUE*	1011	1084	1097
SPECIFIC GRAVITY	0.573	0.706	0.716

	INDEX 787 SAMPLE 6527	INDEX 788 SAMPLE 1794	INDEX 789 SAMPLE 2456
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE	PANHANDLE W	PANHANDLE W
PLANT NAME	MCKEE	PHILLIPS GASOLINE PLANT	HUBER'S LINE TO AMARILLO
LOCATION	STA. 900-3	RESIDUE GAS	NOT GIVEN
OWNER	SHAMROCK OIL & GAS CORP.	PHILLIPS PETROLEUM CO.	AMARILLO OIL CO.
SAMPLED	03/21/58	06/11/29	01/29/32
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	231	NOT GIVEN	70
FLOW,MCFD	43957	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	72.6	69.4	73.8
ETHANE	8.7	19.9	17.6
PROPANE	5.6	---	---
N-BUTANE	2.0	---	---
ISOBUTANE	1.0	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	8.2	9.2	7.5
OXYGEN	TRACE	0.6	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	TRACE	---	---
CARBON DIOXIDE	0.3	0.4	0.5
HELIUM	0.40	0.38	0.38
HEATING VALUE*	1191	1060	1063
SPECIFIC GRAVITY	0.759	0.696	0.677

	INDEX 790 SAMPLE 2511	INDEX 791 SAMPLE 4381	INDEX 792 SAMPLE 4382
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	HUBER'S LINE TO AMARILLO	PIPELINE SAMPLE A	PIPELINE SAMPLE B
LOCATION	NOT GIVEN	BORGER, TEXAS	BORGER, TEXAS
OWNER	AMARILLO GAS CO.	J. M. HUBER CORP.	J. M. HUBER CORP.
SAMPLED	07/12/32	01/13/48	01/13/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	55	NOT GIVEN	NOT GIVEN
FLOW,MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.3	70.6	69.9
ETHANE	22.8	20.7	22.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.1	7.8	7.0
OXYGEN	0.4	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.40	0.41	0.37
HEATING VALUE*	1080	1086	1108
SPECIFIC GRAVITY	0.709	0.691	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 793 SAMPLE 4383	INDEX 794 SAMPLE 5185	INDEX 795 SAMPLE 5186
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	PIPELINE SAMPLE C	FRITCH STA.	TURKEY CREEK STA.
LOCATION	BORGER, TEXAS	FRITCH TEXAS	NOT GIVEN
OWNER	J. M. HUBER CORP.	NATURAL GAS PL CO OF AMERICA	WEST TEXAS GAS CO.
SAMPLED	01/13/48	04/29/52	04/29/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	710	375
FLOW,MCFD	NOT GIVEN	225000	40000
COMPONENT, MOLE PCT			
METHANE	70.9	79.6	79.4
ETHANE	19.6	5.7	5.4
PROPANE	---	3.6	3.2
N-BUTANE	---	0.6	0.5
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	8.6	9.3	10.3
OXYGEN	0.1	0.0	0.1
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.53	0.44	0.53
HEATING VALUE*	1069	1044	1015
SPECIFIC GRAVITY	0.688	0.676	0.670

	INDEX 796 SAMPLE 5534	INDEX 797 SAMPLE 5536	INDEX 798 SAMPLE 5537
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	TEXOMA COMPRESSOR STA.	FRITCH COMPRESSOR STA.	FRITCH COMPRESSOR STA.
LOCATION	26 IN. LINE	INLET GAS	24 IN. OUTLET
OWNER	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE GAS CO.	NATURAL GAS PL CO OF AMERICA
SAMPLED	08/14/53	08/14/53	08/14/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.4	76.6	78.4
ETHANE	7.2	6.5	6.3
PROPANE	3.8	3.5	3.6
N-BUTANE	0.7	1.1	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	9.7	10.5	9.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.42	0.49	0.47
HEATING VALUE*	1059	1065	1038
SPECIFIC GRAVITY	0.690	0.702	0.678

	INDEX 799 SAMPLE 6664	INDEX 800 SAMPLE 6667	INDEX 801 SAMPLE 6668
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.5,BLK.Y-2,TT&RR	STA. IN SEC.5,BLK.Y-2,TT&RR	STA. IN SEC.29,BLK.Y,AB&M
LOCATION	22 IN. LINE	16 IN. LINE	24 IN. LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	J. M. HUBER CORP.
SAMPLED	06/19/58	06/19/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	160	160	65
FLOW,MCFD	70000	70000	59000
COMPONENT, MOLE PCT			
METHANE	76.7	80.7	74.0
ETHANE	6.0	6.3	8.2
PROPANE	3.3	1.9	5.1
N-BUTANE	1.1	0.2	1.8
ISOBUTANE	0.6	0.1	1.0
N-PENTANE	0.1	0.0	0.4
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.3
NITROGEN	10.7	10.0	7.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.40	0.50	0.30
HEATING VALUE*	1063	994	1182
SPECIFIC GRAVITY	0.703	0.652	0.749

	INDEX 802 SAMPLE 6669	INDEX 803 SAMPLE 6670	INDEX 804 SAMPLE 6671
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.29,BLK.Y,AB&M	CARBON BLACK PLANT	STA. IN SEC.29,BLK.Y,AB&M
LOCATION	12 IN. LINE	18 IN. LINE	22 IN. LINE
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	J. M. HUBER CORP.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	65	55	160
FLOW,MCFD	6000	70000	9500
COMPONENT, MOLE PCT			
METHANE	78.3	75.7	72.9
ETHANE	6.1	7.5	4.6
PROPANE	3.6	4.9	2.4
N-BUTANE	1.5	1.5	0.8
ISOBUTANE	0.8	0.7	0.3
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.3	0.1	0.4
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	8.3	8.5	16.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.6
HELIUM	0.40	0.40	1.10
HEATING VALUE*	1103	1129	937
SPECIFIC GRAVITY	0.704	0.722	0.696

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 805 SAMPLE 6677	INDEX 806 SAMPLE 6678	INDEX 807 SAMPLE 6680
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SANFORD PLANT	STA. IN SEC.82,BLK.46,H&TC	SANFORD PLANT
LOCATION	24 IN. INLET	24 IN. LINE	DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	110	110	95
FLOW,MCFD	5000	65000	70000
COMPONENT, MOLE PCT			
METHANE	76.1	75.5	81.0
ETHANE	7.0	7.0	6.2
PROPANE	4.2	4.1	2.0
N-BUTANE	1.4	1.4	0.3
ISOBUTANE	0.8	0.8	0.1
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	8.7	9.4	9.6
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.40	0.40	0.40
HEATING VALUE*	1123	1110	1005
SPECIFIC GRAVITY	0.721	0.721	0.657

	INDEX 808 SAMPLE 6681	INDEX 809 SAMPLE 6682	INDEX 810 SAMPLE 6683
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	ROCK CREEK PLANT	ROCK CREEK PLANT	ROCK CREEK PLANT
LOCATION	RESIDUE	22 IN. LINE	10 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	90	85	90
FLOW,MCFD	40000	50000	10000
COMPONENT, MOLE PCT			
METHANE	78.2	78.9	77.2
ETHANE	8.3	6.7	6.1
PROPANE	3.9	3.5	3.8
N-BUTANE	0.1	1.1	1.5
ISOBUTANE	0.2	0.6	0.9
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	8.4	8.2	8.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.40	0.20	0.40
HEATING VALUE*	1061	1103	1120
SPECIFIC GRAVITY	0.679	0.699	0.718

	INDEX 811 SAMPLE 6684	INDEX 812 SAMPLE 6685	INDEX 813 SAMPLE 6686
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	ROCK CREEK PLANT	ROCK CREEK PLANT	CANADIAN PLANT
LOCATION	22 IN. LINE	24 IN. LINE	DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	105	105	160
FLOW,MCFD	35000	45000	17000
COMPONENT, MOLE PCT			
METHANE	80.6	73.9	68.8
ETHANE	6.6	8.7	13.8
PROPANE	3.1	5.5	8.2
N-BUTANE	0.5	1.6	1.0
ISOBUTANE	0.2	1.0	0.8
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	TRACE
NITROGEN	8.4	7.7	6.8
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.30	0.40	0.20
HEATING VALUE*	1047	1184	1222
SPECIFIC GRAVITY	0.667	0.749	0.762

	INDEX 814 SAMPLE 7383	INDEX 815 SAMPLE 7385	INDEX 816 SAMPLE 7386
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SANFORD COMPRESSOR STA.	SANFORD COMPRESSOR STA.	FRITCH COMPRESSOR STA.
LOCATION	16 IN. LINE	16 IN. LINE	16 IN. LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/09/60	02/09/60	02/09/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	19000	28000	74000
COMPONENT, MOLE PCT			
METHANE	73.3	76.8	72.8
ETHANE	8.0	7.6	6.2
PROPANE	5.1	4.5	3.6
N-BUTANE	1.5	0.8	1.2
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	10.3	9.2	13.1
OXYGEN	TRACE	TRACE	0.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.50	0.41	0.47
HEATING VALUE*	1108	1076	1043
SPECIFIC GRAVITY	0.726	0.694	0.727

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 817 SAMPLE 9234	INDEX 818 SAMPLE 9236	INDEX 819 SAMPLE 13311
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SANFORD PLANT	MAPCO PLANT	FRITCH COMPRESSOR STA. 111
LOCATION	RESIDUE FROM OUTLET	RESIDUE	24 IN. DISCHARGE
OWNER	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	01/27/64	01/27/64	07/24/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	150	150	676
FLOW,MCFD	74300	58800	65800
COMPONENT, MOLE PCT			
METHANE	78.2	80.9	77.6
ETHANE	7.6	6.8	7.3
PROPANE	2.4	2.1	3.5
N-BUTANE	0.4	0.1	0.5
ISOBUTANE	0.1	0.1	0.4
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	10.4	9.2	9.8
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.40	0.50	0.46
HEATING VALUE*	1016	1003	1052
SPECIFIC GRAVITY	0.671	0.651	0.686

	INDEX 820 SAMPLE 15495	INDEX 821 SAMPLE 6663	INDEX 822 SAMPLE 6665
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W & QUINDUNO	PANHANDLE W & QUINDUNO
PLANT NAME	FRITCH STATION III	STA. IN SEC.5,BLK.Y-2,TT&RR	STA. IN SEC.5,BLK.Y-2,TT&RR
LOCATION	24 IN. DISCHARGE	24 IN. LINE	24 IN. LINE
OWNER	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE ET AL.	NATURAL GAS PL CO OF AMERICA
SAMPLED	11/13/78	06/19/58	06/19/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	620	700	160
FLOW,MCFD	120000	200000	60000
COMPONENT, MOLE PCT			
METHANE	75.9	79.2	79.9
ETHANE	6.9	6.1	6.4
PROPANE	4.4	3.1	3.5
N-BUTANE	1.4	0.6	1.2
ISOBUTANE	0.8	0.4	0.7
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.7	0.2	0.6
CYCLOPENTANE	0.3	0.0	0.1
HEXANES PLUS	0.5	0.0	0.2
NITROGEN	7.9	9.7	6.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.36	0.40	0.30
HEATING VALUE*	1165	1034	1123
SPECIFIC GRAVITY	0.737	0.676	0.700

	INDEX 823 SAMPLE 7555	INDEX 824 SAMPLE 7556	INDEX 825 SAMPLE 13312
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W & QUINDUNO	PANHANDLE W & QUINDUNO	PANHANDLE W ET AL
PLANT NAME	FRITCH STA. 111	FRITCH STA 111	FRITCH COMPRESSOR STA. 111
LOCATION	24 IN. INLET	24 IN. COMPOSITE OUTLET	30 IN. DISCHARGE
OWNER	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	05/18/60	05/18/60	07/24/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	620	676
FLOW,MCFD	68	232	95300
COMPONENT, MOLE PCT			
METHANE	79.0	80.0	78.4
ETHANE	6.9	7.0	7.0
PROPANE	3.6	3.7	3.4
N-BUTANE	1.2	0.7	0.4
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	6.9	7.4	9.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.30	0.30	0.43
HEATING VALUE*	1130	1080	1043
SPECIFIC GRAVITY	0.705	0.679	0.678

	INDEX 826 SAMPLE 10488	INDEX 827 SAMPLE 16110	INDEX 828 SAMPLE 12070
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KIMBLE	LAMB	LAMB
FIELD	WEST TEXAS AREA	PERMIAN BASIN	WEST TEXAS DELAWARE BASIN
PLANT NAME	JUNCTION COMPRESSOR STA.	DIMMIT COMPRESSOR STA.	DIMMIT COMPRESSOR STATION
LOCATION	36 IN.	24 IN. OUTLET	NOT GIVEN
OWNER	OASIS PIPELINE CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/08/75	10/20/80	09/29/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	410	435	435
PRESSURE,PSIG	740	725	730
FLOW,MCFD	800000	130000	500000
COMPONENT, MOLE PCT			
METHANE	94.5	88.0	84.5
ETHANE	2.8	5.4	7.6
PROPANE	0.9	3.8	3.4
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	0.9	4.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.5	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.7
HELIUM	0.03	0.05	0.06
HEATING VALUE*	1050	1025	1041
SPECIFIC GRAVITY	0.596	0.625	0.640

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 829 SAMPLE 14479	INDEX 830 SAMPLE 2020	INDEX 831 SAMPLE 16121
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAMB	LOVING	LYNN
FIELD	WEST TEXAS DELAWARE BASIN	WHEAT	WEST TEXAS PERMIAN BASIN
PLANT NAME	DIMMIT COMPRESSOR STA.	PIPELINE SAMPLE	TAHOKA COMPRESSOR STA.
LOCATION	24 IN.	PORTERVILLE, TX.	OUTLET
OWNER	EL PASO NATURAL GAS CO.	LOCKHART & CO.	PIONEER CORP.
SAMPLED	10/09/75	06/06/30	10/20/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	430	430
PRESSURE,PSIG	610	NOT GIVEN	450
FLOW,MCFD	500000	NOT GIVEN	70000
COMPONENT, MOLE PCT			
METHANE	85.6	81.0	93.6
ETHANE	7.1	17.1	3.2
PROPANE	1.0	---	0.7
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.1	---	TRACE
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	0.1
NITROGEN	4.0	1.5	2.0
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	1.9	0.1	0.1
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1027	1127	1040
SPECIFIC GRAVITY	0.636	0.648	0.594

	INDEX 832 SAMPLE 13947	INDEX 833 SAMPLE 2066	INDEX 834 SAMPLE 798
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MITCHELL	MONTAGUE
FIELD	BRAZOS BLOCK 445(G)	WESTBROOK	NOT GIVEN
PLANT NAME	NOT GIVEN	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	STATE TRACT 445-L	SEC. 11, BLK. 28, T&P SUR.	8 MI N NOCONA
OWNER	MONSANTO CO.	MAGNOLIA PETROLEUM CO.	TEXAS OIL CO.
SAMPLED	03/10/74	06/18/30	03/22/23
FORMATION	MIOC-G SAND	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	430	420
PRESSURE,PSIG	2500	NOT GIVEN	250
FLOW,MCFD	14000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.9	39.0	51.7
ETHANE	1.8	52.0	2.9
PROPANE	0.5	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.9	6.3	44.1
OXYGEN	TRACE	0.3	0.0
ARGON	0.0	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.3	2.5	0.2
HELIUM	0.01	0.07	1.01
HEATING VALUE*	1033	1327	976
SPECIFIC GRAVITY	0.581	0.864	0.748

	INDEX 835 SAMPLE 15434	INDEX 836 SAMPLE 15435	INDEX 837 SAMPLE 6526
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	COMPOSITE	COMPOSITE	HUGOTON, TEXAS
PLANT NAME	DUMAS GASOLINE-HELIUM	DUMAS COMPRESSOR STA.	MCKEE PLANT STATION 610
LOCATION	24 IN. INLET	COMPRESSOR PLANT DISCHARGE	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.
SAMPLED	10/20/78	10/20/78	03/21/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	360
PRESSURE,PSIG	225	552	227
FLOW,MCFD	147000	429600	97525
COMPONENT, MOLE PCT			
METHANE	72.3	88.0	71.2
ETHANE	7.2	4.7	6.4
PROPANE	5.1	1.2	3.7
N-BUTANE	1.9	0.2	1.1
ISOBUTANE	0.8	0.1	0.6
N-PENTANE	0.4	TRACE	0.1
ISOPENTANE	0.5	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	10.4	5.2	15.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.50	0.18	0.80
HEATING VALUE*	1143	1022	1015
SPECIFIC GRAVITY	0.755	0.619	0.726

	INDEX 838 SAMPLE 6693	INDEX 839 SAMPLE 6964	INDEX 840 SAMPLE 6965
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	CACTUS	TEXAS HUGOTON	PIPELINE SAMPLE
LOCATION	SEC. 29, BLK. 2-T, T&NO SUR.	INLET NO. D-3	TEXAS HUGOTON
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	185	NOT GIVEN	NOT GIVEN
FLOW,MCFD	105000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.5	69.6	72.3
ETHANE	6.7	6.6	6.6
PROPANE	3.8	4.3	4.1
N-BUTANE	1.2	1.4	1.2
ISOBUTANE	0.7	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	15.3	15.2	13.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.80	0.80	0.70
HEATING VALUE*	1037	1059	1049
SPECIFIC GRAVITY	0.737	0.750	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 841 SAMPLE 6966	INDEX 842 SAMPLE 5507	INDEX 843 SAMPLE 6907
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	NOT GIVEN	NOT GIVEN
PLANT NAME	PIPELINE SAMPLE	CACTUS STA.	SUNRAY COMPRESSOR STA.
LOCATION	8-3-29	16 IN. DISCHARGE	SHAMROCK INLET
OWNER	PHILLIPS PETROLEUM CO.	KERR-MCGEE OIL IND., INC.	PANHANDLE EASTERN PL. CO.
SAMPLED	02/16/59	07/02/53	01/99/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.6	72.4	77.0
ETHANE	6.7	7.0	8.1
PROPANE	4.1	5.4	3.4
N-BUTANE	1.3	0.4	0.2
ISOBUTANE	0.6	0.3	0.1
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	TRACE
NITROGEN	13.7	15.5	10.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.4
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.70	0.74	0.40
HEATING VALUE*	1050	971	1037
SPECIFIC GRAVITY	0.739	0.696	0.679

	INDEX 844 SAMPLE 13413	INDEX 845 SAMPLE 13428	INDEX 846 SAMPLE 13781
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	DUMAS COMPRESSOR STATION	DUMAS COMPRESSOR STATION	DUMAS-PHILLIPS PLANT
LOCATION	HELIUM PLANT SUPPLY LINE	30 IN. DISCHARGE	PLANT INLET
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/05/72	10/05/72	10/26/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	200	550	NOT GIVEN
FLOW,MCFD	300000	550000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.6	81.2	74.1
ETHANE	7.3	7.6	6.9
PROPANE	4.7	1.7	4.5
N-BUTANE	1.5	0.0	1.3
ISOBUTANE	0.7	0.2	0.7
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	11.8	8.8	11.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.54	0.04	0.52
HEATING VALUE*	1037	1014	1098
SPECIFIC GRAVITY	0.733	0.651	0.725

	INDEX 847 SAMPLE 3589	INDEX 848 SAMPLE 3590	INDEX 849 SAMPLE 3592
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
PLANT NAME	FRITCH COMPRESSOR STA.	FRITCH COMPRESSOR STA.	FRITCH COMPRESSOR STA.
LOCATION	INLET	INLET	DISCHARGE
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.
SAMPLED	07/30/42	07/30/42	07/30/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.3	71.0	69.6
ETHANE	18.8	19.7	18.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.6	8.2	11.2
OXYGEN	0.4	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.09	0.29	0.41
HEATING VALUE*	1039	1072	1031
SPECIFIC GRAVITY	0.695	0.690	0.694

	INDEX 850 SAMPLE 6522	INDEX 851 SAMPLE 6523	INDEX 852 SAMPLE 6524
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
PLANT NAME	MCKEE PLANT	MCKEE PLANT	MCKEE PLANT STA. 900
LOCATION	RESIDUE	INLET	MASTER INLET
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/21/58	03/21/58	03/21/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	204	217	231
FLOW,MCFD	132242	53625	80757
COMPONENT, MOLE PCT			
METHANE	76.0	75.4	75.0
ETHANE	7.3	6.6	7.4
PROPANE	3.5	5.6	4.3
N-BUTANE	0.3	1.2	1.4
ISOBUTANE	0.0	0.7	0.7
N-PENTANE	0.0	0.3	0.3
ISOPENTANE	0.9	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	10.9	10.5	9.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.1
CARBON DIOXIDE	TRACE	0.6	0.4
HELIUM	0.60	0.50	0.40
HEATING VALUE*	1045	1075	1124
SPECIFIC GRAVITY	0.691	0.715	0.730

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 853 SAMPLE 6525	INDEX 854 SAMPLE 6530	INDEX 855 SAMPLE 1974
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE	PANHANDLE W
PLANT NAME	MCKEE	CACTUS GASOLINE PLANT NO. 12	BIVINS COMPRESSOR STA.
LOCATION	STATION 621 INLET	NOT GIVEN	INLET
OWNER	SHAMROCK OIL & GAS CORP.	KERR-MCGEE OIL IND., INC.	CANADIAN RIVER GAS CO.
SAMPLED	03/21/58	03/21/58	02/06/30
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	218	170	NOT GIVEN
FLOW,MCFD	78555	52000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	71.1	67.4
ETHANE	6.9	6.6	22.3
PROPANE	4.1	3.8	---
N-BUTANE	1.5	1.2	---
ISOBUTANE	0.7	0.7	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	10.0	15.0	9.8
OXYGEN	0.0	TRACE	0.2
ARGON	0.1	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	TRACE	0.0	---
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.40	0.70	0.00
HEATING VALUE*	1105	1027	1082
SPECIFIC GRAVITY	0.726	0.728	0.709

	INDEX 856 SAMPLE 1975	INDEX 857 SAMPLE 2847	INDEX 858 SAMPLE 2849
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	BIVINS COMPRESSOR STA.	BIVINS COMPRESSOR STA.	BIVINS COMPRESSOR STA.
LOCATION	OUTLET	FIELD LINE F-4	LINE F-4
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	02/06/30	09/19/40	09/19/40
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	4069	18107
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	67.0	69.3
ETHANE	12.5	16.1	16.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.4	15.2	12.2
OXYGEN	0.2	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.2	0.4
HELIUM	0.00	0.98	0.78
HEATING VALUE*	1011	967	1005
SPECIFIC GRAVITY	0.660	0.697	0.691

	INDEX 859 SAMPLE 3591	INDEX 860 SAMPLE 3593	INDEX 861 SAMPLE 3813
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FRITCH COMPRESSOR STA.	COMPRESSOR STA. 22	BIVINS COMPRESSOR STA.
LOCATION	INLET	DISCHARGE	OUTLET
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	07/30/42	08/19/42	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.1	72.0	70.0
ETHANE	20.0	16.6	15.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.8	10.3	13.7
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.43	0.53	0.52
HEATING VALUE*	1048	1027	983
SPECIFIC GRAVITY	0.702	0.681	0.688

	INDEX 862 SAMPLE 4708	INDEX 863 SAMPLE 4709	INDEX 864 SAMPLE 5187
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	EXELL	EXELL	BIVINS COMPRESSOR STA.
LOCATION	OUTLET	INLET	DISCHARGE
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	COLORADO INTERSTATE GAS CO.
SAMPLED	08/99/49	08/99/49	04/25/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	375
FLOW,MCFD	NOT GIVEN	NOT GIVEN	153000
COMPONENT, MOLE PCT			
METHANE	73.7	72.0	75.1
ETHANE	5.3	5.2	5.3
PROPANE	3.1	3.1	2.9
N-BUTANE	0.8	0.9	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	16.0	16.4	14.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.0	0.4	0.2
HELIUM	0.13	1.00	0.70
HEATING VALUE*	984	970	966
SPECIFIC GRAVITY	0.707	0.711	0.686

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 865 SAMPLE 5189	INDEX 866 SAMPLE 5190	INDEX 867 SAMPLE 5191
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	WEST SIDE OF CANADIAN RIVER	STINNETT COMPRESSOR STA.	FOURWAY COMPRESSOR STA.
LOCATION	WEST SIDE CANADIAN RIVER	NOT GIVEN	DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE GAS CO.
SAMPLED	04/25/52	04/29/52	04/25/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	175	680	NOT GIVEN
FLOW,MCFD	45000	250000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.4	78.0	77.7
ETHANE	5.8	5.9	6.0
PROPANE	3.6	3.7	3.8
N-BUTANE	0.9	0.6	0.5
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	10.2	10.3	10.7
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.50	0.53	0.52
HEATING VALUE*	1054	1030	1028
SPECIFIC GRAVITY	0.696	0.683	0.682

	INDEX 868 SAMPLE 5192	INDEX 869 SAMPLE 5193	INDEX 870 SAMPLE 5210
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SNEED COMPRESSOR STA.	DUMAS COMPRESSOR STA.	FOURWAY COMPRESSOR STA.
LOCATION	NOT GIVEN	NOT GIVEN	PLANT INLET
OWNER	PANHANDLE EASTERN PL. CO.	EL PASO NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	04/29/52	04/23/52	06/16/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	500	700	NOT GIVEN
FLOW,MCFD	23000	140000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.5	76.5	76.8
ETHANE	6.1	6.3	5.9
PROPANE	3.5	3.5	3.6
N-BUTANE	0.4	0.6	1.1
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	10.3	11.9	11.1
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.47	0.54	0.54
HEATING VALUE*	1022	1017	1042
SPECIFIC GRAVITY	0.675	0.687	0.696

	INDEX 871 SAMPLE 5211	INDEX 872 SAMPLE 5262	INDEX 873 SAMPLE 5263
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FOURWAY COMPRESSOR STA.	FOURWAY COMPRESSOR STA.	FOURWAY COMPRESSOR STA.
LOCATION	DISCHARGE GAS	INLET GAS	DISCHARGE GAS
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	06/16/52	06/26/52	06/26/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	76.1	76.6
ETHANE	5.9	6.1	6.2
PROPANE	3.6	3.6	3.8
N-BUTANE	0.7	1.0	0.6
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	TRACE	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	11.3	11.2	11.3
OXYGEN	0.1	0.1	0.1
ARGON	1.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.54	0.53	0.55
HEATING VALUE*	1023	1054	1039
SPECIFIC GRAVITY	0.700	0.704	0.690

	INDEX 874 SAMPLE 5485	INDEX 875 SAMPLE 5503	INDEX 876 SAMPLE 5505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FOURWAY COMPRESSOR STA.	BIVINS COMPRESSOR STA.	DUMAS COMPRESSOR STA.
LOCATION	NOT GIVEN	22 IN. OUTLET	DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	05/24/53	07/01/53	07/01/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.4	73.3	77.2
ETHANE	6.4	5.9	7.5
PROPANE	3.5	3.0	3.3
N-BUTANE	0.4	0.7	0.2
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	11.0	15.3	11.2
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.52	0.71	0.49
HEATING VALUE*	1022	973	1009
SPECIFIC GRAVITY	0.682	0.698	0.673

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 877 SAMPLE 5530	INDEX 878 SAMPLE 5543	INDEX 879 SAMPLE 5544
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SUNRAY COMPRESSOR STA.	SNEED COMPRESSOR STA.	SNEED, SUNRAY, HANSFORD STA.
LOCATION	24 IN. DISCHARGE	22 & 24 IN. DISCHARGE	24 & 26 IN. DISCHARGE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PIPELINE
SAMPLED	08/14/53	08/14/53	08/13/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	77.7	77.9
ETHANE	7.9	6.9	7.1
PROPANE	3.7	3.7	3.4
N-BUTANE	0.2	0.6	0.5
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	10.3	10.1	10.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.44	0.46	0.42
HEATING VALUE*	1033	1037	1032
SPECIFIC GRAVITY	0.679	0.679	0.678

	INDEX 880 SAMPLE 5548	INDEX 881 SAMPLE 5629	INDEX 882 SAMPLE 5630
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FOURWAY COMPRESSOR STA.	BIVINS COMPRESSOR STA.	BIVINS COMPRESSOR STA.
LOCATION	22 IN. DISCHARGE	INLET	DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	09/03/53	06/01/54	06/01/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	175	350
FLOW,MCFD	NOT GIVEN	100000	100000
COMPONENT, MOLE PCT			
METHANE	77.1	74.1	75.2
ETHANE	6.3	5.6	5.6
PROPANE	3.7	3.3	2.9
N-BUTANE	0.3	0.9	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.6	TRACE
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	11.3	13.9	14.2
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.53	0.57	0.57
HEATING VALUE*	1013	1023	979
SPECIFIC GRAVITY	0.681	0.713	0.689

	INDEX 883 SAMPLE 5891	INDEX 884 SAMPLE 5892	INDEX 885 SAMPLE 5893
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	F23-6 IN PL.	BIVINS COMPRESSOR STA.	F4-10 IN. LINE
LOCATION	CHANNING FIELD	INLET	CHANNING LINE F4
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/02/55	08/02/55	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.8	73.3	71.9
ETHANE	5.6	5.5	5.4
PROPANE	3.2	3.0	3.0
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	14.9	15.5	16.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.95	0.23	0.95
HEATING VALUE*	1004	997	979
SPECIFIC GRAVITY	0.713	0.711	0.713

	INDEX 886 SAMPLE 5894	INDEX 887 SAMPLE 5897	INDEX 888 SAMPLE 5899
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	BIVINS COMPRESSOR STA.	BIVINS COMPRESSOR STA.	F11-12 IN. LINE
LOCATION	INLET	INLET	CHANNING AREA
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/02/55	08/02/55	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.5	72.7	74.0
ETHANE	5.7	5.7	6.3
PROPANE	3.1	3.1	3.6
N-BUTANE	0.8	0.9	1.1
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.5	15.3	12.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.6
HELIUM	0.77	0.66	0.60
HEATING VALUE*	987	990	1047
SPECIFIC GRAVITY	0.708	0.709	0.717

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 889 SAMPLE 5902	INDEX 890 SAMPLE 5903	INDEX 891 SAMPLE 5908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	EXELL HELIUM PLANT	EXELL HELIUM PLANT	EXELL HELIUM PLANT
LOCATION	INLET	DISCHARGE	DISCHARGE
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	08/05/55	08/05/55	06/06/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	73.2	74.2
ETHANE	5.2	5.1	5.5
PROPANE	3.0	3.0	2.8
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	16.2	16.1	15.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.92	0.89	0.20
HEATING VALUE*	972	981	990
SPECIFIC GRAVITY	0.707	0.707	0.706

	INDEX 892 SAMPLE 5909	INDEX 893 SAMPLE 5910	INDEX 894 SAMPLE 5911
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	EXELL HELIUM PLANT	EXELL HELIUM PLANT	EXELL HELIUM PLANT
LOCATION	INLET	DISCHARGE	INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	06/06/55	07/12/55	07/12/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	74.0	72.2
ETHANE	5.5	5.2	5.2
PROPANE	2.7	3.0	2.9
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.7	15.7	16.4
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.96	0.23	0.97
HEATING VALUE*	971	987	966
SPECIFIC GRAVITY	0.699	0.707	0.707

	INDEX 895 SAMPLE 5997	INDEX 896 SAMPLE 5998	INDEX 897 SAMPLE 6018
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	EXELL HELIUM PLANT	EXELL HELIUM PLANT	EXELL HELIUM PLANT
LOCATION	INLET	DISCHARGE	DISCHARGE
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	01/13/56	01/13/56	02/09/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	73.5	73.5
ETHANE	5.4	5.4	5.3
PROPANE	2.9	2.9	2.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	16.3	15.9	16.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.00	0.14	0.15
HEATING VALUE*	978	992	987
SPECIFIC GRAVITY	0.712	0.712	0.710

	INDEX 898 SAMPLE 6019	INDEX 899 SAMPLE 6528	INDEX 900 SAMPLE 6638
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	EXELL HELIUM PLANT	MCKEE COMPRESSOR	STA. IN SEC.1,T7&R SUR.
LOCATION	INLET	DISCHARGE	26 IN. LINE
OWNER	U.S. BUREAU OF MINES	SHAMROCK OIL & GAS CORP.	NATURAL GAS PL CO OF AMERICA
SAMPLED	02/09/56	03/21/58	06/19/58
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	201	325
FLOW,MCFD	NOT GIVEN	116859	90000
COMPONENT, MOLE PCT			
METHANE	72.9	75.5	87.0
ETHANE	5.2	6.5	9.0
PROPANE	2.9	3.2	1.4
N-BUTANE	0.9	0.4	0.2
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.2	13.2	1.4
OXYGEN	1.0	0.1	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.98	0.60	0.10
HEATING VALUE*	972	997	1098
SPECIFIC GRAVITY	0.706	0.689	0.632

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 901 SAMPLE 6639	INDEX 902 SAMPLE 6641	INDEX 903 SAMPLE 6642
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC.1,TT&RR	STA. IN SEC.1,TT&RR	STA. IN SEC.1,TT&RR
LOCATION	24 IN. LINE	24 IN. LINE	26 IN. LINE
OWNER	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	06/19/58	06/19/58	06/19/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	180	130	610
FLOW,MCFD	42000	25000	175000
COMPONENT, MOLE PCT			
METHANE	77.1	77.6	83.6
ETHANE	6.8	7.5	8.3
PROPANE	3.9	3.7	2.2
N-BUTANE	1.3	0.5	0.3
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.5	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	8.7	9.4	4.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.40	0.40	0.20
HEATING VALUE*	1108	1062	1077
SPECIFIC GRAVITY	0.710	0.685	0.650

	INDEX 904 SAMPLE 6672	INDEX 905 SAMPLE 6673	INDEX 906 SAMPLE 6674
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	STA. IN SEC. 198,BLK.44,H&TC	STA. IN SEC.198,BLK.44,H&TC	STA. IN SEC.198,BLK.44,H&TC
LOCATION	SEC. 198, BLK. 44, H&TC SUR.	24 IN. LINE	24 IN. MAKEIG LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	201	112	112
FLOW,MCFD	145000	30000	60000
COMPONENT, MOLE PCT			
METHANE	77.6	74.4	72.5
ETHANE	6.7	6.5	6.6
PROPANE	2.3	3.5	4.0
N-BUTANE	TRACE	0.9	1.2
ISOBUTANE	0.1	1.0	0.7
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	12.5	12.0	13.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.60	0.60	0.70
HEATING VALUE*	969	1043	1047
SPECIFIC GRAVITY	0.663	0.711	0.724

	INDEX 907 SAMPLE 6675	INDEX 908 SAMPLE 6676	INDEX 909 SAMPLE 6679
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	DUMAS COMPRESSOR	SNEAD COMPRESSOR STA.	SNEAD COMPRESSOR STA.
LOCATION	30 IN. INLET	24 IN. INLET	24 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	112	NOT GIVEN	110
FLOW,MCFD	85000	NOT GIVEN	65000
COMPONENT, MOLE PCT			
METHANE	74.0	75.2	73.8
ETHANE	6.7	6.9	6.8
PROPANE	3.8	4.1	4.1
N-BUTANE	1.4	1.4	1.3
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.6	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.7	10.1	11.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.2
HELIUM	0.50	0.50	0.60
HEATING VALUE*	1100	1102	1083
SPECIFIC GRAVITY	0.735	0.721	0.724

	INDEX 910 SAMPLE 6687	INDEX 911 SAMPLE 6756	INDEX 912 SAMPLE 6757
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SNEAD COMPRESSOR STA.	DUMAS COMPRESSOR STA.	SUNRAY COMPRESSOR STA.
LOCATION	20 IN. DISCHARGE	SEC. 181, BLK. 44, H&TC SUR.	DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/01/58	07/25/58	07/23/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	480	610	600
FLOW,MCFD	184000	425000	125000
COMPONENT, MOLE PCT			
METHANE	77.9	85.6	83.5
ETHANE	6.6	7.8	6.6
PROPANE	3.5	1.4	1.8
N-BUTANE	0.6	0.0	TRACE
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	10.2	4.7	7.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.50	0.10	0.20
HEATING VALUE*	1037	1051	1014
SPECIFIC GRAVITY	0.683	0.631	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 913 6759	INDEX SAMPLE 914 6969	INDEX SAMPLE 915 7384
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SUNRAY COMPRESSOR STA.	PIPELINE SAMPLE	FOURWAY COMPRESSOR STA.
LOCATION	INLET	MOORE COUNTY SOUR GAS SYSTEM	20 IN. DISCHARGE
OWNER	SHAMROCK OIL & GAS CORP.	SINCLAIR OIL & GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/25/58	02/12/59	02/09/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	190	NOT GIVEN	NOT GIVEN
FLOW,MCFD	125000	NOT GIVEN	82000
COMPONENT, MOLE PCT			
METHANE	73.7	77.0	77.2
ETHANE	6.2	8.1	6.8
PROPANE	2.9	3.3	4.0
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	15.6	9.8	10.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.4	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.70	0.40	0.54
HEATING VALUE*	962	1038	1031
SPECIFIC GRAVITY	0.691	0.676	0.683

	INDEX SAMPLE 916 7436	INDEX SAMPLE 917 7438	INDEX SAMPLE 918 7439
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	MCKEE GASOLINE PLANT	MCKEE GASOLINE PLANT	MCKEE GASOLINE PLANT
LOCATION	20 IN. DISCHARGE	NOT GIVEN	18 IN.
OWNER	SHAMROCK OIL & GAS CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/16/60	03/16/60	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.2	77.2	76.7
ETHANE	6.4	7.6	8.1
PROPANE	2.8	2.5	2.9
N-BUTANE	0.3	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	16.8	11.0	10.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.5	0.5
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.80	0.50	0.40
HEATING VALUE*	946	1000	1015
SPECIFIC GRAVITY	0.695	0.666	0.668

	INDEX SAMPLE 919 7440	INDEX SAMPLE 920 7441	INDEX SAMPLE 921 7442
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	MCKEE GASOLINE PLANT	BURNETT COMPRESSOR STA.	MCKEE GASOLINE PLANT
LOCATION	22 IN. INLET	20 IN. DISCHARGE	20 IN. INLET
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/16/60	03/16/60	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.5	74.8	72.2
ETHANE	7.1	7.2	9.3
PROPANE	4.1	4.3	6.0
N-BUTANE	1.4	1.5	1.9
ISOBUTANE	0.7	0.8	0.9
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.4	9.6	8.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.40	0.40	0.40
HEATING VALUE*	1108	1120	1193
SPECIFIC GRAVITY	0.731	0.731	0.756

	INDEX SAMPLE 922 7443	INDEX SAMPLE 923 7444	INDEX SAMPLE 924 7554
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	SUNRAY COMPRESSOR STA.	MCKEE GASOLINE PLANT	STINNETT STA. 112
LOCATION	20 IN. DISCHARGE	PLANT RESIDUE	SEC. 1, BLK. 1, TTARR SUR,
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	NATURAL GAS PL CO OF AMERICA
SAMPLED	03/16/60	03/16/60	05/18/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	650
FLOW,MCFD	NOT GIVEN	NOT GIVEN	135
COMPONENT, MOLE PCT			
METHANE	75.0	77.5	78.5
ETHANE	7.6	8.3	6.9
PROPANE	4.6	2.7	3.6
N-BUTANE	1.4	0.1	0.6
ISOBUTANE	0.8	0.0	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	9.1	9.9	9.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	1.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.40	0.40	0.40
HEATING VALUE*	1129	1023	1057
SPECIFIC GRAVITY	0.729	0.644	0.640

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 925 SAMPLE 7738	INDEX 926 SAMPLE 9233	INDEX 927 SAMPLE 9235
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	N MOORE CO. LINE,SEC.1,TT&RR	W MOORE CK MTR TO STINNETT	N MOORE CK MTR TO STINNETT
LOCATION	24 IN LINE	NOT GIVEN	NOT GIVEN
OWNER	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA	NATURAL GAS PL CO OF AMERICA
SAMPLED	10/25/60	01/29/64	01/29/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	141	160	150
FLOW,MCFD	NOT GIVEN	85900	68700
COMPONENT, MOLE PCT			
METHANE	74.8	76.8	80.9
ETHANE	7.7	6.9	6.2
PROPANE	3.6	4.0	2.6
N-BUTANE	0.8	1.5	0.6
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	TRACE
NITROGEN	11.2	8.2	8.6
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.50	0.40	0.40
HEATING VALUE*	1052	1130	1043
SPECIFIC GRAVITY	0.701	0.721	0.663

	INDEX 928 SAMPLE 9305	INDEX 929 SAMPLE 9306	INDEX 930 SAMPLE 9307
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	MOORE CO. GATHERING SYSTEM	F-1 LINE TO FOUR-WAY STA.	GATHERING LINE THRU FIELD
LOCATION	12 IN. F-45 LINE	22 IN. LINE	12 IN. F-48 LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	04/24/64	04/24/64	04/24/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	176	NOT GIVEN	NOT GIVEN
FLOW,MCFD	179	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	75.7	76.0
ETHANE	6.7	6.6	6.9
PROPANE	4.0	3.9	3.7
N-BUTANE	1.4	1.3	1.2
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	11.0	10.2	10.1
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.48	0.52	0.50
HEATING VALUE*	1101	1095	1087
SPECIFIC GRAVITY	0.732	0.716	0.710

	INDEX 931 SAMPLE 9734	INDEX 932 SAMPLE 9736	INDEX 933 SAMPLE 11853
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	COMPRESSOR NO. 2	BIVINS COMPRESSOR STA.	EXELL HELIUM PLANT
LOCATION	INLET FROM LINE F-2-12	INLET LINE F-1-22	INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/17/65	02/17/65	05/09/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	140	180	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	75.2	71.5
ETHANE	6.4	6.5	6.5
PROPANE	4.0	3.7	3.6
N-BUTANE	1.4	1.2	1.2
ISOBUTANE	0.8	0.7	0.4
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.5	10.9	14.8
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.53	0.60	0.79
HEATING VALUE*	1099	1078	1024
SPECIFIC GRAVITY	0.724	0.716	0.726

	INDEX 934 SAMPLE 12117	INDEX 935 SAMPLE 13310	INDEX 936 SAMPLE 13433
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	DUMAS COMPRESSOR STA.	STINNETT COMPRESSOR STA. 112	BIVINS COMPRESSOR STATION
LOCATION	INLET	30 IN. LINE	22 IN. PLATEAU DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	NATURAL GAS PL CO OF AMERICA	COLORADO INTERSTATE GAS CO.
SAMPLED	11/24/69	07/24/72	10/05/72
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	684	150
FLOW,MCFD	NOT GIVEN	156900	12000
COMPONENT, MOLE PCT			
METHANE	73.2	79.4	73.6
ETHANE	6.6	6.3	7.4
PROPANE	4.9	3.4	3.2
N-BUTANE	1.2	1.1	0.4
ISOBUTANE	0.8	0.6	0.0
N-PENTANE	0.4	0.2	0.0
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	TRACE	0.0
NITROGEN	11.5	8.2	14.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.59	0.34	0.82
HEATING VALUE*	1103	1071	975
SPECIFIC GRAVITY	0.734	0.684	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 937 SAMPLE 13437	INDEX 938 SAMPLE 13438	INDEX 939 SAMPLE 15417
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	BIVINS COMPRESSOR STATION	FOURWAY COMPRESSOR STATION	BIVINS COMPRESSOR STA.
LOCATION	20 IN. FOURWAY STA. DISCH.	20 IN. DISCHARGE	22 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/05/72	10/05/72	10/16/78
FORMATION	PERM-	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	380	780	400
FLOW,MCFD	100000	125000	60000
COMPONENT, MOLE PCT			
METHANE	76.4	77.1	72.5
ETHANE	7.6	7.6	7.6
PROPANE	2.8	2.8	4.8
N-BUTANE	0.0	0.0	1.5
ISOBUTANE	0.0	0.0	0.7
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	12.7	12.1	11.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.68	0.64	0.15
HEATING VALUE*	972	977	1119
SPECIFIC GRAVITY	0.669	0.665	0.738

	INDEX 940 SAMPLE 15502	INDEX 941 SAMPLE 5385	INDEX 942 SAMPLE 5506
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W & HUGOTON, TEXAS	PANHANDLE W & HUGOTON, TEXAS
PLANT NAME	STINNETT COMPRESSOR STA. 112	PHILLIPS CHEMICAL PLANT	SUNRAY COMPRESSOR STA.
LOCATION	30 IN. DISCHARGE	NOT GIVEN	16 IN. DISCHARGE
OWNER	NATURAL GAS PL CO OF AMERICA	KERR-MCGEE CORP.	NORTHERN NATURAL GAS CO.
SAMPLED	11/13/78	02/06/55	07/01/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	650	NOT GIVEN	NOT GIVEN
FLOW,MCFD	150000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.5	70.9	72.4
ETHANE	6.2	6.4	6.7
PROPANE	2.9	4.1	3.3
N-BUTANE	0.7	1.2	0.6
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.2	15.4	15.5
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.68	0.73	0.70
HEATING VALUE*	1048	1020	980
SPECIFIC GRAVITY	0.677	0.727	0.702

	INDEX 943 SAMPLE 7437	INDEX 944 SAMPLE 9594	INDEX 945 SAMPLE 4355
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	NEWTON	NUECES
FIELD	PANHANDLE W/HUGOTON	QUICKSAND CREEK	LUBY
PLANT NAME	MCKEE GASOLINE PLANT	PIPELINE SAMPLE	GASOLINE PLANT
LOCATION	20 IN. INLET	NOT GIVEN	INLET
OWNER	SHAMROCK OIL & GAS CORP.	OIL RESERVES CORP.	STANOLIND OIL & GAS CO.
SAMPLED	03/16/60	10/07/64	09/25/47
FORMATION	NOT GIVEN	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	220	220
PRESSURE,PSIG	NOT GIVEN	950	NOT GIVEN
FLOW,MCFD	NOT GIVEN	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	83.2	61.5
ETHANE	6.6	8.2	36.9
PROPANE	3.9	2.8	---
N-BUTANE	1.1	0.7	---
ISOBUTANE	0.6	1.2	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	15.3	0.9	0.6
OXYGEN	0.2	0.0	0.6
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	2.3	0.4
HELIUM	0.90	0.01	0.01
HEATING VALUE*	1028	1159	1284
SPECIFIC GRAVITY	0.731	0.693	0.747

	INDEX 946 SAMPLE 4358	INDEX 947 SAMPLE 7750	INDEX 948 SAMPLE 6127
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	OCHILTREE	PALO PINTO
FIELD	LUBY	ANADARKO BASIN	BRAD AREA
PLANT NAME	GASOLINE PLANT	ANADARKO BASIN GAS	GORDON PLANT
LOCATION	OUTLET	NOT GIVEN	NEAR BRAD, TEXAS
OWNER	SEABOARD OIL CO.	SHAMROCK OIL & GAS CORP.	LONE STAR GAS CO.
SAMPLED	09/26/47	11/01/60	08/08/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	360	425
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
FLOW,MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	84.3	90.2	78.9
ETHANE	15.2	4.9	10.8
PROPANE	---	2.0	4.1
N-BUTANE	---	0.6	1.1
ISOBUTANE	---	0.5	0.7
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	0.2	0.7	3.2
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.3
HELIUM	0.01	0.10	0.10
HEATING VALUE*	1126	1104	1195
SPECIFIC GRAVITY	0.633	0.631	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 949 SAMPLE 8134	INDEX 950 SAMPLE 8125	INDEX 951 SAMPLE 8130
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	DEATON	ECHOLS	NOT GIVEN
PLANT NAME	DEATON DEHYDRATION	GORDON PLANT	GORDON PLANT
LOCATION	SE OF GORDON, TEXAS	NOT GIVEN	OUTLET
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	08/09/61	08/08/61	08/08/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
PRESSURE,PSIG	280	330	280
FLOW,MCFD	1200	4200	40000
COMPONENT, MOLE PCT			
METHANE	80.0	79.1	77.7
ETHANE	10.1	9.9	11.5
PROPANE	3.9	4.0	3.2
N-BUTANE	1.0	1.1	0.1
ISOBUTANE	0.7	0.6	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	3.2	4.2	6.1
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1181	1166	1087
SPECIFIC GRAVITY	0.700	0.701	0.678

	INDEX 952 SAMPLE 8131	INDEX 953 SAMPLE 8132	INDEX 954 SAMPLE 10887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	NOT GIVEN	NOT GIVEN	VARIOUS
PLANT NAME	GORDON GASOLINE	GORDON GASOLINE	NOT GIVEN
LOCATION	INLET	INLET LINE K	NOT GIVEN
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	S. W. GAS PIPELINE, INC.
SAMPLED	08/08/61	08/08/61	02/27/67
FORMATION	NOT GIVEN	NOT GIVEN	-COMMINGLED
GEOLOGIC PROVINCE CODE	425	425	425
PRESSURE,PSIG	240	290	600
FLOW,MCFD	40000	2000	6000
COMPONENT, MOLE PCT			
METHANE	73.5	70.8	78.4
ETHANE	11.3	12.9	9.3
PROPANE	4.9	6.1	4.3
N-BUTANE	0.9	0.9	1.2
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.0	7.5	5.1
OXYGEN	0.8	0.5	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.10	0.12
HEATING VALUE*	1143	1172	1160
SPECIFIC GRAVITY	0.725	0.745	0.706

	INDEX 955 SAMPLE 10888	INDEX 956 SAMPLE 8116	INDEX 957 SAMPLE 8117
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PARKER	PARKER
FIELD	VARIOUS	BOONSVILLE	BOONSVILLE
PLANT NAME	GATHERING SYSTEM	SPRINGTOWN PLANT	SPRINGTOWN PLANT
LOCATION	NOT GIVEN	INLET	OUTLET
OWNER	TEXAS PACIFIC OIL CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	02/99/67	08/07/61	08/07/61
FORMATION	PENN-STRAWN & MARBLE FALLS	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	420	420
PRESSURE,PSIG	600	390	390
FLOW,MCFD	3000	145000	142700
COMPONENT, MOLE PCT			
METHANE	79.2	82.7	87.0
ETHANE	9.6	11.6	9.0
PROPANE	4.0	3.2	2.8
N-BUTANE	1.1	0.8	0.4
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	TRACE
NITROGEN	4.6	0.0	0.0
OXYGEN	0.4	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.14	0.12	0.10
HEATING VALUE*	1142	1203	1139
SPECIFIC GRAVITY	0.694	0.681	0.640

	INDEX 958 SAMPLE 8133	INDEX 959 SAMPLE 16117	INDEX 960 SAMPLE 12072
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PECOS	PECOS
FIELD	BRAZOS E	GOMEZ	GOMEZ & GRAY RANCH
PLANT NAME	PIPELINE SAMPLE	GRAY RANCH COMPRESSOR STA.	NOT GIVEN
LOCATION	J. B. BRANNON SUR.	30 IN.	NOT GIVEN
OWNER	LONE STAR GAS CO.	VALERO TRANSMISSION CO.	COASTAL STATES GAS PROD. CO.
SAMPLED	08/09/61	10/21/80	10/01/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	430	430
PRESSURE,PSIG	260	700	900
FLOW,MCFD	4900	NOT GIVEN	235000
COMPONENT, MOLE PCT			
METHANE	77.7	86.6	96.4
ETHANE	12.4	6.7	0.2
PROPANE	5.0	2.3	TRACE
N-BUTANE	1.1	0.6	0.0
ISOBUTANE	0.7	0.3	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	2.1	1.8	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.2	3.0
HELIUM	0.10	0.08	0.02
HEATING VALUE*	1226	1109	980
SPECIFIC GRAVITY	0.716	0.654	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 961 SAMPLE 14486	INDEX 962 SAMPLE 14487	INDEX 963 SAMPLE 16122
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GOMEZ & GRAY RANCH	GOMEZ & GRAY RANCH	WEST TEXAS
PLANT NAME	GRAY RANCH	GRAY RANCH	WAHA COMPRESSOR STA.
LOCATION	30 IN. LINE	30 IN. AFTER PROCESSING	36 IN. OUTLET
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	LONE STAR GAS CO.
SAMPLED	10/07/75	10/07/75	10/21/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	1040	1010	700
FLOW,MCFD	220000	97000	220000
COMPONENT, MOLE PCT			
METHANE	52.0	96.3	95.5
ETHANE	0.1	0.1	2.0
PROPANE	TRACE	TRACE	0.5
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	0.9	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	47.2	2.6	0.7
HELIUM	0.03	0.06	0.02
HEATING VALUE*	529	977	1028
SPECIFIC GRAVITY	1.016	0.584	0.587

	INDEX 964 SAMPLE 14484	INDEX 965 SAMPLE 16118	INDEX 966 SAMPLE 2041
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WEST TEXAS AREA	WEST TEXAS GAS	YATES
PLANT NAME	WAHA COMPRESSOR STA.	WAHA COMPRESSOR STA.	PIPELINE SAMPLE
LOCATION	36 IN. LINE	OUTLET	NOT GIVEN
OWNER	LONE STAR GAS CO.	OASIS PIPE LINE CO.	HUMBLE OIL & REFINING CO.
SAMPLED	10/06/75	10/21/80	06/13/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	760	900	NOT GIVEN
FLOW,MCFD	260000	380000	22
COMPONENT, MOLE PCT			
METHANE	96.6	96.5	75.2
ETHANE	1.4	1.3	17.9
PROPANE	0.2	0.2	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.1	TRACE	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	0.9	0.6	1.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.7	1.1	5.0
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1016	1015	1083
SPECIFIC GRAVITY	0.577	0.579	0.695

	INDEX 967 SAMPLE 5635	INDEX 968 SAMPLE 5636	INDEX 969 SAMPLE 5661
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	CLIFFSIDE
PLANT NAME	AMARILLO HELIUM PLANT	AMARILLO HELIUM PLANT	AMARILLO HELIUM PLANT
LOCATION	RESIDUE GAS	PLANT INLET	PLANT INLET
OWNER	U. S. BUREAU OF MINES	U.S. BUREAU OF MINES	U. S. BUREAU OF MINES
SAMPLED	06/11/54	06/11/54	08/02/54
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.6	66.0	65.7
ETHANE	3.8	3.6	3.8
PROPANE	1.9	1.9	1.8
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	24.0	24.5	25.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	0.6
HELIUM	0.13	1.77	1.77
HEATING VALUE*	857	835	816
SPECIFIC GRAVITY	0.710	0.715	0.709

	INDEX 970 SAMPLE 5662	INDEX 971 SAMPLE 5663	INDEX 972 SAMPLE 2078
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	CLIFFSIDE	CLIFFSIDE	PANHANDLE W
PLANT NAME	AMARILLO HELIUM PLANT	AMARILLO HELIUM PLANT	BIVINS COMPRESSOR STA.
LOCATION	PLANT RESIDUE	PLANT RESIDUE	DISCHARGE
OWNER	U. S. BUREAU OF MINES	U. S. BUREAU OF MINES	CANADIAN RIVER GAS CO.
SAMPLED	08/02/54	08/02/54	06/27/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	68.4	69.0
ETHANE	4.0	4.0	18.5
PROPANE	1.6	1.8	---
N-BUTANE	0.6	0.5	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	24.5	24.4	11.4
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.12	0.12	0.47
HEATING VALUE*	868	847	1030
SPECIFIC GRAVITY	0.712	0.710	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 973 SAMPLE 2591	INDEX 974 SAMPLE 2923	INDEX 975 SAMPLE 3272
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	GASOLINE PLANT INLET	PIPELINE SAMPLE	BIVINS NO. A-25
LOCATION	LINE TO AMARILLO	SOUTH LINE AT TRI-WAY JCT.	GATHERING LINE-BIV.A-25 & A2
OWNER	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	01/19/33	10/14/41	04/99/42
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	180	NOT GIVEN	NOT GIVEN
FLOW,MCFD	10000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.6	65.3	65.2
ETHANE	19.8	17.8	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.8	15.0	14.5
OXYGEN	0.9	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.7	0.1
HELIUM	0.62	0.99	0.77
HEATING VALUE*	1019	980	1001
SPECIFIC GRAVITY	0.711	0.708	0.708

	INDEX 976 SAMPLE 5188	INDEX 977 SAMPLE 5502	INDEX 978 SAMPLE 5508
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FAIN COMPRESSOR STA.	FAIN COMPRESSOR STA.	TURKEY CREEK COMPRESSOR STA.
LOCATION	NOT GIVEN	DISCHARGE	DISCHARGE
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	WEST TEXAS GAS CO.
SAMPLED	04/25/52	07/01/53	07/01/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	400	NOT GIVEN	NOT GIVEN
FLOW,MCFD	26000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.9	75.6	78.3
ETHANE	6.0	6.6	6.7
PROPANE	3.3	3.2	TRACE
N-BUTANE	0.8	0.8	0.6
ISOBUTANE	0.3	0.3	0.9
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.1	0.5
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	12.1	12.5	12.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.66	0.66	0.49
HEATING VALUE*	1021	1013	985
SPECIFIC GRAVITY	0.694	0.691	0.670

	INDEX 979 SAMPLE 5625	INDEX 980 SAMPLE 5626	INDEX 981 SAMPLE 5627
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	TURKEY CREEK COMPRESSOR STA.	TURKEY CREEK COMPRESSOR STA.	FAIN COMPRESSOR STA.
LOCATION	INLET	OUTLET	INLET
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
SAMPLED	06/01/54	06/01/54	06/01/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	175	390	160
FLOW,MCFD	40000	40000	45000
COMPONENT, MOLE PCT			
METHANE	77.6	78.8	75.6
ETHANE	6.2	5.9	6.6
PROPANE	3.8	3.5	3.3
N-BUTANE	1.1	0.6	0.9
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	9.4	10.0	11.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.48	0.53	0.64
HEATING VALUE*	1075	1033	1042
SPECIFIC GRAVITY	0.697	0.678	0.701

	INDEX 982 SAMPLE 5628	INDEX 983 SAMPLE 5890	INDEX 984 SAMPLE 5895
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FAIN COMPRESSOR STA.	FAIN COMPRESSOR STA.	CHANNING LINE
LOCATION	OUTLET	NO. F44-12	F-36 16 IN. LINE AT TRIWAY
OWNER	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	06/01/54	08/02/55	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	325	NOT GIVEN	NOT GIVEN
FLOW,MCFD	45000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.5	72.4	72.1
ETHANE	6.2	5.5	3.6
PROPANE	3.4	3.2	3.9
N-BUTANE	0.7	1.0	0.9
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	11.9	15.5	15.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.68	0.93	0.92
HEATING VALUE*	1016	995	984
SPECIFIC GRAVITY	0.686	0.712	0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 985 SAMPLE 5896	INDEX 986 SAMPLE 5898	INDEX 987 SAMPLE 6758
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	CHANNING LINE	CHANNING LINE	TURKEY CREEK PLANT
LOCATION	10 IN. F-6 LOOP	8 IN. F-17 LINE	16 IN. NORTH LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	AMARILLO OIL CO.
SAMPLED	08/02/55	08/02/55	07/23/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	145
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.8	72.1	78.4
ETHANE	5.5	5.7	6.1
PROPANE	3.0	3.1	0.3
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	16.3	15.7	9.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	1.00	0.95	0.40
HEATING VALUE*	977	987	1074
SPECIFIC GRAVITY	0.711	0.711	0.648

	INDEX 988 SAMPLE 6761	INDEX 989 SAMPLE 6762	INDEX 990 SAMPLE 7340
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	TURKEY CREEK PLANT	TURKEY CREEK PLANT	TURKEY CREEK GASOLINE PLANT
LOCATION	24 IN. DISCHARGE	16 IN. WEST LINE	24 IN. LINE
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	PIONEER NATURAL GAS CO.
SAMPLED	07/23/58	07/23/58	01/19/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	350	85	400
FLOW,MCFD	32000	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	78.6	77.4	78.7
ETHANE	6.3	6.1	5.9
PROPANE	3.4	3.3	2.8
N-BUTANE	0.8	1.1	0.5
ISOBUTANE	0.3	0.6	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	9.4	10.2	10.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.50	0.50	0.50
HEATING VALUE*	1051	1063	1021
SPECIFIC GRAVITY	0.684	0.698	0.673

	INDEX 991 SAMPLE 7387	INDEX 992 SAMPLE 7688	INDEX 993 SAMPLE 7691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FAIN COMPRESSOR STA.	TURKEY CREEK COMPRESSOR STA.	TURKEY CREEK COMPRESSOR STA.
LOCATION	16 IN. INLET	INLET	INLET
OWNER	COLORADO INTERSTATE GAS CO.	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.
SAMPLED	02/09/60	09/26/60	09/27/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	72000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	78.8	77.4
ETHANE	6.7	6.4	6.2
PROPANE	3.5	3.5	3.7
N-BUTANE	1.1	1.2	1.2
ISOBUTANE	0.5	0.6	0.8
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	11.4	8.0	9.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.59	0.40	0.40
HEATING VALUE*	1061	1100	1094
SPECIFIC GRAVITY	0.709	0.699	0.707

	INDEX 994 SAMPLE 7692	INDEX 995 SAMPLE 7866	INDEX 996 SAMPLE 7867
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	TURKEY CREEK COMPRESSOR STA.	TURKEY CREEK GASOLINE PLANT	TURKEY CREEK GASOLINE PLANT
LOCATION	INLET	INLET	16 IN. INLET
OWNER	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.
SAMPLED	09/30/60	02/23/61	02/23/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.3	77.1	78.5
ETHANE	6.5	6.5	6.7
PROPANE	3.7	3.5	3.4
N-BUTANE	1.3	1.1	1.0
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	8.9	10.0	8.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.50	0.50	0.40
HEATING VALUE*	1098	1072	1080
SPECIFIC GRAVITY	0.706	0.701	0.691

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 997 SAMPLE 8103	INDEX 998 SAMPLE 8186	INDEX 999 SAMPLE 9304
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	TURKEY CREEK PLANT	TURKEY CREEK PLANT	FOURWAY COMPRESSOR STA.
LOCATION	INLET	INLET	INLET
OWNER	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/09/61	08/05/61	04/24/64
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	176
FLOW,MCFD	NOT GIVEN	NOT GIVEN	179
COMPONENT, MOLE PCT			
METHANE	77.9	78.8	75.4
ETHANE	6.8	7.0	6.9
PROPANE	3.4	3.1	3.8
N-BUTANE	0.9	0.9	1.3
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	9.5	8.7	10.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.40	0.30	0.50
HEATING VALUE*	1063	1082	1102
SPECIFIC GRAVITY	0.691	0.692	0.721

	INDEX 1000 SAMPLE 9309	INDEX 1001 SAMPLE 9735	INDEX 1002 SAMPLE 11849
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	FAIN COMPRESSOR STA.	FAIN COMPRESSOR STA.	COMPRESSOR STATION NO. 1
LOCATION	16 IN INLET	INLET F-29-16	SEC. 24, BLK. 2, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	04/24/64	02/17/65	05/09/69
FORMATION	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	170	166	NOT GIVEN
FLOW,MCFD	64	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	75.3	71.6
ETHANE	7.0	6.9	6.0
PROPANE	3.7	3.9	3.8
N-BUTANE	1.2	1.2	1.4
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.2	0.3	0.5
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	10.4	10.7	14.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.54	0.57	0.78
HEATING VALUE*	1083	1140	1051
SPECIFIC GRAVITY	0.712	0.717	0.736

	INDEX 1003 SAMPLE 11850	INDEX 1004 SAMPLE 11851	INDEX 1005 SAMPLE 11852
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
PLANT NAME	COMPRESSOR STATION NO. 7	COMPRESSOR STATION NO. 19	STATION NO. 21
LOCATION	SEC. 37, BLK. 018, EL&RR SUR	SEC. 5, BLK. 018, D&P SUR.	SEC. 25, BLK. PMC, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	05/09/69	05/09/69	05/09/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.4	71.2	71.6
ETHANE	5.6	6.6	6.4
PROPANE	3.5	3.8	3.6
N-BUTANE	1.2	1.3	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.5	0.4	0.3
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	15.6	14.3	14.9
OXYGEN	0.1	0.3	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.88	0.78	0.82
HEATING VALUE*	1013	1041	1020
SPECIFIC GRAVITY	0.729	0.733	0.725

	INDEX 1006 SAMPLE 8584	INDEX 1007 SAMPLE 7422	INDEX 1008 SAMPLE 6640
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	RANDALL	ROBERTS
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W	QUINDUNO
PLANT NAME	PIPELINE SAMPLE	PIPELINE SAMPLE	STA. N OF PAMPA TEX.
LOCATION	COMPOSITE	CANYON, TEXAS	12 IN. LINE
OWNER	ANADARKO PRODUCTION CO.	PIONEER NATURAL GAS CO.	NATURAL GAS PL CO OF AMERICA
SAMPLED	06/19/62	12/09/59	06/19/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	435	360
PRESSURE,PSIG	NOT GIVEN	325	NOT GIVEN
FLOW,MCFD	NOT GIVEN	30000	20000
COMPONENT, MOLE PCT			
METHANE	76.0	79.5	79.0
ETHANE	7.3	5.9	8.2
PROPANE	3.7	2.7	4.2
N-BUTANE	0.9	0.3	1.4
ISOBUTANE	0.5	0.3	0.8
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	10.2	10.2	4.9
OXYGEN	0.5	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.33	0.50	0.10
HEATING VALUE*	1062	1006	1184
SPECIFIC GRAVITY	0.701	0.662	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1009 SAMPLE 8160	INDEX 1010 SAMPLE 8159	INDEX 1011 SAMPLE 12545
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUNNELS	RUNNELS	RUSK
FIELD	FORT CHADBOURNE	WINTERS SW	PONE
PLANT NAME	FORT CHADBOURNE PLANT	COMP. STA. AT BALLINGER TEX.	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	HUMBLE OIL & REFINING CO.
SAMPLED	08/12/61	08/12/61	11/10/70
FORMATION	NOT GIVEN	NOT GIVEN	CRET-COMPOSITE
GEOLOGIC PROVINCE CODE	425	425	260
PRESSURE, PSIG	950	315	NOT GIVEN
FLOW, MCFD	5300	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.9	72.5	89.2
ETHANE	16.8	10.2	3.4
PROPANE	5.7	4.9	1.9
N-BUTANE	0.2	1.3	0.7
ISOBUTANE	0.3	0.7	0.8
N-PENTANE	TRACE	0.2	0.5
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.4
NITROGEN	5.8	9.3	2.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.7
HELIUM	0.08	0.25	0.03
HEATING VALUE*	1148	1143	1114
SPECIFIC GRAVITY	0.728	0.737	0.652

	INDEX 1012 SAMPLE 6935	INDEX 1013 SAMPLE 6936	INDEX 1014 SAMPLE 12712
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SCHLEICHER	SCHLEICHER
FIELD	WHITE POINT E	NOT GIVEN	PAGE
PLANT NAME	GAS PRODUCTS PLANT NO. 20	GAS PRODUCTS PLANT NO. 23	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	02/02/59	02/05/59	03/12/71
FORMATION	NOT GIVEN	NOT GIVEN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	220	430	430
PRESSURE, PSIG	37	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.1	79.3	77.2
ETHANE	6.2	9.6	8.7
PROPANE	2.6	2.4	4.5
N-BUTANE	TRACE	0.0	1.3
ISOBUTANE	TRACE	0.0	0.7
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.1	0.0	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.3
NITROGEN	0.5	8.2	5.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.7
HELIUM	0.01	0.20	0.12
HEATING VALUE*	1096	1038	1171
SPECIFIC GRAVITY	0.615	0.659	0.726

	INDEX 1015 SAMPLE 8157	INDEX 1016 SAMPLE 8153	INDEX 1017 SAMPLE 6529
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCURRY	SHACKELFORD	SHERMAN
FIELD	NOT GIVEN	WINDHAM	HUGOTON & PANHANDLE
PLANT NAME	SNYDER COMPRESSOR STA.	10 MI. E OF ABILENE TEX.	PHILLIPS PIPELINE SYSTEM
LOCATION	DISCHARGE	NOT GIVEN	NOT GIVEN
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	KERR-MCGEE OIL IND., INC.
SAMPLED	08/11/61	08/10/61	03/21/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	425	360
PRESSURE, PSIG	960	255	175
FLOW, MCFD	18700	700	7000
COMPONENT, MOLE PCT			
METHANE	70.5	64.6	70.6
ETHANE	23.9	10.9	6.5
PROPANE	1.0	8.3	4.0
N-BUTANE	TRACE	2.7	1.3
ISOBUTANE	TRACE	1.3	0.6
N-PENTANE	TRACE	0.5	0.2
ISOPENTANE	0.1	0.6	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.1
NITROGEN	4.2	10.4	15.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.20	0.80
HEATING VALUE*	1173	1266	1030
SPECIFIC GRAVITY	0.702	0.827	0.733

	INDEX 1018 SAMPLE 5384	INDEX 1019 SAMPLE 5386	INDEX 1020 SAMPLE 5698
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	PHILLIPS CHEMICAL PLANT	PHILLIPS CHEMICAL PLANT	TEXAS BOOSTER STA.
LOCATION	NOT GIVEN	NOT GIVEN	LINE K
OWNER	KERR-MCGEE CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/06/53	02/06/53	10/12/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	255
FLOW, MCFD	NOT GIVEN	NOT GIVEN	40000
COMPONENT, MOLE PCT			
METHANE	70.0	70.8	74.1
ETHANE	6.5	6.6	6.1
PROPANE	6.1	6.1	3.1
N-BUTANE	1.2	1.1	0.7
ISOBUTANE	0.5	0.8	0.4
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.0	15.0	14.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.74	0.74	0.78
HEATING VALUE*	1016	1014	995
SPECIFIC GRAVITY	0.736	0.727	0.697

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1021 SAMPLE 5700	INDEX 1022 SAMPLE 5701	INDEX 1023 SAMPLE 6267
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	TEXAS BOOSTER STA.	TEXAS BOOSTER STA.	TEXAS BOOSTER STA.
LOCATION	LINE L-1	LINE L-1	LINE K
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/12/54	10/12/54	03/12/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	255	255	NOT GIVEN
FLOW,MCFD	160000	80000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	70.5	74.1
ETHANE	6.3	6.2	6.7
PROPANE	4.1	3.9	3.5
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.9	16.1	12.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.75	0.73	0.70
HEATING VALUE*	1016	1019	1044
SPECIFIC GRAVITY	0.729	0.731	0.711

	INDEX 1024 SAMPLE 6688	INDEX 1025 SAMPLE 6691	INDEX 1026 SAMPLE 6695
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	AREA A,SEC.300,BLK.1-T,T&NO	AREA A,SEC.407,BLK2-T,T&NO	STA. IN SEC.23,BLK.1-C,GN&RR
LOCATION	24 IN. L LINE	24 IN. L LINE	24 IN. J-L LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	196	200	175
FLOW,MCFD	6200	65000	51000
COMPONENT, MOLE PCT			
METHANE	69.8	69.8	72.4
ETHANE	6.3	6.6	6.1
PROPANE	3.9	4.1	3.5
N-BUTANE	1.3	1.3	1.0
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.5	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	16.2	15.6	14.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.80	0.80	1.00
HEATING VALUE*	1021	1041	1013
SPECIFIC GRAVITY	0.736	0.741	0.715

	INDEX 1027 SAMPLE 6696	INDEX 1028 SAMPLE 6697	INDEX 1029 SAMPLE 6699
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.23,BLK.1-C,GH&RR	STA. IN SEC.23,BLK.1-C,GH&RR	STA. IN SEC.23,BLK.1-C,GH&RR
LOCATION	26 IN. K LINE	24 IN. L LINE	24 IN. L-1 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	240	175	175
FLOW,MCFD	56000	112000	98000
COMPONENT, MOLE PCT			
METHANE	73.9	70.4	70.6
ETHANE	6.4	6.4	6.2
PROPANE	3.5	4.0	3.9
N-BUTANE	1.0	1.2	1.3
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	13.1	15.8	15.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.70	0.80	0.70
HEATING VALUE*	1039	1026	1027
SPECIFIC GRAVITY	0.713	0.734	0.734

	INDEX 1030 SAMPLE 6942	INDEX 1031 SAMPLE 6943	INDEX 1032 SAMPLE 6944
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	SEC. 22, BLK. I-C GH&H SUR.	TEXAS BOOSTER STA.	TEXAS BOOSTER STA.
LOCATION	J-4	J-1 LINE	L-2 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.7	75.4	75.2
ETHANE	6.3	6.4	6.5
PROPANE	3.6	3.8	3.6
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	12.3	12.0	12.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.50	0.40	0.50
HEATING VALUE*	1048	1046	1046
SPECIFIC GRAVITY	0.710	0.702	0.704

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1033 SAMPLE 6945	INDEX 1034 SAMPLE 6946	INDEX 1035 SAMPLE 6947
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.119,BLK.1-C,GH&N	STA. IN SEC.122,BLK1-C,GH&N	STA. IN SEC.33,BLK.2,GH&H
LOCATION	L-10 LINE	L-11 LINE	K-1 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.7	70.2	75.6
ETHANE	6.5	6.6	6.9
PROPANE	3.7	4.1	3.6
N-BUTANE	0.9	1.2	1.0
ISOBUTANE	0.6	0.8	0.5
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	0.7	0.5
NITROGEN	18.2	14.8	10.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	1.00	0.70	0.60
HEATING VALUE*	992	1072	1074
SPECIFIC GRAVITY	0.730	0.751	0.710

	INDEX 1036 SAMPLE 6948	INDEX 1037 SAMPLE 6949	INDEX 1038 SAMPLE 6950
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.34,BLK.3-B,GH&H	STA. IN SEC.47,BLK.3-B,GH&H	STA. IN SEC.6,BLK.3-T,T&NO
LOCATION	K-6 LINE	K-42 LINE	TEXAS HUGOTON
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.8	69.5	71.0
ETHANE	6.6	6.3	6.7
PROPANE	3.8	3.4	3.7
N-BUTANE	1.1	0.8	0.8
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	14.4	17.8	15.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.80	0.90	0.80
HEATING VALUE*	1037	967	1001
SPECIFIC GRAVITY	0.726	0.718	0.719

	INDEX 1039 SAMPLE 6951	INDEX 1040 SAMPLE 6952	INDEX 1041 SAMPLE 6953
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.27,BLK.2-B,GH&H	STA. IN SEC.46,BLK.2-B,GH&H	TEXAS BOOSTER STA.
LOCATION	L-16 LINE	L LINE	O LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	69.5	70.8
ETHANE	6.6	6.5	6.2
PROPANE	3.9	4.3	3.9
N-BUTANE	1.0	1.4	1.2
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	14.5	15.6	15.6
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.70	0.80	0.70
HEATING VALUE*	1019	1043	1022
SPECIFIC GRAVITY	0.715	0.744	0.730

	INDEX 1042 SAMPLE 6954	INDEX 1043 SAMPLE 6955	INDEX 1044 SAMPLE 6956
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	TEXAS BOOSTER STA.	TEXAS BOOSTER STA.	PIPELINE SAMPLE
LOCATION	N LINE	M LINE	J-MAIN LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	70.4	72.1
ETHANE	6.5	6.5	6.2
PROPANE	3.8	4.0	3.7
N-BUTANE	1.1	1.2	1.1
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.2	15.5	14.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.80	0.80	0.60
HEATING VALUE*	1034	1025	1021
SPECIFIC GRAVITY	0.722	0.732	0.721

* CALCULATED GROSS BTU PER CU FT. DRY. AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1045 SAMPLE 6957	INDEX 1046 SAMPLE 6958	INDEX 1047 SAMPLE 6959
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.192,BLK.1-C,GH&H	STA. IN SEC.137,BLK.1-T,TN&O	STA. IN SEC.300,BLK.1-T,T&NO
LOCATION	J-17 LINE	J LINE	L-1-37 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.9	66.4	69.4
ETHANE	6.1	5.8	6.4
PROPANE	4.0	4.0	4.1
N-BUTANE	1.2	1.2	1.4
ISOBUTANE	0.6	0.6	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	19.4	20.2	15.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.90	0.90	0.80
HEATING VALUE*	983	977	1038
SPECIFIC GRAVITY	0.745	0.749	0.744

	INDEX 1048 SAMPLE 6960	INDEX 1049 SAMPLE 6961	INDEX 1050 SAMPLE 6962
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
PLANT NAME	STA. IN SEC.239,BLK.1-T,T&NO	STA. IN SEC.343,BLK.1-T,T&NO	STA. IN SEC.275,BLK.1-T,T&NO
LOCATION	TEXAS HUGOTON	L-15 LINE	TEXAS HUGOTON
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	69.8	66.1
ETHANE	6.0	6.4	6.4
PROPANE	4.0	4.3	5.3
N-BUTANE	1.3	1.4	3.0
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.3	0.3	1.4
ISOPENTANE	0.3	0.4	0.8
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	17.8	15.5	14.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.80	0.80	0.70
HEATING VALUE*	913	1048	1159
SPECIFIC GRAVITY	0.745	0.744	0.808

	INDEX 1051 SAMPLE 6963	INDEX 1052 SAMPLE 8144	INDEX 1053 SAMPLE 8170
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	STEPHENS	SUTTON
FIELD	HUGOTON, TEXAS	MANNING-OCONNOR	MIERS
PLANT NAME	STA. IN SEC.408,BLK.1-T,T&NO	PIPELINE SAMPLE	MIERS FIELD COMP. STA.
LOCATION	L-21 LINE	MANNING-OCONNOR FIELD	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	LONE STAR GAS CO.	SHELL OIL CO.
SAMPLED	02/16/59	08/10/61	08/14/61
FORMATION	PENN-TONKAWA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	425	430
PRESSURE,PSIG	NOT GIVEN	63	365
FLOW,MCFD	NOT GIVEN	275	3400
COMPONENT, MOLE PCT			
METHANE	68.4	71.0	81.9
ETHANE	6.6	11.2	5.7
PROPANE	4.3	6.7	2.3
N-BUTANE	1.5	2.1	0.6
ISOBUTANE	0.7	1.1	0.4
N-PENTANE	0.5	0.5	TRACE
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	0.3	0.2	TRACE
HEXANES PLUS	0.8	0.5	0.1
NITROGEN	15.7	5.4	7.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.9
HELIUM	0.70	0.10	0.30
HEATING VALUE*	1076	1282	1039
SPECIFIC GRAVITY	0.766	0.790	0.665

	INDEX 1054 SAMPLE 2052	INDEX 1055 SAMPLE 12727	INDEX 1056 SAMPLE 5509
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	WHEELER
FIELD	MCCAMEY	WILSHIRE	PANHANDLE E
PLANT NAME	PIPELINE SAMPLE	NOT GIVEN	SHAMROCK PLANT
LOCATION	NOT GIVEN	NOT GIVEN	18 IN. DISCHARGE
OWNER	HUMBLE OIL & REFINING CO.	ATLANTIC RICHFIELD CO.	LONE STAR GAS CO.
SAMPLED	06/16/30	03/19/71	07/02/53
FORMATION	NOT GIVEN	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	360
PRESSURE,PSIG	18	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.7	75.5	82.0
ETHANE	68.1	13.8	5.8
PROPANE	---	5.6	4.1
N-BUTANE	---	1.4	1.9
ISOBUTANE	---	0.8	0.9
N-PENTANE	---	0.5	0.7
ISOPENTANE	---	0.0	0.4
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.5
NITROGEN	0.9	1.3	3.5
OXYGEN	0.1	0.0	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	2.2	0.7	0.0
HELIUM	0.00	0.02	0.12
HEATING VALUE*	1511	1272	1212
SPECIFIC GRAVITY	0.917	0.743	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1057 SAMPLE 5510	INDEX 1058 SAMPLE 6741	INDEX 1059 SAMPLE 6742
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
PLANT NAME	TWITTY STA.	STATION NO. 2	PANOMA PLANT
LOCATION	18 IN. DISCHARGE	16 IN. DISCHARGE	EAST LINE
OWNER	CONSOLIDATED GAS CO.	LONE STAR GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	07/02/53	07/22/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
PRESSURE,PSIG	NOT GIVEN	270	190
FLOW,MCFD	NOT GIVEN	3000	56000
COMPONENT, MOLE PCT			
METHANE	80.2	82.8	88.2
ETHANE	7.9	6.1	3.4
PROPANE	3.7	4.1	1.5
N-BUTANE	1.0	1.6	0.5
ISOBUTANE	0.5	1.0	0.3
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	6.4	2.8	5.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.17	TRACE	0.20
HEATING VALUE*	1117	1134	1042
SPECIFIC GRAVITY	0.684	2.800	0.631

	INDEX 1060 SAMPLE 7279	INDEX 1061 SAMPLE 6744	INDEX 1062 SAMPLE 2023
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WINKLER
FIELD	PANHANDLE E	PANHANDLE W	LLANO
PLANT NAME	GATHERING SYSTEM	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	2 TO 12 IN. LINES	SEC. 9, BLK. A-8, H&GN SUR.	SEC. 1, BLK. C22, P.S.L.
OWNER	UNITED PRODUCING CO., INC.	CONSOLIDATED GAS UTILITIES	SHELL PETROLEUM CORP.
SAMPLED	11/17/59	07/22/58	06/10/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	430
PRESSURE,PSIG	280	310	NOT GIVEN
FLOW,MCFD	10500	30000	68
COMPONENT, MOLE PCT			
METHANE	89.4	80.7	51.4
ETHANE	5.3	8.0	44.0
PROPANE	1.7	4.8	---
N-BUTANE	0.4	1.3	---
ISOBUTANE	0.3	0.8	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	3.9	3.9	4.0
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.10	0.10	0.07
HEATING VALUE*	1058	1174	1309
SPECIFIC GRAVITY	0.627	0.701	0.793

	INDEX 1063 SAMPLE 8294	INDEX 1064 SAMPLE 8295	INDEX 1065 SAMPLE 8296
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	KEYSTONE FIELD COMP. STA.	EMPERIOR	KEYSTONE COMPRESSOR STA.
LOCATION	16 IN. LINE	20 IN. LINE	24 IN. LINE
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	11/29/61	11/29/61	11/29/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	436
FLOW,MCFD	73000	223000	144000
COMPONENT, MOLE PCT			
METHANE	82.6	91.1	88.0
ETHANE	12.5	4.4	4.6
PROPANE	0.8	1.5	0.7
N-BUTANE	0.1	0.3	0.1
ISOBUTANE	TRACE	0.2	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	3.4	1.7	1.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	TRACE	0.0	0.0
CARBON DIOXIDE	0.4	0.8	5.2
HELIUM	0.06	0.02	0.06
HEATING VALUE*	1085	1061	996
SPECIFIC GRAVITY	0.643	0.615	0.640

	INDEX 1066 SAMPLE 8297	INDEX 1067 SAMPLE 2026	INDEX 1068 SAMPLE 8280
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WISE
FIELD	NOT GIVEN	O BRIEN	NOT GIVEN
PLANT NAME	KEYSTONE COMPRESSOR STA.	PIPELINE SAMPLE	PIPELINE
LOCATION	30 IN. LINE	SEC. 27, BLK. B-12, P.S.L.	NOT GIVEN
OWNER	EL PASO NATURAL GAS CO.	CONTINENTAL OIL CO.	CHEM GAS PRODUCTS PLANT, INC
SAMPLED	11/29/61	06/10/30	11/24/61
FORMATION	NOT GIVEN	NOT GIVEN	PENN-ROONESVILLE BEND CONG.
GEOLOGIC PROVINCE CODE	430	430	420
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	650
FLOW,MCFD	266000	NOT GIVEN	150000
COMPONENT, MOLE PCT			
METHANE	83.6	41.1	81.1
ETHANE	11.7	28.0	8.5
PROPANE	0.8	---	4.1
N-BUTANE	TRACE	---	1.0
ISOBUTANE	TRACE	---	0.6
N-PENTANE	0.0	---	0.2
ISOPENTANE	0.0	---	0.4
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	3.6	0.3	3.3
OXYGEN	0.0	0.4	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	0.2	---	TRACE
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	TRACE	30.3	0.4
HELIUM	0.54	0.00	0.12
HEATING VALUE*	1078	918	1165
SPECIFIC GRAVITY	0.684	0.992	0.694

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1069 SAMPLE 10892	INDEX 1070 SAMPLE 6775	INDEX 1071 SAMPLE 8305
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	YOAKUM
FIELD	VARIOUS	WISE & JACK	NOT GIVEN
PLANT NAME	PIPELINE	WISE CO. GASOLINE PLANT	PLAINS COMPRESSOR STA.
LOCATION	NOT GIVEN	20 IN. LINE	30 IN. DISCHARGE
OWNER	S. W. GAS PIPELINE, INC.	NATURAL GAS PL CO OF AMERICA	EL PASO NATURAL GAS CO.
SAMPLED	02/27/67	08/08/58	11/30/61
FORMATION	-COMMINGLED	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	430
PRESSURE,PSIG	600	645	833
FLOW,MCFD	7000	90000	625000
COMPONENT, MOLE PCT			
METHANE	77.1	86.3	86.9
ETHANE	10.0	9.4	7.3
PROPANE	5.9	1.5	1.3
N-BUTANE	1.4	0.1	0.1
ISOBUTANE	0.5	0.1	TRACE
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.4	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	3.9	1.9	3.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.11	0.10	0.05
HEATING VALUE*	1208	1093	1048
SPECIFIC GRAVITY	0.730	0.632	0.622

	INDEX 1072 SAMPLE 8304	INDEX 1073 SAMPLE 7853	INDEX 1074 SAMPLE 16003
STATE	TEXAS	UTAH	UTAH
COUNTY	YOAKUM	CARBON	CARBON
FIELD	SPRABERRY	CLEAR CREEK	VERNAL & COLORADO
PLANT NAME	PLAINS COMPRESSOR STA.	CLEAR CREEK COMPOSITE	PRICE STA.
LOCATION	24 IN. DISCHARGE TO DIMITT	NOT GIVEN	20 IN.
OWNER	EL PASO NATURAL GAS CO.	UTAH NATURAL GAS CO.	MOUNTAIN FUEL SUPPLY CO.
SAMPLED	11/30/61	02/09/61	07/09/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	575	575
PRESSURE,PSIG	517	NOT GIVEN	421
FLOW,MCFD	38000	NOT GIVEN	64000
COMPONENT, MOLE PCT			
METHANE	87.8	97.4	89.5
ETHANE	7.3	0.1	6.3
PROPANE	1.1	0.1	1.3
N-BUTANE	0.1	TRACE	0.2
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	3.2	1.6	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.5
HELIUM	0.09	0.04	0.07
HEATING VALUE*	1052	991	1077
SPECIFIC GRAVITY	0.618	0.569	0.621

	INDEX 1075 SAMPLE 6968	INDEX 1076 SAMPLE 8318	INDEX 1077 SAMPLE 9621
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	LISBON
PLANT NAME	PIPELINE	ANETH GASOLINE PLANT	PIPELINE SAMPLE
LOCATION	NOT GIVEN	20 IN. INLET	LISBON UNIT WELL NO. C-93
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	PURE OIL CO.
SAMPLED	02/11/59	12/04/61	10/26/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
PRESSURE,PSIG	NOT GIVEN	977	2850
FLOW,MCFD	NOT GIVEN	85200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	78.7	37.7
ETHANE	19.3	15.1	10.8
PROPANE	8.7	3.3	8.9
N-BUTANE	1.7	TRACE	1.7
ISOBUTANE	0.9	TRACE	0.5
N-PENTANE	0.2	TRACE	0.5
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.6	2.4	10.9
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.3
CARBON DIOXIDE	0.2	0.1	27.8
HELIUM	0.07	0.03	0.58
HEATING VALUE*	1366	1158	914
SPECIFIC GRAVITY	0.788	0.674	1.061

	INDEX 1078 SAMPLE 8319	INDEX 1079 SAMPLE 12074	INDEX 1080 SAMPLE 14480
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	SAN JUAN BASIN	SAN JUAN BASIN
PLANT NAME	ANETH GASOLINE PLANT	MOAB COMPRESSOR STATION	MOAB COMPRESSOR STA.
LOCATION	6 IN. OUTLET	NO. 2 DISCHARGE	26 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	NORTHWEST PIPELINE CORP.
SAMPLED	12/04/61	10/06/69	09/30/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
PRESSURE,PSIG	924	647	640
FLOW,MCFD	2400	200000	185000
COMPONENT, MOLE PCT			
METHANE	66.3	91.3	90.5
ETHANE	4.6	4.7	6.3
PROPANE	2.4	1.3	1.5
N-BUTANE	0.7	0.0	TRACE
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	19.0	0.7	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	TRACE	0.0	0.0
CARBON DIOXIDE	5.0	1.9	1.2
HELIUM	0.98	0.01	0.02
HEATING VALUE*	867	1043	1072
SPECIFIC GRAVITY	0.747	0.612	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1081 SAMPLE 16119	INDEX 1082 SAMPLE 6849	INDEX 1083 SAMPLE 16004
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SUMMIT
FIELD	SAN JUAN BASIN	WHITE MESA	SW WYO., NW COLO., & NE UTAH
PLANT NAME	MOAB COMPRESSOR STA.	PIPELINE SAMPLE	COALVILLE STA.
LOCATION	26 IN. OUTLET	NOT GIVEN	INLET
OWNER	NORTHWEST PIPELINE CORP.	CONTINENTAL OIL CO.	MOUNTAIN FUEL SUPPLY CO.
SAMPLED	10/27/80	11/99/59	07/10/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	570
PRESSURE,PSIG	730	NOT GIVEN	800
FLOW,MCFD	280000	NOT GIVEN	48000
COMPONENT, MOLE PCT			
METHANE	90.2	64.1	83.6
ETHANE	6.4	20.9	9.5
PROPANE	1.5	10.1	1.9
N-BUTANE	TRACE	2.2	0.3
ISOBUTANE	TRACE	1.2	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.0	0.7	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.4	0.3	4.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	0.3
HELIUM	0.01	TRACE	0.05
HEATING VALUE*	1067	1453	1094
SPECIFIC GRAVITY	0.614	0.838	0.653

	INDEX 1084 SAMPLE 6832	INDEX 1085 SAMPLE 9980	INDEX 1086 SAMPLE 8373
STATE	UTAH	VIRGINIA	WASHINGTON
COUNTY	UINTAH	RUSSELL	SPOKANE
FIELD	RED WASH	COMPOSITE VIRGINIA GAS	COUR DE LANE
PLANT NAME	PIPELINE SAMPLE	METER NO. 55M3 A&B	SPOKANE P.G.T. CHECK STA.
LOCATION	COMPRESSOR INTAKE	12 IN. LINE	NOT GIVEN
OWNER	STANDARD OIL CO. OF CALIF.	KENTUCKY WEST VIRGINIA GAS	EL PASO NATURAL GAS CO.
SAMPLED	10/16/58	07/09/65	01/18/62
FORMATION	NOT GIVEN	DEVO-SHALE & MISS	NOT GIVEN
GEOLOGIC PROVINCE CODE	575	160	605
PRESSURE,PSIG	NOT GIVEN	115	NOT GIVEN
FLOW,MCFD	NOT GIVEN	1734	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	95.7	87.4
ETHANE	2.0	2.5	7.3
PROPANE	2.1	0.5	2.3
N-BUTANE	0.9	0.1	0.6
ISOBUTANE	0.6	0.1	0.4
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.8	TRACE	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	0.3	0.7	1.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	TRACE	TRACE
HELIUM	TRACE	0.07	0.03
HEATING VALUE*	1121	1043	1118
SPECIFIC GRAVITY	0.642	0.581	0.639

	INDEX 1087 SAMPLE 6915	INDEX 1088 SAMPLE 8412	INDEX 1089 SAMPLE 14837
STATE	WASHINGTON	WASHINGTON	WEST VIRGINIA
COUNTY	WHATCOM	WHATCOM	BRAXTON
FIELD	CANADIAN FIELDS	DAWSON CREEK AREA, CANADA	CENTRAL WEST VIRGINIA GAS
PLANT NAME	COMPRESSOR STA. NO. 18	COMPRESSOR STA. NO. 18	BURNSVILLE COMPRESSOR STA.
LOCATION	26 IN. O. D.	NOT GIVEN	12 IN. DISCHARGE
OWNER	PACIFIC NORTHWEST PIPELINE	EL PASO NATURAL GAS CO.	EQUITABLE GAS CO.
SAMPLED	12/19/58	02/19/62	10/21/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	700	700	160
PRESSURE,PSIG	725	NOT GIVEN	44
FLOW,MCFD	208381	NOT GIVEN	14000
COMPONENT, MOLE PCT			
METHANE	90.5	91.8	83.8
ETHANE	4.2	4.8	9.4
PROPANE	0.8	1.3	3.5
N-BUTANE	0.2	0.2	0.9
ISOBUTANE	0.0	0.1	0.5
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	3.2	1.4	1.1
OXYGEN	0.8	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.02	0.03	0.08
HEATING VALUE*	1020	1064	1192
SPECIFIC GRAVITY	0.607	0.605	0.679

	INDEX 1090 SAMPLE 14838	INDEX 1091 SAMPLE 14840	INDEX 1092 SAMPLE 14825
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BRAXTON	DODDRIDGE	KANAWHA
FIELD	CENTRAL WEST VIRGINIA GAS	RITCHIE AND DODDRIDGE CO.	CENTRAL WEST VIRGINIA
PLANT NAME	BURNSVILLE COMPRESSOR STA.	WEST UNION COMPRESSOR STA.	COBB COMPRESSOR STA.
LOCATION	12 IN. PLANT INLET	NOT GIVEN	12 IN. DISCHARGE
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	COLUMBIA GAS TRANSMISSION
SAMPLED	10/21/76	10/21/76	10/20/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	48	40	300
FLOW,MCFD	14000	12000	30000
COMPONENT, MOLE PCT			
METHANE	88.7	89.7	81.7
ETHANE	4.9	6.0	10.0
PROPANE	3.2	1.9	4.3
N-BUTANE	0.8	0.5	1.3
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.2	0.8	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.11	0.06	0.06
HEATING VALUE*	1172	1115	1235
SPECIFIC GRAVITY	0.667	0.631	0.705

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1093 SAMPLE 14843	INDEX 1094 SAMPLE 12	INDEX 1095 SAMPLE 14826
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	LEWIS	LEWIS
FIELD	CENTRAL WEST VIRGINIA	KENNEDY STA.	LEWIS, UPSHUR & BARBOUR CO.
PLANT NAME	CORNWELL COMPRESSOR STA.	NOT GIVEN	BERLIN COMPRESSOR STA.
LOCATION	12 IN. DISCHARGE	NOT GIVEN	10 IN. DISCHARGE
OWNER	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.	COLUMBIA GAS TRANSMISSION
SAMPLED	10/20/76	05/13/19	10/21/76
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	250	56	180
FLOW,MCFD	3400	43000	5100
COMPONENT, MOLE PCT			
METHANE	83.2	72.2	89.4
ETHANE	9.9	25.8	6.9
PROPANE	3.7	---	1.8
N-BUTANE	1.0	---	0.4
ISOBUTANE	0.6	---	0.2
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.3	---	0.2
NITROGEN	0.7	0.6	0.7
OXYGEN	0.0	1.1	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	0.04	TRACE	0.06
HEATING VALUE*	1211	1194	1119
SPECIFIC GRAVITY	0.686	0.694	0.629

	INDEX 1096 SAMPLE 14839	INDEX 1097 SAMPLE 17	INDEX 1098 SAMPLE 14824
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	RITCHIE	SUMMERS
FIELD	NOT GIVEN	CRAIG STATION	KENTUCKY,VIRGINIA&W.VIRGINIA
PLANT NAME	SKIN CREEK COMPRESSOR STA.	NOT GIVEN	FLAT TOP COMPRESSOR STA.
LOCATION	12 IN. DISCHARGE	NOT GIVEN	20 IN. SUCTION
OWNER	EQUITABLE GAS CO.	HOPE NATURAL GAS CO.	COLUMBIA GAS TRANSMISSION
SAMPLED	10/21/76	05/13/19	10/20/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
PRESSURE,PSIG	240	63	210
FLOW,MCFD	10000	NOT GIVEN	90000
COMPONENT, MOLE PCT			
METHANE	86.9	74.4	94.8
ETHANE	7.9	24.8	3.6
PROPANE	2.6	---	0.5
N-BUTANE	0.6	---	0.2
ISOBUTANE	0.4	---	0.1
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	TRACE
NITROGEN	1.0	0.0	0.6
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	0.08	0.00	0.06
HEATING VALUE*	1150	1198	1055
SPECIFIC GRAVITY	0.652	0.684	0.587

	INDEX 1099 SAMPLE 14823	INDEX 1100 SAMPLE 3045	INDEX 1101 SAMPLE 3065
STATE	WEST VIRGINIA	WYOMING	WYOMING
COUNTY	WAYNE	CARBON	CARBON
FIELD	KENTUCKY E. & WEST VIRGINIA	BUNKER HILL	OIL SPRINGS
PLANT NAME	KENOVA EXTRACTION PLANT	2 GEO, BRIMMER WELLS	PIPELINE SAMPLE
LOCATION	24 IN. INLET GAS	SEC. 32, T27N, R89W	SEC. 2&3, T23N, R79W
OWNER	COLUMBIA GAS TRANSMISSION	OHIO OIL CO.	OHIO OIL & CUNNINGHAM OIL CO
SAMPLED	10/19/76	12/09/41	12/26/41
FORMATION	NOT GIVEN	CRET-SHANNON	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	160	535	535
PRESSURE,PSIG	325	387	1100
FLOW,MCFD	125000	2000	2500
COMPONENT, MOLE PCT			
METHANE	79.9	95.5	97.9
ETHANE	12.4	4.3	0.1
PROPANE	4.7	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.0	0.0	1.6
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1220	1044	994
SPECIFIC GRAVITY	0.697	0.578	0.565

	INDEX 1102 SAMPLE 9417	INDEX 1103 SAMPLE 6976	INDEX 1104 SAMPLE 9097
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	FREMONT
FIELD	ROCK RIVER	WERTZ	HAPPY SPRINGS
PLANT NAME	FIELD COMPOSITE	PIPELINE SAMPLE	PIPELINE SAMPLE
LOCATION	PLANT INLET	NOT GIVEN	SEC. 9, T28N, R93W
OWNER	MARATHON OIL CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
SAMPLED	06/29/64	02/17/59	09/99/63
FORMATION	CRET--MUDDY,DAKOTA,&LAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	530
PRESSURE,PSIG	100	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.1	37.5	68.6
ETHANE	12.4	5.9	6.9
PROPANE	11.4	5.2	9.6
N-BUTANE	3.0	2.5	3.9
ISOBUTANE	2.3	1.3	3.0
N-PENTANE	1.0	0.8	0.8
ISOPENTANE	0.5	0.5	1.3
CYCLOPENTANE	0.3	0.1	0.3
HEXANES PLUS	0.7	0.7	0.9
NITROGEN	2.0	11.9	4.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	TRACE	0.0
CARBON DIOXIDE	0.3	32.9	0.3
HELIUM	0.01	0.40	0.04
HEATING VALUE*	1475	844	1447
SPECIFIC GRAVITY	0.873	1.105	0.879

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1105 SAMPLE 9124	INDEX 1106 SAMPLE 9126	INDEX 1107 SAMPLE 9127
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SUSSEX	SUSSEX	SUSSEX
PLANT NAME	SUSSEX B BATTERY	SUSSEX E BATTERY	NOT GIVEN
LOCATION	SEC. 23, T42N, R78W	SEC. 16, T42N, R78W	NME O LEARY BATT.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	10/12/63	10/12/63	10/13/63
FORMATION	-MIXED SWEET GAS	CRET-SHANNON	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	515	515
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.6	71.5	76.3
ETHANE	10.8	11.4	12.1
PROPANE	12.6	9.4	6.0
N-BUTANE	4.4	3.5	1.8
ISOBUTANE	1.2	0.9	0.7
N-PENTANE	0.8	0.6	0.3
ISOPENTANE	1.0	0.9	0.6
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.4	0.3
NITROGEN	1.7	1.0	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.02	0.00	0.03
HEATING VALUE*	1494	1409	1287
SPECIFIC GRAVITY	0.879	0.820	0.748

	INDEX 1108 SAMPLE 9128	INDEX 1109 SAMPLE 9129	INDEX 1110 SAMPLE 9130
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SUSSEX	SUSSEX	SUSSEX
PLANT NAME	SUSSEX A BATTERY	N.M.C. BATTERY NO. 1	SUSSEX A BATTERY
LOCATION	TEST SYSTEM	SEC. 35, T42N, R78W	SEC. 17, T42N, R78W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	10/21/63	12/31/63	12/31/63
FORMATION	CRET-PARKMAN	CRET-SHANNON	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.3	55.3	60.4
ETHANE	7.6	19.6	16.2
PROPANE	9.3	15.4	12.3
N-BUTANE	4.0	4.7	4.4
ISOBUTANE	1.8	1.7	1.4
N-PENTANE	0.8	0.5	0.8
ISOPENTANE	1.1	1.5	0.9
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.5	0.5
NITROGEN	1.1	0.3	2.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1417	1642	1519
SPECIFIC GRAVITY	0.831	0.960	0.909

	INDEX 1111 SAMPLE 9131	INDEX 1112 SAMPLE 9132	INDEX 1113 SAMPLE 9133
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SUSSEX	SUSSEX	SUSSEX
PLANT NAME	MCU A-4 BATTERY	PIPELINE SAMPLE	MCU A-1 BATTERY
LOCATION	SEC. 3, T41N, R78W	SEC. 26, T42N, R78W	SEC. 2, T41N, R78W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	10/--/63	10/--/63	12/31/63
FORMATION	CRET-SHANNON	CRET-SUSSEX	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	61.6	65.4
ETHANE	12.3	15.1	15.7
PROPANE	6.7	14.1	11.3
N-BUTANE	2.4	4.4	2.8
ISOBUTANE	0.6	1.3	1.3
N-PENTANE	0.4	0.7	0.4
ISOPENTANE	0.9	1.2	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.5	0.4
NITROGEN	1.6	0.6	1.7
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1332	1563	1434
SPECIFIC GRAVITY	0.775	0.914	0.847

	INDEX 1114 SAMPLE 9134	INDEX 1115 SAMPLE 16001	INDEX 1116 SAMPLE 16002
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	LINCOLN	LINCOLN
FIELD	SUSSEX	BIG PINEY, LABARGE AREA	COLO, WYO., & UTAH
PLANT NAME	MCU A-2 BATTERY	OPAL GASOLINE	KEMMERER COMPRESSOR STA.
LOCATION	SEC. 11, T41N, R78W	30 IN.	26 IN.
OWNER	CONTINENTAL OIL CO.	NORTHWEST PIPELINE CORP.	NORTHWEST PIPELINE CORP.
SAMPLED	12/31/63	07/10/80	07/10/80
FORMATION	CRET-FRONTIER 2ND	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	535	535
PRESSURE,PSIG	NOT GIVEN	700	600
FLOW,MCFD	NOT GIVEN	161000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	90.7	91.5
ETHANE	8.9	5.5	5.7
PROPANE	8.8	2.0	0.8
N-BUTANE	2.7	0.4	0.1
ISOBUTANE	1.1	0.3	0.1
N-PENTANE	0.5	0.1	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	4.8	0.6	0.8
OXYGEN	0.5	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1297	1106	1057
SPECIFIC GRAVITY	0.798	0.628	0.605

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1117 SAMPLE 16005		INDEX 1118 SAMPLE 8998		INDEX 1119 SAMPLE 8995	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NATRONA	
FIELD	BEAVER CREEK & N GRIEVE		BROOKS RANCH		BURKE RANCH	
PLANT NAME	NEW TOWN BORDER METER		PIPELINE SAMPLE		PIPELINE SAMPLE	
LOCATION	16 IN.		NOT GIVEN		NOT GIVEN	
OWNER	NORTHERN UTILITIES, INC.		ATLANTIC REFINING CO.		ATLANTIC REFINING CO.	
SAMPLED	07/11/80		05/31/63		05/31/63	
FORMATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	530		530		530	
PRESSURE,PSIG	200		NOT GIVEN		NOT GIVEN	
FLOW,MCFD	10000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.5		60.0		46.4	
ETHANE	7.4		13.7		14.6	
PROPANE	0.3		14.1		21.8	
N-BUTANE	TRACE		3.9		5.5	
ISOBUTANE	0.0		1.6		2.8	
N-PENTANE	TRACE		0.9		0.8	
ISOPENTANE	TRACE		0.7		1.1	
CYCLOPENTANE	TRACE		0.3		0.2	
HEXANES PLUS	TRACE		0.8		0.5	
NITROGEN	0.6		3.7		3.3	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	2.2		0.3		2.0	
HELIUM	0.01		0.02		0.02	
HEATING VALUE*	1047		1225		1725	
SPECIFIC GRAVITY	0.618		0.921		1.073	

	INDEX 1120 SAMPLE 16007		INDEX 1121 SAMPLE 16006		INDEX 1122 SAMPLE 4514	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NIOBRARA	
FIELD	POWELL II * MCCULLOCK		W. WYOMING TO CASPER		LANCE CREEK	
PLANT NAME	NORTHERN PIPELINE METER		KNNG SUCTION METER		BELL1-0 WELLS 10-19-22-23-24	
LOCATION	6 IN.		20 IN.		SEC. 34, T36N, R65W	
OWNER	NORTHERN UTILITIES, INC.		KANSAS-NEBRASKA NAT. GAS CO.		CONTINENTAL OIL CO.	
SAMPLED	07/11/80		07/11/80		05/06/48	
FORMATION	NOT GIVEN		NOT GIVEN		PENN-	
GEOLOGIC PROVINCE CODE	530		530		515	
PRESSURE,PSIG	200		375		NOT GIVEN	
FLOW,MCFD	9000		40000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	70.1		92.3		60.5	
ETHANE	15.5		3.9		30.8	
PROPANE	2.6		1.2		---	
N-BUTANE	0.3		0.4		---	
ISOBUTANE	0.1		0.2		---	
N-PENTANE	TRACE		0.1		---	
ISOPENTANE	TRACE		0.2		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	TRACE		0.1		---	
NITROGEN	7.7		0.4		7.8	
OXYGEN	1.9		0.0		0.1	
ARGON	0.1		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE	0.0		0.0		---	
CARBON DIOXIDE	1.5		1.1		0.7	
HELIUM	0.01		0.01		0.10	
HEATING VALUE*	1069		1076		1165	
SPECIFIC GRAVITY	0.720		0.617		0.746	

	INDEX 1123 SAMPLE 8335		INDEX 1124 SAMPLE 8337		INDEX 1125 SAMPLE 8336	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	BIG PINEY		HOGSBACK		TIP TOP	
PLANT NAME	BIG PINEY COMPRESSOR STA. 23		PIPELINE SAMPLE		PIPELINE SAMPLE	
LOCATION	16 IN. OUTLET		BIG PINEY		BIG PINEY	
OWNER	EL PASO NATURAL GAS CO.		EL PASO NATURAL GAS CO.		EL PASO NATURAL GAS CO.	
SAMPLED	12/08/61		12/08/61		12/08/61	
FORMATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	535		535		535	
PRESSURE,PSIG	200		750		750	
FLOW,MCFD	70000		47000		32000	
COMPONENT, MOLE PCT						
METHANE	90.9		91.9		91.4	
ETHANE	4.6		4.7		4.8	
PROPANE	1.7		1.4		1.5	
N-BUTANE	0.4		0.3		0.4	
ISOBUTANE	0.6		0.2		0.2	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		TRACE		0.1	
NITROGEN	1.1		0.9		1.0	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.03		TRACE		0.02	
HEATING VALUE*	1103		1081		1085	
SPECIFIC GRAVITY	0.626		0.609		0.615	

	INDEX 1126 SAMPLE 2106		INDEX 1127 SAMPLE 9570		INDEX 1128 SAMPLE 9053	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	LOST SOLDIER		LOST SOLDIER		PATRICK DRAW	
PLANT NAME	NO. 46		PIPELINE SAMPLE		PIPELINE SAMPLE	
LOCATION	SEC. 3, T26N, R90W		SEC. 7, T26N, R89W		NOT GIVEN	
OWNER	PRAIRIE OIL & GAS CO.		SINCLAIR OIL & GAS CO.		TEXACO INC. & U.P. RAILROAD	
SAMPLED	09/04/30		09/21/64		07/99/63	
FORMATION	CRET-DAKOTA		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	535		535		535	
PRESSURE,PSIG	5		NOT GIVEN		NOT GIVEN	
FLOW,MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	32.8		31.9		83.9	
ETHANE	19.3		5.7		7.8	
PROPANE	---		13.9		3.3	
N-BUTANE	---		3.8		1.2	
ISOBUTANE	---		TRACE		0.5	
N-PENTANE	---		1.5		0.2	
ISOPENTANE	---		TRACE		0.5	
CYCLOPENTANE	---		0.2		0.1	
HEXANES PLUS	---		0.8		0.3	
NITROGEN	40.7		12.3		0.3	
OXYGEN	0.1		TRACE		0.0	
ARGON	---		TRACE		0.0	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE	---		0.0		0.0	
CARBON DIOXIDE	7.2		29.3		1.8	
HELIUM	0.00		0.37		TRACE	
HEATING VALUE*	678		1027		1182	
SPECIFIC GRAVITY	0.889		1.166		0.693	

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 1 SAMPLE 7811	INDEX 2 SAMPLE 7814	INDEX 3 SAMPLE 7815
COUNTRY	ARGENTINA	ARGENTINA	ARGENTINA
STATE OR PROVINCE	SALTA	SALTA	SALTA
FIELD	CAMPO DURAN	CAMPO DURAN	CAMPO DURAN
WELL NAME	CAMPO DURAN 26	CAMPO DURAN 6.-	CAMP DURAN 15
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES
COMPLETED	12/07/57	04/14/51	10/28/55
SAMPLED	04/08/60	04/08/60	04/08/60
FORMATION	-TUPAMBI	-TUPAMBI	-TUPAMBI
DEPTH, FEET	12150	11303	11306
WELLHEAD PRESSURE,PSIG	3325	3840	3881
OPEN FLOW, MCFD	27181	29789	22592
COMPONENT, MOLE PCT			
METHANE	85.7	85.0	87.2
ETHANE	6.8	6.8	6.1
PROPANE	3.2	3.3	2.0
N-BUTANE	1.0	1.1	0.7
ISOBUTANE	0.5	0.7	0.5
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	0.6	0.9	2.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.9
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1163	1188	1107
SPECIFIC GRAVITY	0.674	0.690	0.650

	INDEX 4 SAMPLE 7820	INDEX 5 SAMPLE 7816	INDEX 6 SAMPLE 7817
COUNTRY	ARGENTINA	ARGENTINA	ARGENTINA
STATE OR PROVINCE	SALTA	SALTA	SALTA
FIELD	CAMPO DURAN	MADRAJONES	MADRAJONES
WELL NAME	CAMPO DURAN 40	MADREJONES 23	MADREJONES 16
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES
COMPLETED	03/29/60	01/29/60	11/27/59
SAMPLED	04/08/60	04/08/60	04/08/60
FORMATION	-TUPA CREEK	-TUAPMBI	-TUPAMBI
DEPTH, FEET	11943	13049	12973
WELLHEAD PRESSURE,PSIG	3527	3705	3869
OPEN FLOW, MCFD	2922	37328	24615
COMPONENT, MOLE PCT			
METHANE	82.8	87.7	85.8
ETHANE	7.7	6.2	6.4
PROPANE	4.0	2.1	2.7
N-BUTANE	1.3	0.7	0.9
ISOBUTANE	0.7	0.5	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.1	2.1	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.2	1.8
HELIUM	0.03	TRACE	0.03
HEATING VALUE*	1188	1117	1136
SPECIFIC GRAVITY	0.701	0.645	0.673

	INDEX 7 SAMPLE 7818	INDEX 8 SAMPLE 7819	INDEX 9 SAMPLE 7809
COUNTRY	ARGENTINA	ARGENTINA	ARGENTINA
STATE OR PROVINCE	SALTA	SALTA	SANTA CRUZ
FIELD	MADREJONES	MADREJONES	CANADON SECO
WELL NAME	MADREJONES 17	MADREJONES 4	CS 40
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES
COMPLETED	06/27/59	02/21/56	NOT GIVEN
SAMPLED	04/08/60	04/08/60	--/--/60
FORMATION	-TUPAMBI	-TUPAMBI	-CHUBUTIANO
DEPTH, FEET	13074	13012	5246
WELLHEAD PRESSURE,PSIG	3442	3819	855
OPEN FLOW, MCFD	15221	27322	14
COMPONENT, MOLE PCT			
METHANE	85.9	81.4	90.1
ETHANE	6.4	7.9	5.5
PROPANE	3.1	4.4	1.7
N-BUTANE	0.9	1.6	0.5
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	0.7	1.2	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.6	0.1
HELIUM	0.03	0.03	0.20
HEATING VALUE*	1152	1215	1104
SPECIFIC GRAVITY	0.674	0.720	0.624

	INDEX 10 SAMPLE 7812	INDEX 11 SAMPLE 7813	INDEX 12 SAMPLE 7810
COUNTRY	ARGENTINA	ARGENTINA	ARGENTINA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	COON LEON	MESETA ESPINOZA	PICO TRUNCADO
WELL NAME	CL 198	ME 374	PT 105
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES	YACIMIENTOS P. FISCALES
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	02/14/61	--/--/60	--/--/60
FORMATION	-CHUBUTIANO	-CHUBUTIANO	-CHUBUTIANO
DEPTH, FEET	4182	4698	3107
WELLHEAD PRESSURE,PSIG	135	74	45
OPEN FLOW, MCFD	159	177	18
COMPONENT, MOLE PCT			
METHANE	96.5	89.6	86.4
ETHANE	2.1	5.3	6.3
PROPANE	0.3	1.8	2.6
N-BUTANE	0.1	0.5	1.4
ISOBUTANE	0.2	0.4	0.9
N-PENTANE	TRACE	0.2	0.5
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.6	1.9	1.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.11	0.02	0.01
HEATING VALUE*	1042	1106	1177
SPECIFIC GRAVITY	0.577	0.633	0.675

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 13 SAMPLE 14223	INDEX 14 SAMPLE 10479	INDEX 15 SAMPLE 10924
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	NORTH TERRIRORY	NORTH TERRITORY	QUEENSLAND
FIELD	PALM VALLEY	MEREENIE	BONY CREEK
WELL NAME	PALM VALLEY NO. 2	EAST MEREENIE NO. 1	BONY CREEK NO. 4
LOCATION	LAT 24 00 03S LONG132 38 47E	NOT GIVEN	26-44-26S, 148-57-20E
OWNER	MAGELLAN PETROLEJM PTY. LTD.	EXOIL N.T. PTY.LTD. ET AL.	ASSOC. AUSTRALIAN OIL FIELD
COMPLETED	02/02/70	08/04/64	11/18/63
SAMPLED	06/24/74	02/02/66	01/05/67
FORMATION	ORDO-POCOOTA	ORDO-PACOOTA	JURA-PRECIPICE
DEPTH, FEET	6557	3550	4330
WELLHEAD PRESSURE,PSIG	2446	1530	1740
OPEN FLOW, MCFD	69700	60500	3650
COMPONENT, MOLE PCT			
METHANE	87.9	68.3	82.2
ETHANE	7.8	8.9	5.6
PROPANE	1.2	3.6	1.8
N-BUTANE	0.2	1.2	0.1
ISOBUTANE	0.2	0.6	1.0
N-PENTANE	TRACE	0.8	TRACE
ISOPENTANE	0.1	TRACE	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.9	0.8
NITROGEN	2.3	15.3	7.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.21	0.20	0.08
HEATING VALUE*	1084	1093	1054
SPECIFIC GRAVITY	0.626	0.765	0.663

	INDEX 16 SAMPLE 10925	INDEX 17 SAMPLE 10932	INDEX 18 SAMPLE 10933
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	BONY CREEK	BONY CREEK	BONY CREEK
WELL NAME	BONY CREEK NO. 6	BONY CREEK NO. 10	BONY CREEK NO. 5
LOCATION	26-44-00S, 148-58-18E	26-44-51S, 148-59-14E	26-45-43S, 148-59-13E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	12/14/63	05/29/64	11/28/63
SAMPLED	01/05/67	01/05/67	01/05/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
DEPTH, FEET	4330	4320	4240
WELLHEAD PRESSURE,PSIG	1750	1740	1780
OPEN FLOW, MCFD	10600	3500	5300
COMPONENT, MOLE PCT			
METHANE	82.2	82.4	79.5
ETHANE	5.7	5.6	5.3
PROPANE	2.1	2.0	1.8
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	1.2	1.1	1.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.5	0.6	0.9
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.5	7.4	10.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.5
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1065	1062	1049
SPECIFIC GRAVITY	0.671	0.671	0.692

	INDEX 19 SAMPLE 10938	INDEX 20 SAMPLE 10939	INDEX 21 SAMPLE 10928
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	BONY CREEK	BONY CREEK	PICKANJINNIE
WELL NAME	BONY CREEK NO. 2	BONY CREEK NO. 13	PICKANJINNIE NO. 4
LOCATION	26-44-10S, 148-57-40E	26-43-34S, 148-56-29E	26-34-57S, 149-06-53E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	04/29/63	07/18/64	08/15/64
SAMPLED	01/05/67	01/05/67	01/06/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
DEPTH, FEET	4224	4255	4057
WELLHEAD PRESSURE,PSIG	1725	1725	1630
OPEN FLOW, MCFD	NOT GIVEN	9200	4400
COMPONENT, MOLE PCT			
METHANE	79.4	79.6	92.8
ETHANE	5.6	6.3	1.1
PROPANE	1.9	3.1	0.3
N-BUTANE	0.1	0.8	0.1
ISOBUTANE	1.1	1.0	0.6
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.4	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	10.8	7.7	4.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.06	0.08	0.02
HEATING VALUE*	1020	1109	1018
SPECIFIC GRAVITY	0.685	0.701	0.610

	INDEX 22 SAMPLE 10929	INDEX 23 SAMPLE 10942	INDEX 24 SAMPLE 10943
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	PICKANJINNIE	PICKANJINNIE	PICKANJINNIE
WELL NAME	PICKANJINNIE NO. 6	PICKANJINNIE NO. 1	PICKANJINNIE NO. 8
LOCATION	26-35-17S, 149-08-54E	26-35-42S, 149-07-18E	26-36-50S, 149-11-33E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	09/22/64	08/04/60	10/23/64
SAMPLED	NOT GIVEN	01/06/67	01/06/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	-SHOWGROUND
DEPTH, FEET	4078	4009	4320
WELLHEAD PRESSURE,PSIG	1600	1620	1990
OPEN FLOW, MCFD	11800	6650	10800
COMPONENT, MOLE PCT			
METHANE	96.3	93.1	96.1
ETHANE	0.5	1.5	1.0
PROPANE	TRACE	0.4	0.0
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.1	0.5	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.3	3.6	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1007	1018	1011
SPECIFIC GRAVITY	0.576	0.605	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 25 SAMPLE 10940	INDEX 26 SAMPLE 10941	INDEX 27 SAMPLE 10926
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	PINE RIDGE	PINE RIDGE	RICHMOND
WELL NAME	PINE RIDGE NO. 1	PINE RIDGE NO. 6	RICHMOND NO. 7
LOCATION	26-29-35S, 149-01-02E	26-28-43S, 148-58-36E	26-41-54S, 148-52-43E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	01/25/65	06/27/65	12/16/63
SAMPLED	01/06/67	01/06/67	01/04/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
DEPTH, FEET	3414	3420	4076
WELLHEAD PRESSURE,PSIG	1310	1240	1650
OPEN FLOW, MCFD	5500	5500	11200
COMPONENT, MOLE PCT			
METHANE	95.2	92.9	83.8
ETHANE	2.0	3.1	5.6
PROPANE	0.1	0.3	2.5
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	0.5	0.9
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	2.0	2.6	5.4
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.405	0.05	0.04
HEATING VALUE*	1018	1042	1101
SPECIFIC GRAVITY	0.582	0.600	0.670

	INDEX 28 SAMPLE 10927	INDEX 29 SAMPLE 10930	INDEX 30 SAMPLE 10931
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	RICHMOND	RICHMOND	RICHMOND
WELL NAME	RICHMOND NO. 11	RICHMOND NO. 18	APPLEGROVE NO. 1
LOCATION	26-41-44S, 148-51-12E	26-41-01S, 148-50-05E	26-40-55S, 148-51-06E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	01/05/64	04/23/64	10/28/63
SAMPLED	01/04/67	01/04/67	01/04/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
DEPTH, FEET	4036	3935	3932
WELLHEAD PRESSURE,PSIG	1650	1680	1685
OPEN FLOW, MCFD	1200	7900	2330
COMPONENT, MOLE PCT			
METHANE	85.6	92.2	86.2
ETHANE	5.8	2.5	5.6
PROPANE	2.6	0.4	2.2
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	1.1	0.0	0.9
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.5	0.0	0.4
CYCLOPENTANE	0.2	0.0	0.2
HEXANES PLUS	0.4	0.0	0.3
NITROGEN	2.9	3.7	3.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.9	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.07	0.06
HEATING VALUE*	1142	995	1105
SPECIFIC GRAVITY	0.669	0.584	0.658

	INDEX 31 SAMPLE 10935	INDEX 32 SAMPLE 10936	INDEX 33 SAMPLE 10937
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	RICHMOND	RICHMOND	RICHMOND
WELL NAME	RICHMOND NO. 13	RICHMOND NO. 16	RICHMOND NO. 5
LOCATION	26-42-16S, 148-52-51E	26-41-13S, 148-51-35E	26-42-00S, 148-52-14E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	03/01/64	04/03/64	11/29/63
SAMPLED	01/04/67	01/12/67	01/12/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
DEPTH, FEET	4107	4018	4146
WELLHEAD PRESSURE,PSIG	1640	1655	1576
OPEN FLOW, MCFD	4400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	87.1	84.3
ETHANE	5.6	5.6	6.1
PROPANE	2.8	2.2	2.8
N-BUTANE	0.7	0.3	0.7
ISOBUTANE	1.1	0.8	0.9
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	1.0	0.6	0.6
CYCLOPENTANE	0.4	0.2	0.1
HEXANES PLUS	0.7	0.3	0.2
NITROGEN	3.1	2.7	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1179	1126	1134
SPECIFIC GRAVITY	0.692	0.655	0.681

	INDEX 34 SAMPLE 12027	INDEX 35 SAMPLE 10788	INDEX 36 SAMPLE 10791
COUNTRY	AUSTRIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE		SANTA CRUZ	SANTA CRUZ
FIELD	MATZEN	COLPA	PALMAR
WELL NAME	SCHOENKIRCHEN TIEF 32	COLPA NO. 2	PALMAR NO. 5
LOCATION	SCHOENKIRCHEN N.O.	NOT GIVEN	NOT GIVEN
OWNER	MINERALOLVER WALTUNG AG	BOLIVIAN GULF OIL CO.	BOLIVIAN GULF OIL CO.
COMPLETED	07/18/69	03/20/..	01/05/65
SAMPLED	07/17/69	10/25/66	11/24/66
FORMATION	-KREIDE	-TARIJA L	-TAIQUATI
DEPTH, FEET	15452	8903	8670
WELLHEAD PRESSURE,PSIG	4120	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.2	84.4	88.8
ETHANE	0.8	6.7	5.4
PROPANE	0.2	4.0	2.9
N-BUTANE	0.1	1.4	0.9
ISOBUTANE	TRACE	0.8	0.2
N-PENTANE	TRACE	0.7	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.5	0.1
HEXANES PLUS	0.1	0.8	0.2
NITROGEN	1.2	0.5	0.9
OXYGEN	2.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	10.1	0.1	TRACE
HELIUM	0.02	0.02	0.01
HEATING VALUE*	896	1236	1140
SPECIFIC GRAVITY	0.689	0.701	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 37 SAMPLE 10792	INDEX 38 SAMPLE 10793	INDEX 39 SAMPLE 16042
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	RIO GRANDE	RIO GRANDE	SANTA CRUZ
WELL NAME	RIO GRANDE NO. 12	RIO GRANDE NO. 12	NO. 4-B
LOCATION	NOT GIVEN	NOT GIVEN	ROBORE
OWNER	BOLIVIAN GULF OIL CO.	BOLIVIAN GULF OIL CO.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	10/31/63	11/01/63	01/26/77
SAMPLED	11/24/66	11/24/66	07/24/80
FORMATION	-TAIQUATI	-TAIQUATI	CARB-TUPAMBI
DEPTH, FEET	9195	8618	6477
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.4	89.0	82.4
ETHANE	5.3	4.6	7.3
PROPANE	3.4	2.6	4.6
N-BUTANE	1.2	1.0	1.6
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.6	0.2	0.4
ISOPENTANE	0.5	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.3	0.3
NITROGEN	1.9	1.5	2.0
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1201	1136	1216
SPECIFIC GRAVITY	0.693	0.652	0.707

	INDEX 40 SAMPLE 16036	INDEX 41 SAMPLE 16037	INDEX 42 SAMPLE 16038
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA	TITA
WELL NAME	TITA NO. 1-T	TITA NO. 12-T	TITA NO. 3-UM
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	08/17/76	10/14/77	01/30/78
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
DEPTH, FEET	6592	6375	6423
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.4	70.0	81.6
ETHANE	7.1	6.2	7.1
PROPANE	4.3	4.1	4.2
N-BUTANE	1.4	1.5	1.3
ISOBUTANE	0.6	1.1	0.7
N-PENTANE	0.4	0.7	0.3
ISOPENTANE	0.4	0.8	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.3	1.2	0.4
NITROGEN	1.9	11.5	3.6
OXYGEN	0.0	2.5	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1204	1151	1180
SPECIFIC GRAVITY	0.695	0.793	0.703

	INDEX 43 SAMPLE 16039	INDEX 44 SAMPLE 16040	INDEX 45 SAMPLE 16041
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA	TITA
WELL NAME	TITA NO. 13-T	TITA NO. 7-B	TITA NO. 6-M
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	11/06/77	06/16/77	05/11/77
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
DEPTH, FEET	6454	6434	6342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.8	81.9	82.8
ETHANE	7.2	7.5	7.4
PROPANE	4.2	4.6	4.5
N-BUTANE	1.3	1.4	1.4
ISOBUTANE	0.6	0.8	0.6
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	1.9	2.2	2.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1196	1226	1200
SPECIFIC GRAVITY	0.691	0.713	0.697

	INDEX 46 SAMPLE 16043	INDEX 47 SAMPLE 10790	INDEX 48 SAMPLE 8883
COUNTRY	BOLIVIA	BOLIVIA	CANADA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	ALBERTA
FIELD	TITA	WILDCAT	BLACK BUTTE
WELL NAME	TITA NO. 5-B	PENA NO. 1	HOME CMG BLACK BUTTE
LOCATION	ROBORE	NOT GIVEN	L. S. 10-7, T1, R8
OWNER	OCCIDENTAL BOLIVIANA, INC.	BOLIVIAN GULF OIL CO.	CANADIAN MONTANA GAS CO.,LTD
COMPLETED	03/28/77	09/10/65	12/26/62
SAMPLED	07/24/80	11/24/66	02/09/63
FORMATION	CARB-TUPAMBI	DEVO-	-MANNVILLE
DEPTH, FEET	6498	11312	2679
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.5	90.2	91.8
ETHANE	8.4	3.7	2.3
PROPANE	5.4	2.1	1.0
N-BUTANE	1.6	0.7	0.4
ISOBUTANE	0.8	0.4	TRACE
N-PENTANE	0.4	0.4	TRACE
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.3	1.0	TRACE
NITROGEN	2.2	0.5	3.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.01	0.02	0.10
HEATING VALUE*	1236	1168	1019
SPECIFIC GRAVITY	0.720	0.664	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 49 SAMPLE 11025	INDEX 50 SAMPLE 11180	INDEX 51 SAMPLE 11183
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CARBON	COUNTESS	COUNTESS
WELL NAME	CWNG 10-19-29-22	COUNTESS 6-16-21-16	DELMI-SOCONY COUNTESS NO. 1
LOCATION	LSD 10-19-29-22-W4M	LSD 6-16-21-16-W4M	LSD 7-8-21-16-W4M
OWNER	CANADIAN WESTERN NAT. GAS CO	CANADIAN DELMI OIL, LTD.	CANADIAN DELMI OIL, LTD.
COMPLETED	NOT GIVEN	09/15/60	04/02/51
SAMPLED	07/04/67	06/20/67	06/20/67
FORMATION	-GLAUCONITE	CRET-COLORADO BASAL	CRET-BOW ISLAND
DEPTH, FEET	4765	3170	2870
WELLHEAD PRESSURE,PSIG	1110	826	752
OPEN FLOW, MCFD	13700	9000	1890
COMPONENT, MOLE PCT			
METHANE	85.1	91.5	91.4
ETHANE	6.0	3.0	2.9
PROPANE	3.2	0.9	0.9
N-BUTANE	0.8	0.3	0.2
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	3.9	3.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.06	0.06
HEATING VALUE*	1146	1038	1029
SPECIFIC GRAVITY	0.671	0.611	0.606

	INDEX 52 SAMPLE 11692	INDEX 53 SAMPLE 11693	INDEX 54 SAMPLE 11694
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CROSSFIELD	CROSSFIELD	CROSSFIELD
WELL NAME	CROSS 10-35-25-29	CPR CALGARY 11-1-26-29	MOBIL CPR CROSS 2-2-26-29
LOCATION	LSD 10-35-25-29 W4M	LSD 11-1-26-29 W4M	LSD 2-2-26-29W4M
OWNER	JEFFERSON LAKE PETROCHEMICAL	JEFFERSON LAKE PETROCHEMICAL	JEFFERSON LAKE PETROCHEMICAL
COMPLETED	10/21/66	05/06/60	07/15/62
SAMPLED	11/19/68	11/19/68	11/19/68
FORMATION	CRET-BLAIRMORE	DEVO-CROSSFIELD	MISS-ELKTON
DEPTH, FEET	7304	8625	7312
WELLHEAD PRESSURE,PSIG	1772	2105	1902
OPEN FLOW, MCFD	5300	51000	71000
COMPONENT, MOLE PCT			
METHANE	83.7	62.3	83.8
ETHANE	6.7	0.7	6.6
PROPANE	2.2	TRACE	2.1
N-BUTANE	0.5	0.0	0.6
ISOBUTANE	0.5	0.0	0.5
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.3
NITROGEN	0.5	2.4	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	29.4	0.3
CARBON DIOXIDE	5.2	10.1	4.9
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1090	800	1097
SPECIFIC GRAVITY	0.692	0.821	0.694

	INDEX 55 SAMPLE 10997	INDEX 56 SAMPLE 10998	INDEX 57 SAMPLE 10999
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	FERRIER	FERRIER	GILBY
WELL NAME	FERRIER NO. 8-28	FERRIER NO. 8-28	GILBY
LOCATION	LSD 8-28-39-8-W5M	LSD 8-28-39-8-W5M	LSD 10-1-41-3-W5M
OWNER	SINCLAIR CANADA OIL CO.	SINCLAIR CANADA OIL CO.	CANADIAN HOMESTEAD OILS LTD.
COMPLETED	12/01/55	12/01/55	10/09/59
SAMPLED	06/08/67	06/08/67	06/--/67
FORMATION	CRET-VIKING	CRET-CARDIUM	PENN-ROWE
DEPTH, FEET	8250	7230	7013
WELLHEAD PRESSURE,PSIG	2100	1700	NOT GIVEN
OPEN FLOW, MCFD	1000	750	7250
COMPONENT, MOLE PCT			
METHANE	83.2	84.8	76.5
ETHANE	9.2	8.0	7.8
PROPANE	3.6	3.2	3.1
N-BUTANE	1.0	0.7	0.8
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	1.1	1.6	5.3
OXYGEN	0.1	0.2	1.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	4.0
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1167	1137	1079
SPECIFIC GRAVITY	0.678	0.662	0.732

	INDEX 58 SAMPLE 11000	INDEX 59 SAMPLE 11001	INDEX 60 SAMPLE 8362
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	GILBY	GILBY	HARMATTAN
WELL NAME	GILBY	GILBY	HARMATTAN NO. 4-15
LOCATION	LSD 11-11-41-3-W5M	LSD 10-10-41-3-W5M	SEC. 15, T32, R4W5
OWNER	CANADIAN HOMESTEAD OILS LTD.	CANADIAN HOMESTEAD OILS LTD.	SHELL OIL CO.
COMPLETED	08/13/64	01/21/61	05/--/61
SAMPLED	06/--/67	06/--/67	11/--/61
FORMATION	JURA-A	-MANNVILLE A &JURASSIC D	DEVO-
DEPTH, FEET	7040	7190	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2664
OPEN FLOW, MCFD	5130	47000	98000
COMPONENT, MOLE PCT			
METHANE	81.0	77.6	77.9
ETHANE	8.1	7.8	0.5
PROPANE	3.0	3.0	0.1
N-BUTANE	0.8	0.9	TRACE
ISOBUTANE	0.4	1.1	0.0
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.3	1.2	0.0
CYCLOPENTANE	TRACE	0.4	0.0
HEXANES PLUS	0.2	1.7	0.0
NITROGEN	1.3	2.1	5.1
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	12.1
CARBON DIOXIDE	4.3	3.6	3.7
HELIUM	0.02	0.01	0.21
HEATING VALUE*	1112	1246	879
SPECIFIC GRAVITY	0.702	0.783	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 61 SAMPLE 10987	INDEX 62 SAMPLE 10989	INDEX 63 SAMPLE 14455
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	KEYSTONE	KEYSTONE	LANAWAY
WELL NAME	6-24-48-4	CS IMPERIAL KEYSTONE	LANAWAY NO 6-1
LOCATION	LSD 6-24-48-4-W5M	LSD 6-35-48-4-W5M	10-32-35-4 W5M
OWNER	CANADA-CITIES SERVICE	CANADA-CITIES SERVICE	AMOCO CANADA PET. CO.
COMPLETED	06/07/65	08/06/66	NOT GIVEN
SAMPLED	05/30/67	05/30/67	06/05/75
FORMATION	CRET-BELLY RIVER	CRET-BLAIRMORE	CRET-
DEPTH, FEET	3130	5070	7996
WELLHEAD PRESSURE,PSIG	934	510	2959
OPEN FLOW, MCFD	8800	1260	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	86.2	79.2
ETHANE	1.3	6.3	11.5
PROPANE	1.1	3.1	4.9
N-BUTANE	0.1	0.7	0.8
ISOBUTANE	0.3	0.6	0.8
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.1	1.8	1.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.9
HELIUM	0.02	0.04	0.01
HEATING VALUE*	1047	1146	1213
SPECIFIC GRAVITY	0.589	0.663	0.714

	INDEX 64 SAMPLE 8566	INDEX 65 SAMPLE 14456	INDEX 66 SAMPLE 10986
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	MINNEHIK-BUCK LAKE	NOT GIVEN	PADDLE RIVER
WELL NAME	HB MINIHIK 10-8-45-5	ROW KY NORTH NO. 1	PADDLE RIVER
LOCATION	SEC. 8, T45, R5W5M	7-14-33-20 W4M	LSD 6-1-57-9-W5M
OWNER	HUDSONS BAY OIL AND GAS CO.	AMOCO CANADA PET. CO.	CANADA-CITIES SERVICE
COMPLETED	11/13/61	NOT GIVEN	10/01/61
SAMPLED	05/12/62	07/24/75	05/29/67
FORMATION	MISS-PEKISKO	CRET-BASIL	JURA-
DEPTH, FEET	7090	4495	5351
WELLHEAD PRESSURE,PSIG	2430	1036	1470
OPEN FLOW, MCFD	23300	NOT GIVEN	23000
COMPONENT, MOLE PCT			
METHANE	84.8	86.4	84.4
ETHANE	6.5	6.4	7.8
PROPANE	2.8	3.3	3.1
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	0.5	1.9	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	TRACE	1.7
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1138	1145	1150
SPECIFIC GRAVITY	0.688	0.658	0.677

	INDEX 67 SAMPLE 10990	INDEX 68 SAMPLE 11785	INDEX 69 SAMPLE 11786
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	PADDLE RIVER	PRINCESS	PRINCESS
WELL NAME	6-32-56-8	MURPHY PRINCESS 10-28	MURPHY PRINCESS NO. 6-34
LOCATION	LSD 6-32-56-8-W5M	LSD 10-28-19-10W4	LSD6-34-19-10-W4
OWNER	CANADA-CITIES SERVICE	MURPHY OIL CO. LTD.	MURPHY OIL CO. LTD.
COMPLETED	09/05/62	NOT GIVEN	NOT GIVEN
SAMPLED	05/29/67	02/19/69	02/19/69
FORMATION	JURA-	CRET-WHITE SPECS 2ND	CRET-WHITE SPECS 2ND
DEPTH, FEET	4942	2000	2000
WELLHEAD PRESSURE,PSIG	1470	475	475
OPEN FLOW, MCFD	18500	2000	200
COMPONENT, MOLE PCT			
METHANE	84.5	95.7	91.4
ETHANE	7.7	0.4	0.3
PROPANE	2.9	TRACE	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.1	3.8	8.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	1.8	0.08	TRACE
HELIUM	0.04	977	0.18
HEATING VALUE*	1145	0.572	934
SPECIFIC GRAVITY	0.678		0.590

	INDEX 70 SAMPLE 14457	INDEX 71 SAMPLE 11279	INDEX 72 SAMPLE 11280
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	RICINUS	SAVANNA CREEK	SAVANNA CREEK
WELL NAME	RICINUS CARDIUM NO. 1	SAVANNAH CREEK NO. 3-A	SAVANNA CREEK NO. 1
LOCATION	15-12-36-9 W5M	5-32-14-4-W5M	12-20-14-4-W5M
OWNER	AMOCO CANADA PET. CO.	HUSKY OIL CANADA LTD.	HUSKY OIL CANADA LTD.
COMPLETED	NOT GIVEN	08/06/57	02/23/55
SAMPLED	06/05/75	02/07/68	02/07/68
FORMATION	CRET-	MISS-LIVINGSTONE	MISS-LIVINGSTONE
DEPTH, FEET	8566	8838	7040
WELLHEAD PRESSURE,PSIG	2400	1475	1475
OPEN FLOW, MCFD	17607	5289	1099
COMPONENT, MOLE PCT			
METHANE	81.6	88.9	84.4
ETHANE	8.7	1.0	0.9
PROPANE	4.3	TRACE	TRACE
N-BUTANE	0.9	0.0	0.0
ISOBUTANE	0.8	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	1.4	0.3	5.2
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	9.1	9.1
CARBON DIOXIDE	0.8	0.4	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1216	977	929
SPECIFIC GRAVITY	0.709	0.623	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 73 SAMPLE 11018	INDEX 74 SAMPLE 11019	INDEX 75 SAMPLE 8287
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	SAVANNAH CREEK	SAVANNAH CREEK	SHELL WATERTON
WELL NAME	SAVANNAH CREEK NO 3A	SAVANNAH CREEK NO. 1	SHELL WATERTON NO. 19
LOCATION	LSD 5-32-14-4-W5M	LSD 12-20-14-4-W5M	SEC. 11, TWP. 4, R1, W5M
OWNER	HUSKY OIL CANADA LTD.	HUSKY OIL CANADA LTD.	SHELL OIL CO. OF CANADA,LTD.
COMPLETED	08/06/67	06/--/67	11/--/61
SAMPLED	06/27/67	06/27/67	11/20/61
FORMATION	MISS-	MISS-	MISS-
DEPTH, FEET	8285	6401	12099
WELLHEAD PRESSURE,PSIG	1200	1200	2775
OPEN FLOW, MCFD	20000	40000	20000
COMPONENT, MOLE PCT			
METHANE	90.5	88.6	65.5
ETHANE	0.9	0.9	4.2
PROPANE	0.1	0.1	0.7
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.6	0.4	2.1
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	7.1	9.3	17.4
CARBON DIOXIDE	0.5	0.5	8.8
HELIUM	0.01	0.01	0.02
HEATING VALUE*	982	976	891
SPECIFIC GRAVITY	0.612	0.625	0.799

	INDEX 76 SAMPLE 8410	INDEX 77 SAMPLE 8264	INDEX 78 SAMPLE 9187
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	SUNDRE	WAYNE	WILDCAT
WELL NAME	HB SUNDRE 14-14-36-5	HB CPOG WAYNE NO. 1	SINCLAIR MILLICENT NO. 10-5
LOCATION	SEC. 14-T34-R5-W5M	SEC. 31, T26, R19W4M	SEC. 5, T21, R13W
OWNER	HUDSONS BAY OIL & GAS CO.	HUDSONS BAY OIL & GAS ET AL.	SINCLAIR CANADA OIL CO.
COMPLETED	12/29/61	09/01/61	03/10/63
SAMPLED	02/15/62	10/31/61	10/--/63
FORMATION	MISS-ELKTON	CRET-BLAIRMORE BASAL	CRET-VIKING
DEPTH, FEET	8868	4748	2592
WELLHEAD PRESSURE,PSIG	1000	1000	935
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1300
COMPONENT, MOLE PCT			
METHANE	87.7	86.3	92.2
ETHANE	6.0	6.6	2.8
PROPANE	1.6	2.8	1.3
N-BUTANE	0.3	0.7	0.3
ISOBUTANE	0.2	0.7	0.1
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.5	2.2	2.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.1	0.4
HELIUM	0.01	0.05	0.00
HEATING VALUE*	1068	1135	1040
SPECIFIC GRAVITY	0.650	0.657	0.605

	INDEX 79 SAMPLE 9188	INDEX 80 SAMPLE 11002	INDEX 81 SAMPLE 8675
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	WILDCAT	WILDCAT HILLS	WORSLEY
WELL NAME	SINCLAIR MILLICENT NO. 10-5	WILDCAT HILLS UNIT	WORSLEY NO. 14-19
LOCATION	SEC. 5, T21, R13W	10-6-27-W5M	SEC. 19, T87, R7W6M
OWNER	SINCLAIR CANADA OIL CO.	CANADIAN FINA OIL LTD.	SHELL OIL CO. OF CANADA LTD.
COMPLETED	03/10/63	10/17/66	09/07/59
SAMPLED	10/--/63	06/08/67	08/22/62
FORMATION	CRET-BLAIRMORE BASAL	MISS-TUNNER VALLEY	DEVO-
DEPTH, FEET	3336	10051	7300
WELLHEAD PRESSURE,PSIG	1466	2650	2753
OPEN FLOW, MCFD	8600	19000	130000
COMPONENT, MOLE PCT			
METHANE	92.1	87.0	85.4
ETHANE	1.9	3.3	3.9
PROPANE	0.5	0.8	2.0
N-BUTANE	0.1	0.2	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.8	1.3	6.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.5	0.0
CARBON DIOXIDE	0.9	6.2	0.5
HELIUM	0.10	0.01	0.50
HEATING VALUE*	1104	991	1044
SPECIFIC GRAVITY	0.606	0.660	0.647

	INDEX 82 SAMPLE 11068	INDEX 83 SAMPLE 11346	INDEX 84 SAMPLE 11348
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	BR COLUMBIA	BR COLUMBIA
FIELD	WORSLEY	PARKLAND	PARKLAND
WELL NAME	WORSLEY 10-22-87-7	PACIFIC IMPERIAL PARKLAND	PACIFIC IMPERIAL PARKLAND
LOCATION	LSD 10-22-87-7-W6M	6-29-81-15-W6	10-28-81-15
OWNER	SHELL CANADA LTD.	PACIFIC PETROLEUM LTD.	PACIFIC PETROLEUM LTD.
COMPLETED	NOT GIVEN	10/20/56	01/18/63
SAMPLED	08/06/67	01/23/68	01/23/68
FORMATION	DEVO-	DEVO-WABAMUN	DEVO-WABAMUN
DEPTH, FEET	7443	10893	10680
WELLHEAD PRESSURE,PSIG	1800	2504	2952
OPEN FLOW, MCFD	NOT GIVEN	25700	11000
COMPONENT, MOLE PCT			
METHANE	85.2	92.5	92.3
ETHANE	3.9	0.4	0.5
PROPANE	2.0	0.1	0.1
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	6.1	2.3	2.1
OXYGEN	0.1	0.2	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	2.2	0.0	0.0
CARBON DIOXIDE	0.5	4.2	4.5
HELIUM	0.52	0.24	0.30
HEATING VALUE*	1056	947	947
SPECIFIC GRAVITY	0.657	0.609	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 85 SAMPLE 11349	INDEX 86 SAMPLE 13287	INDEX 87 SAMPLE 11105
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	BR COLUMBIA	NW TERRITORY	ONTARIO
FIELD	RIGEL	DRAKE POINT	DOVER
WELL NAME	IMPERIAL ET AL. RIGEL	DRAKE POINT F-16	AJAX NO. 4
LOCATION	6-27-88-18-W6	MELVILLE ISLAND	LOT2, CONC.4, DOVER E. TWP.
OWNER	IMPERIAL OIL LTD.	PANARCTIC OILS LTD.	UNION GAS CO. OF CANADA
COMPLETED	11/08/61	06/22/72	06/05/29
SAMPLED	01/23/68	06/22/72	09/05/67
FORMATION	CRET-GUNLEVY	JURA-	ORDO-TRENTON
DEPTH, FEET	3400	NOT GIVEN	2805
WELLHEAD PRESSURE,PSIG	902	NOT GIVEN	1216
OPEN FLOW, MCFD	10800	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	88.3	97.4	89.6
ETHANE	6.3	0.7	4.6
PROPANE	2.2	TRACE	1.4
N-BUTANE	0.7	TRACE	0.4
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.0	1.6	3.1
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	TRACE	0.02	0.14
HEATING VALUE*	1113	999	1057
SPECIFIC GRAVITY	0.640	0.565	0.617

	INDEX 88 SAMPLE 11103	INDEX 89 SAMPLE 11102	INDEX 90 SAMPLE 11101
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ONTARIO	ONTARIO	ONTARIO
FIELD	GOBLES	NORFOLK	TILBURY
WELL NAME	PARIS PETROLEUM NO. 2	ROBERTS NO. 29	UNION TILBURY NO. 323
LOCATION	LOT18, CONC.1, BLENHEIM TWP.	LOT 9, CHARLOTTEVILLE TWP.	LOT168, STR TILBURY E. TWP.
OWNER	RAYROCK MINES LTD.	CARL H. ROBERTS	UNION GAS CO. OF CANADA
COMPLETED	04/20/60	03/27/67	01/25/54
SAMPLED	09/08/67	09/06/67	09/05/67
FORMATION	CAMB-	-THOROLD	-GUELPH-SALINA
DEPTH, FEET	2868	1186	1257
WELLHEAD PRESSURE,PSIG	540	660	232
OPEN FLOW, MCFD	1200	114	80
COMPONENT, MOLE PCT			
METHANE	81.9	83.0	84.9
ETHANE	6.7	5.9	6.5
PROPANE	3.1	1.7	2.7
N-BUTANE	0.8	0.4	0.7
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	6.2	8.1	3.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.21	0.36	0.10
HEATING VALUE*	1094	1025	1107
SPECIFIC GRAVITY	0.673	0.650	0.656

	INDEX 91 SAMPLE 11104	INDEX 92 SAMPLE 11100	INDEX 93 SAMPLE 5979
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ONTARIO	ONTARIO	SASKATCHEWAN
FIELD	VERSCHOYLE W	WILKES PORT	HATTON
WELL NAME	SUBEO C. H. 1	IMPERIAL SOMBRA 14-14	HERTER NO. 1-10
LOCATION	LOT21, CONC.5, DEREHAM TWP.	LOT14, CONC.14, SOMBRA TWP.	SEC. 21, T15, R28W
OWNER	SUBEO LTD.	IMPERIAL OIL LTD.	AMUREX OIL CO.
COMPLETED	12/08/66	07/02/65	07/28/54
SAMPLED	09/06/67	09/05/67	12/31/55
FORMATION	-GUELPH	-GUELPH	-MEDICINE HAT
DEPTH, FEET	886	2075	1644
WELLHEAD PRESSURE,PSIG	440	925	600
OPEN FLOW, MCFD	300	13000	660
COMPONENT, MOLE PCT			
METHANE	73.3	85.9	95.5
ETHANE	3.2	5.0	0.3
PROPANE	0.1	2.2	0.3
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.9	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	21.6	4.5	3.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.0
HELIUM	1.26	0.16	0.10
HEATING VALUE*	802	1085	981
SPECIFIC GRAVITY	0.663	0.650	0.574

	INDEX 94 SAMPLE 5980	INDEX 95 SAMPLE 8962	INDEX 96 SAMPLE 8963
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	SASKATCHEWAN	SASKATCHEWAN	SASKATCHEWAN
FIELD	HATTON	KINDERSLEY	KINDERSLEY
WELL NAME	MOELLER NO. 1-10	KEWANEE KINDERSLEY	KEWANEE KINDERSLEY
LOCATION	SEC. 26, T14, R28W	SEC. 5, T30, R25W3M	SEC. 29, T29, R25W3
OWNER	AMUREX OIL CO.	CANADIAN KEWANEE LTD.	CANADIAN KEWANEE LTD.
COMPLETED	07/04/54	10/04/62	08/26/62
SAMPLED	12/03/55	05/09/63	05/09/62
FORMATION	-MEDICINE HAT	-VICTORIA	-VICTORIA
DEPTH, FEET	1629	838	770
WELLHEAD PRESSURE,PSIG	525	300	300
OPEN FLOW, MCFD	1130	8500	92000
COMPONENT, MOLE PCT			
METHANE	95.3	94.8	96.3
ETHANE	0.2	0.0	0.1
PROPANE	0.2	0.0	0.0
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	3.9	4.9	3.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.10	0.04	0.10
HEATING VALUE*	979	960	977
SPECIFIC GRAVITY	0.576	0.578	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 97 SAMPLE 8964		INDEX 98 SAMPLE 10643		INDEX 99 SAMPLE 10644	
COUNTRY	CANADA		CANADA		CANADA	
STATE OR PROVINCE	SASKATCHEWAN		SASKATCHEWAN		SASKATCHEWAN	
FIELD	KINDERSLEY		WILDCAT		WILDCAT	
WELL NAME	KEWANEE KINDERSLEY		WOOD MTN. 10-3		WOOD MTN. 12-10-5-8 W3M	
LOCATION	SEC. 32, T29, R25W3		10-3-5-8 W3M			
OWNER	CANADIAN KEWANEE LTD.		INTERNATIONAL HELIUM CO. LTD		INTERNATIONAL HELIUM CO. LTD	
COMPLETED	10/05/62		01/01/62		01/01/62	
SAMPLED	05/09/63		06/24/66		06/24/66	
FORMATION	-VICTORIA		CAMB-DEADWOOD		CAMB-DEADWOOD	
DEPTH, FEET	753		8390		8418	
WELLHEAD PRESSURE,PSIG	300		2653		2653	
OPEN FLOW, MCFD	38500		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	71.7	----------	1.8	----------	1.7	----------
ETHANE	0.0		0.0		0.2	
PROPANE	0.0	----------	0.0	----------	0.0	----------
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0	----------	0.0	----------	0.0	----------
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0	----------	0.0	----------	0.0	----------
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0	----------	0.0	----------	0.0	----------
NITROGEN	22.6		96.4		96.6	
OXYGEN	5.0	----------	TRACE	----------	0.0	----------
ARGON	0.2		0.2		0.2	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4	----------	0.3	----------	0.3	----------
HELIUM	0.03		1.20		1.09	
HEATING VALUE*	326	----------	18	----------	19	----------
SPECIFIC GRAVITY	0.680		0.951		0.950	

	INDEX 100 SAMPLE 10645		INDEX 101 SAMPLE 10646		INDEX 102 SAMPLE 14147	
COUNTRY	CANADA		CANADA		ETHIOPIA	
STATE OR PROVINCE	SASKATCHEWAN		SASKATCHEWAN		NOT GIVEN	
FIELD	WILDCAT		WILDCAT		NOT GIVEN	
WELL NAME	WOOD MTN.		WOOD MTN. 10-3		HILALA NO. 1	
LOCATION	NOT GIVEN		10-3-5-8 W3M		NOT GIVEN	
OWNER	INTERNATIONAL HELIUM LTD.		INTERNATIONAL HELIUM CO. LTD		TENNECO OIL CO.	
COMPLETED	01/01/62		01/01/62		DRILL STEM TEST NO. 10	
SAMPLED	06/24/66		06/24/66		08/01/74	
FORMATION	CAMB-DEADWOOD		CAMB-DEADWOOD		-GUMBORO	
DEPTH, FEET	8418		8390		10470	
WELLHEAD PRESSURE,PSIG	2653		2653		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	1.7	----------	1.8	----------	79.0	----------
ETHANE	0.1		0.1		6.0	
PROPANE	0.0	----------	0.0	----------	1.7	----------
N-BUTANE	0.0		0.0		0.3	
ISOBUTANE	0.0	----------	0.0	----------	0.4	----------
N-PENTANE	0.0		0.0		0.1	
ISOPENTANE	0.0	----------	0.0	----------	0.1	----------
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0	----------	0.0	----------	0.2	----------
NITROGEN	96.4		96.5		10.2	
OXYGEN	TRACE	----------	0.1	----------	1.4	----------
ARGON	0.2		0.2		0.1	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3	----------	0.1	----------	0.4	----------
HELIUM	1.10		1.20		0.09	
HEATING VALUE*	19	----------	20	----------	994	----------
SPECIFIC GRAVITY	0.950		0.950		0.675	

	INDEX 103 SAMPLE 12022		INDEX 104 SAMPLE 7547		INDEX 105 SAMPLE 7548	
COUNTRY	IRAN		IRAQ		IRAQ	
STATE OR PROVINCE	KHORASAN		NOT GIVEN		NOT GIVEN	
FIELD	KRANGIRAN		BAI HASSAN		JAMBUR	
WELL NAME	KHANGIRAN NO. 2		NO. 2		JAMBUR NO. 8	
LOCATION	SARAKHS-N.E.IRAN		NOT GIVEN		NOT GIVEN	
OWNER	NATIONAL IRANIAN GAS CO.		IRAQ PETROLEUM CO., LTD.		IRAQ PETROLEUM CO., LTD.	
COMPLETED	09/69		09/48		05/10/56	
SAMPLED	06/09/69		02/15/60		02/15/60	
FORMATION	CRET-SHOORIJEH		-EUPHRATES LIMESTONE		-EUPHRATES-SERIKAGNI	
DEPTH, FEET	9680		2634		5152	
WELLHEAD PRESSURE,PSIG	4500		950		2450	
OPEN FLOW, MCFD	16000		230000		48500	
COMPONENT, MOLE PCT						
METHANE	94.9	----------	84.2	----------	86.3	----------
ETHANE	1.2		9.4		6.4	
PROPANE	1.4	----------	3.3	----------	3.0	----------
N-BUTANE	0.2		0.9		0.9	
ISOBUTANE	0.2	----------	0.6	----------	0.5	----------
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	TRACE	----------	0.4	----------	0.2	----------
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.2	----------	0.2	----------	0.2	----------
NITROGEN	2.0		0.3		0.2	
OXYGEN	0.2	----------	TRACE	----------	TRACE	----------
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1	----------	0.1	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4	----------	0.2	----------	0.0	----------
HELIUM	0.01		0.10		0.01	
HEATING VALUE*	1026	----------	1193	----------	1177	----------
SPECIFIC GRAVITY	0.592		0.675		0.660	

	INDEX 106 SAMPLE 7549		INDEX 107 SAMPLE 9240		INDEX 108 SAMPLE 9239	
COUNTRY	IRAQ		ITALY		ITALY	
STATE OR PROVINCE	NOT GIVEN		EMILIA		EMILIA	
FIELD	KIRKUK		MINERBIO		SPILAMBERTO	
WELL NAME	KIRKUK NO. 59		NO. 27		NO. 7	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	IRAQ PETROLEUM CO., LTD.		AGIP S.P.A.		AGIP S.P.A.	
COMPLETED	08/23/48		--/--/61		--/--/60	
SAMPLED	02/15/60		10/10/63		10/10/63	
FORMATION	-KIRKUK MAIN LIMESTONE		PLIO-MEDIO SUPERIORE		MIOC-SUPERIORE	
DEPTH, FEET	1004		4020		2730	
WELLHEAD PRESSURE,PSIG	377		1675		2020	
OPEN FLOW, MCFD	NOT GIVEN		21900		7760	
COMPONENT, MOLE PCT						
METHANE	83.8	----------	99.3	----------	96.8	----------
ETHANE	10.5		0.1		1.9	
PROPANE	2.3	----------	0.1	----------	0.5	----------
N-BUTANE	0.6		0.0		0.2	
ISOBUTANE	0.4	----------	0.0	----------	TRACE	----------
N-PENTANE	0.1		0.0		TRACE	
ISOPENTANE	0.2	----------	0.0	----------	0.2	----------
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1	----------	0.0	----------	TRACE	----------
NITROGEN	0.0		0.4		0.8	
OXYGEN	TRACE	----------	0.0	----------	0.0	----------
ARGON	0.0		TRACE		TRACE	
HYDROGEN	2.1	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	TRACE		0.0		0.0	
CARBON DIOXIDE	1.8	----------	TRACE	----------	0.1	----------
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1149	----------	1010	----------	1039	----------
SPECIFIC GRAVITY	0.669		0.557		0.576	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 109 SAMPLE 9238	INDEX 110 SAMPLE 11384	INDEX 111 SAMPLE 11341
COUNTRY	ITALY	MEXICO	MEXICO
STATE OR PROVINCE	ROMAGNA	NOT GIVEN	NUEVO LEON
FIELD	SABBIONCELLO	CHILAPILLA	CULEBRA
WELL NAME	NO. 16	NO. 6-D	NO. 3D
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	AGIP S.P.A.	PEMEX	PEMEX
COMPLETED	--/--/60	07/15/63	09/10/64
SAMPLED	09/10/63	02/23/68	02/29/68
FORMATION	PLIO-MEDIO SUPERIORE	-AMATE SUPERIOR ARENA B2	-LC-MS-12
DEPTH, FEET	3645	NOT GIVEN	4098
WELLHEAD PRESSURE,PSIG	1317	2595	2302
OPEN FLOW, MCFD	6350	5845	11250
COMPONENT, MOLE PCT			
METHANE	99.0	86.2	90.6
ETHANE	0.1	5.1	5.0
PROPANE	0.1	2.7	2.1
N-BUTANE	0.0	1.2	0.5
ISOBUTANE	0.0	1.0	0.6
N-PENTANE	0.0	0.4	0.2
ISOPENTANE	0.0	0.7	0.1
CYCLOPENTANE	0.0	0.4	TRACE
HEXANES PLUS	0.0	0.9	0.3
NITROGEN	0.7	0.7	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1007	1235	1127
SPECIFIC GRAVITY	0.558	0.700	0.632

	INDEX 112 SAMPLE 11335	INDEX 113 SAMPLE 11381	INDEX 114 SAMPLE 11382
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	NUEVO LEON	TABASCO	TABASCO
FIELD	PAMORANA	CHILAPILLA	CHILAPILLA
WELL NAME	NO. 3	NO. 12-D	NO. 6
LOCATION	NOT GIVEN	CUIDAD PEMEX	CUIDAD PEMEX
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	09/25/64	01/07/63	06/04/59
SAMPLED	02/29/68	02/23/68	02/23/68
FORMATION	-EY-5	-AMATE SUPERIOR ARENA A1	-AMATE SUPERIOR ARENA A2
DEPTH, FEET	5300	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2619	2165	2077
OPEN FLOW, MCFD	32000	1851	3601
COMPONENT, MOLE PCT			
METHANE	86.8	90.1	80.0
ETHANE	7.4	5.1	5.0
PROPANE	3.0	2.1	1.9
N-BUTANE	0.7	0.6	0.9
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.3	0.5	0.4
NITROGEN	0.1	0.1	8.7
OXYGEN	0.0	0.0	0.9
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1177	1157	1050
SPECIFIC GRAVITY	0.664	0.647	0.697

	INDEX 115 SAMPLE 11383	INDEX 116 SAMPLE 11388	INDEX 117 SAMPLE 11387
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TABASCO	TABASCO
FIELD	CHILAPILLA	CINCO PRESIDENTES	CINCO PRESIDINTES
WELL NAME	NO. 31	NO. 180-1	NO. 162-1
LOCATION	CUIDAD PEMEX	ZONA SUR	ZONA SUR
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	07/08/64	10/09/64	07/06/64
SAMPLED	02/23/68	02/28/68	02/28/68
FORMATION	-AMATE SUPERIOR ARENA B4	MIOC-ENCANTO	MIOC-ENCANTO
DEPTH, FEET	NOT GIVEN	6642	8384
WELLHEAD PRESSURE,PSIG	2306	1846	852
OPEN FLOW, MCFD	4705	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	79.9	82.0
ETHANE	5.0	10.6	9.2
PROPANE	1.8	4.8	3.6
N-BUTANE	0.6	1.2	0.9
ISOBUTANE	0.6	0.6	0.3
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	0.0	1.9	2.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	TRACE	0.05	0.02
HEATING VALUE*	1146	1220	1153
SPECIFIC GRAVITY	0.642	0.707	0.672

	INDEX 118 SAMPLE 11379	INDEX 119 SAMPLE 11380	INDEX 120 SAMPLE 11385
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TABASCO	TABASCO
FIELD	JOSE COLOMO	JOSE COLOMO	JOSE COLOMO
WELL NAME	NO. 69	NO. 85	NO. 91
LOCATION	CUIDAD PEMEX	CUIDAD PEMEX	CUIDAD PEMEX
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	05/09/57	09/10/56	01/07/57
SAMPLED	02/22/68	02/22/68	02/22/58
FORMATION	-AMATE SUPERIOR ARENA F	-AMATE SUPERIOR ARENA E	-AMATE SUPERIOR ARENA A
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2605	2436	2528
OPEN FLOW, MCFD	3306	6487	7871
COMPONENT, MOLE PCT			
METHANE	87.1	76.7	87.8
ETHANE	5.8	8.0	6.3
PROPANE	2.8	5.6	2.3
N-BUTANE	1.0	2.9	0.9
ISOBUTANE	0.9	2.2	0.6
N-PENTANE	0.4	1.0	0.2
ISOPENTANE	0.7	1.5	0.4
CYCLOPENTANE	0.3	0.4	0.3
HEXANES PLUS	0.7	1.3	0.7
NITROGEN	0.1	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1217	1426	1185
SPECIFIC GRAVITY	0.688	0.817	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 121 SAMPLE 11386	INDEX 122 SAMPLE 11343	INDEX 123 SAMPLE 11344
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TAMAULIPAS	TAMAULIPAS
FIELD	JOSE COLOMO	18 DE MARZO	BRASIL
WELL NAME	NO. 6	NO. 10	NO. 7
LOCATION	CUIDAD PEMEX	NOT GIVEN	NOT GIVEN
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	05/06/55	04/19/56	04/13/52
SAMPLED	02/22/68	02/28/68	02/28/68
FORMATION	-AMATE SUPERIOR ARENA O	-AM-2Y2A-BA	-FS-B-1
DEPTH, FEET	NOT GIVEN	7016	6756
WELLHEAD PRESSURE,PSIG	2402	2670	2033
OPEN FLOW, MCFD	8342	28200	17200
COMPONENT, MOLE PCT			
METHANE	89.5	94.9	85.5
ETHANE	5.3	2.1	1.3
PROPANE	2.3	0.3	0.3
N-BUTANE	0.9	0.1	0.0
ISOBUTANE	0.5	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.9	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.6	0.1	0.0
NITROGEN	0.0	1.7	10.5
OXYGEN	0.0	0.1	2.3
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1160	1023	898
SPECIFIC GRAVITY	0.650	0.585	0.620

	INDEX 124 SAMPLE 11339	INDEX 125 SAMPLE 11336	INDEX 126 SAMPLE 11342
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	FRANCISCO CANO	LOMITAS	MONTERREY
WELL NAME	NO. 36-T	NO. 111-C	NO. 12
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	10/10/55	03/05/61	07/16/62
SAMPLED	03/03/68	02/29/68	03/04/68
FORMATION	-FM-12	-L-1, BB-N	-FS-14
DEPTH, FEET	7190	4784	6326
WELLHEAD PRESSURE,PSIG	1980	1593	2406
OPEN FLOW, MCFD	20320	6200	6200
COMPONENT, MOLE PCT			
METHANE	96.0	95.6	95.9
ETHANE	2.1	2.1	2.2
PROPANE	0.4	0.4	0.4
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.6	1.2	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1043	1046	1049
SPECIFIC GRAVITY	0.586	0.587	0.585

	INDEX 127 SAMPLE 11338	INDEX 128 SAMPLE 11340	INDEX 129 SAMPLE 11345
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	REYNOSA	REYNOSA	REYNOSA
WELL NAME	NO. 92-C	NO. 17	NO. 172
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PEMEX	PEMEX	PEMEX
COMPLETED	08/26/55	06/22/60	06/31/63
SAMPLED	03/03/68	03/03/68	03/03/68
FORMATION	-FS-12	-FS-3	-FS-4
DEPTH, FEET	6061	5796	5981
WELLHEAD PRESSURE,PSIG	1758	1693	1882
OPEN FLOW, MCFD	18000	165000	33900
COMPONENT, MOLE PCT			
METHANE	93.9	93.7	93.3
ETHANE	3.7	3.4	3.7
PROPANE	1.0	1.0	0.8
N-BUTANE	0.4	0.2	0.8
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.5	0.6	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1090	1081	1084
SPECIFIC GRAVITY	0.609	0.604	0.608

	INDEX 130 SAMPLE 11337	INDEX 131 SAMPLE 10353	INDEX 132 SAMPLE 10641
COUNTRY	MEXICO	NETHERLANDS	NETHERLANDS
STATE OR PROVINCE	TAMAULIPAS	DE WIJK	NOT GIVEN
FIELD	TREVINO	DE WIJK	DE LIER
WELL NAME	NO. 414-TC	DE WIJK 11	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	BLOCK STATION 1
OWNER	PEMEX	N A M	N A M
COMPLETED	01/29/62	11/28/60	NOT GIVEN
SAMPLED	02/24/68	04/29/66	05/01/66
FORMATION	-FM-12	CRET-A TRIA	-ALBIAN
DEPTH, FEET	7605	3393	4350
WELLHEAD PRESSURE,PSIG	2141	2043	NOT GIVEN
OPEN FLOW, MCFD	5800	6350	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.7	90.0	88.3
ETHANE	1.6	2.9	2.2
PROPANE	0.2	0.9	1.4
N-BUTANE	0.1	0.2	0.6
ISOBUTANE	0.0	TRACE	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.9	5.6	2.2
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.01	0.05	0.02
HEATING VALUE*	1036	1008	1091
SPECIFIC GRAVITY	0.579	0.610	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 133 SAMPLE 10642	INDEX 134 SAMPLE 10637	INDEX 135 SAMPLE 10640
COUNTRY	NETHERLANDS	NETHERLANDS	NETHERLANDS
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	DE LIER	PYNACKER	RIDDERKERK/YSSELMONDE
WELL NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	BLOCK STATION 1	BLOCK STATION 1	BLOCK STATION 2
OWNER	N.A.M.	N.A.M.	N.A.M.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	05/01/66	05/01/66	05/01/66
FORMATION	-BARREMIAN	-VALANGINIAN	-YSSELMONDE MAINSAND
DEPTH, FEET	4900	5300	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	90.6	94.8
ETHANE	6.4	4.9	1.6
PROPANE	2.2	1.6	0.1
N-BUTANE	0.7	0.5	0.0
ISOBUTANE	0.4	0.2	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	2.3	0.9	1.3
OXYGEN	0.3	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	2.1
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1121	1106	992
SPECIFIC GRAVITY	0.650	0.630	0.590

	INDEX 136 SAMPLE 10638	INDEX 137 SAMPLE 10639	INDEX 138 SAMPLE 10554
COUNTRY	NETHERLANDS	NETHERLANDS	NETHERLANDS
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	WANNEPERVEEN
FIELD	RYSWYK	WASSENAAR	WANNEPERVEEN
WELL NAME	NOT GIVEN	NOT GIVEN	WANNEPERVEEN 1
LOCATION	BLOCK STATION 1	LOOLAAN	NOT GIVEN
OWNER	N.A.M.	N.A.M.	N. A. M.
COMPLETED	NOT GIVEN	NOT GIVEN	07/08/51
SAMPLED	05/01/66	05/01/66	04/29/66
FORMATION	-VALANGINIAN	-VALANGINIAN	CRET-
DEPTH, FEET	4600	3800	5008
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1928
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	92.0	96.2	89.3
ETHANE	3.4	1.3	3.0
PROPANE	1.3	0.1	0.6
N-BUTANE	0.6	0.0	0.2
ISOBUTANE	0.3	0.0	0.1
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	1.1	0.6	6.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.7	0.1
HELIUM	0.03	0.01	0.04
HEATING VALUE*	1102	1000	999
SPECIFIC GRAVITY	0.630	0.580	0.614

	INDEX 139 SAMPLE 11725	INDEX 140 SAMPLE 11726	INDEX 141 SAMPLE 11727
COUNTRY	PAKISTAN	PAKISTAN	PAKISTAN
STATE OR PROVINCE	WEST PAKISTAN	WEST PAKISTAN	WEST PAKISTAN
FIELD	MARI	MARI	MARI
WELL NAME	MARI NO. 4	MARI NO. 5	MARI NO. 6
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ESSO STANDARD EASTERN, INC.	ESSO STANDARD EASTERN, INC.	ESSO STANDARD EASTERN, INC.
COMPLETED	12/21/65	01/16/66	02/12/66
SAMPLED	11/25/68	11/25/68	11/25/68
FORMATION	-LOWER KIRTHER LIMESTONE	-LOWER KIRTHER LIMESTONE	-LOWER KIRTHER LIMESTONE
DEPTH, FEET	2310	2330	2340
WELLHEAD PRESSURE,PSIG	1050	975	1050
OPEN FLOW, MCFD	77220	22360	37970
COMPONENT, MOLE PCT			
METHANE	76.5	71.2	75.0
ETHANE	0.3	0.2	0.2
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	18.8	18.2	22.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.3	10.3	2.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	780	725	764
SPECIFIC GRAVITY	0.675	0.730	0.672

	INDEX 142 SAMPLE 11728	INDEX 143 SAMPLE 11729	INDEX 144 SAMPLE 11561
COUNTRY	PAKISTAN	PAKISTAN	PERU
STATE OR PROVINCE	WEST PAKISTAN	WEST PAKISTAN	LIMA
FIELD	MARI	MARI	AGUAYTIA
WELL NAME	MARI NO. 8	MARI NO. 9	AGUAYTIA NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ESSO STANDARD EASTERN,INC.	ESSO STANDARD EASTERN,INC.	MOBIL OIL CO. DEL PERU
COMPLETED	03/11/66	03/26/66	--/--/62
SAMPLED	11/25/68	11/25/68	05/20/68
FORMATION	-LOWER KIRTHER LIMESTONE	-LOWER KIRTHER LIMESTONE	-CUSHABATAY
DEPTH, FEET	2343	2360	8300
WELLHEAD PRESSURE,PSIG	990	1000	3000
OPEN FLOW, MCFD	34640	33360	15000
COMPONENT, MOLE PCT			
METHANE	73.0	71.0	82.5
ETHANE	0.2	0.3	6.4
PROPANE	TRACE	TRACE	2.5
N-BUTANE	0.0	0.0	0.7
ISOBUTANE	0.0	0.0	0.9
N-PENTANE	0.0	0.0	0.5
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	18.6	17.5	5.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.0	11.1	0.0
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	743	725	1125
SPECIFIC GRAVITY	0.709	0.736	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 145 SAMPLE 7615		INDEX 146 SAMPLE 7616		INDEX 147 SAMPLE 7617	
COUNTRY	QATAR		QATAR		QATAR	
STATE OR PROVINCE	NOT GIVEN		NOT GIVEN		NOT GIVEN	
FIELD	DUKHAN		DUKHAN		DUKHAN	
WELL NAME	NO. DK. 58		NO. DK. 60		NO. DK. 56	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	QATAR PETROLEUM CO., LTD.		QATAR PETROLEUM CO., LTD.		QATAR PETROLEUM CO., LTD.	
COMPLETED	07/10/56		05/25/54		11/18/56	
SAMPLED	01/13/60		01/13/60		02/14/60	
FORMATION	-C LIMESTONE ARAB ZONE		-ARAEJ		-D LIMESTONE ARAB ZONE	
DEPTH, FEET	5300		6815		5997	
WELLHEAD PRESSURE,PSIG	1440		2660		2300	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	74.8	----------	79.2	----------	79.0	----------
ETHANE	9.4		6.9		10.5	
PROPANE	5.5	----------	3.8	----------	4.1	----------
N-BUTANE	1.7		2.4		1.1	
ISOBUTANE	TRACE	----------	0.3	----------	0.2	----------
N-PENTANE	0.4		1.7		0.2	
ISOPENTANE	0.3	----------	0.8	----------	0.2	----------
CYCLOPENTANE	0.1		0.2		0.0	
HEXANES PLUS	0.4	----------	1.2	----------	TRACE	----------
NITROGEN	0.0		0.0		0.0	
OXYGEN	TRACE	----------	TRACE	----------	TRACE	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1	----------	0.7	----------	0.2	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	7.2	----------	2.9	----------	4.3	----------
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1194	----------	1294	----------	1156	----------
SPECIFIC GRAVITY	0.784		0.774		0.715	

	INDEX 148 SAMPLE 7281		INDEX 149 SAMPLE 13935		INDEX 150 SAMPLE 13936	
COUNTRY	SOUTH AFRICA		TAIWAN		TAIWAN	
STATE OR PROVINCE	ORANGE FREE ST		HSIG CHU		HSING CHU	
FIELD	O.F.S. GOLDFIELDS		CHINGTSAOHU		CHINGTSAOHU	
WELL NAME	A.D. NO. 1		CTH-1 (S)		CTH-1 (L)	
LOCATION	NOT GIVEN		LAT 24 46 50 LONG120 59 19		LAT 24 46 50 LONG120 59 19	
OWNER	VA. O. F. S. GOLD MINING CO.		CHINESE PETROLEUM CORP.		CHINESE PETROLEUM CORP.	
COMPLETED	NOT GIVEN		05/03/69		05/03/69	
SAMPLED	11/12/59		02/19/74		02/19/74	
FORMATION	-VENTERSDORP LAVA		MIOC-YUTENGPING		MIOC-KUANTAOSHAN	
DEPTH, FEET	643		5363		6396	
WELLHEAD PRESSURE,PSIG	50		1890		2220	
OPEN FLOW, MCFD	1		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	86.6	----------	82.7	----------	86.6	----------
ETHANE	0.2		9.8		7.5	
PROPANE	0.0	----------	4.0	----------	2.8	----------
N-BUTANE	0.0		0.9		0.5	
ISOBUTANE	0.0	----------	1.1	----------	0.8	----------
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0	----------	0.4	----------	0.3	----------
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0	----------	0.1	----------	0.1	----------
NITROGEN	9.9		0.8		0.8	
OXYGEN	TRACE	----------	0.0	----------	0.0	----------
ARGON	0.4		0.0		0.0	
HYDROGEN	0.0	----------	0.0	----------	TRACE	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE	----------	0.1	----------	0.4	----------
HELIUM	2.91		TRACE		TRACE	
HEATING VALUE*	881	----------	1211	----------	1150	----------
SPECIFIC GRAVITY	0.588		0.690		0.656	

	INDEX 151 SAMPLE 13940		INDEX 152 SAMPLE 13937		INDEX 153 SAMPLE 13938	
COUNTRY	TAIWAN		TAIWAN		TAIWAN	
STATE OR PROVINCE	HSING CHU		MIAOLI		MIAOLI	
FIELD	CHINGTSAOHU		CHINSHUI		CHINSHUI	
WELL NAME	CTH-12		CS-66		CS-72 (L)	
LOCATION	LAT 24 47 26 LONG120 59 46		LAT 24 34 43 LONG120 51 21		LAT 24 34 31 LONG120 50 58	
OWNER	CHINESE PETROLEUM CORP.		CHINESE PETROLEUM CORP.		CHINESE PETROLEUM CORP.	
COMPLETED	04/18/70		09/23/61		08/20/69	
SAMPLED	02/19/74		02/22/74		02/22/74	
FORMATION	MIOC-TALU		MIOC-CHUHUANGKENG		MIOC-MUSHAN	
DEPTH, FEET	12533		9768		13530	
WELLHEAD PRESSURE,PSIG	3400		5100		6000	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	83.0	----------	88.2	----------	83.0	----------
ETHANE	7.7		4.0		5.2	
PROPANE	2.8	----------	1.2	----------	1.0	----------
N-BUTANE	0.5		0.2		0.1	
ISOBUTANE	0.8	----------	0.5	----------	0.4	----------
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.3	----------	0.2	----------	0.1	----------
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1	----------	0.2	----------	0.1	----------
NITROGEN	0.7		0.4		0.3	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0	----------	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	4.1	----------	5.1	----------	11.8	----------
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1117	----------	1047	----------	950	----------
SPECIFIC GRAVITY	0.694		0.662		0.708	

	INDEX 154 SAMPLE 13943		INDEX 155 SAMPLE 13944		INDEX 156 SAMPLE 13941	
COUNTRY	TAIWAN		TAIWAN		TAIWAN	
STATE OR PROVINCE	MIAOLI		MIAOLI		MIAOLI	
FIELD	CHINSHUI		CHINSHUI		CHUHUANGKENG	
WELL NAME	CS-45		CS-74		CHK-106	
LOCATION	LAT 24 3 33 LONG120 52 8		LAT 24 35 22 LONG120 51 07		LAT 24 28 05 LONG120 51 18	
OWNER	CHINESE PETROLEUM CORP.		CHINESE PETROLEUM CORP.		CHINESE PETROLEUM CORP.	
COMPLETED	11/27/60		09/11/69		04/29/62	
SAMPLED	02/22/74		02/22/74		02/20/74	
FORMATION	MIOC-TALU		MIOC-WUCHIHSHAN		MIOC-MUSHAN	
DEPTH, FEET	7631		14793		9089	
WELLHEAD PRESSURE,PSIG	2225		6950		3860	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.9	----------	82.0	----------	58.5	----------
ETHANE	4.3		2.1		2.0	
PROPANE	1.3	----------	0.5	----------	0.5	----------
N-BUTANE	0.2		0.1		0.1	
ISOBUTANE	0.2	----------	0.1	----------	0.2	----------
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.2	----------	0.1	----------	0.1	----------
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1	----------	0.1	----------	0.1	----------
NITROGEN	1.3		0.3		1.2	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0	----------	TRACE	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1	----------	14.6	----------	37.4	----------
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1069	----------	971	----------	661	----------
SPECIFIC GRAVITY	0.636		0.722		0.948	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 157 SAMPLE 13942	INDEX 158 SAMPLE 13939	INDEX 159 SAMPLE 13945
COUNTRY	TAIWAN	TAIWAN	TAIWAN
STATE OR PROVINCE	MIAOLI	MIAOLI	MIAOLI
FIELD	CHUHUANGKENG	PAISHATUN	TIEHCHENSHAN
WELL NAME	CHK-110 (S)	PST-5 (S)	TCS-10
LOCATION	LAT 24 27 17 LONG120 50 43	LAT 24 37 13 LONG120 45 42	LAT 24 28 11 LONG120 40 33
OWNER	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.
COMPLETED	04/14/72	12/18/71	12/18/65
SAMPLED	02/20/74	02/18/74	02/23/74
FORMATION	MIOC-WUCHIHSHAN	MIOC-TALU	MIOC-TALU
DEPTH, FEET	10368	10762	9000
WELLHEAD PRESSURE,PSIG	4250	3610	2830
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.6	89.5	85.4
ETHANE	1.8	4.9	5.5
PROPANE	0.5	1.6	1.8
N-BUTANE	0.1	0.3	0.5
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.0	0.3	3.1
OXYGEN	0.0	0.0	0.7
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	40.6	2.4	1.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	628	1084	1070
SPECIFIC GRAVITY	0.977	0.641	0.662

	INDEX 160 SAMPLE 13946	INDEX 161 SAMPLE 14163	INDEX 162 SAMPLE 14164
COUNTRY	TAIWAN	THAILAND	THAILAND
STATE OR PROVINCE	MIAOLI	NOT GIVEN	NOT GIVEN
FIELD	TIEHCHENSHAN	WILDCAT	WILDCAT
WELL NAME	TCS-23(S)	UNION NO. 13-1	UNION NO. 13-1
LOCATION	LAT 24 26 40 LONG120 41 44	GULF OF THAILAND	GULF OF THAILAND
OWNER	CHINESE PETROLEUM CORP.	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA
COMPLETED	02/09/69	DRILL STEM TEST NO. 6	DRILL STEM TEST NO. 3
SAMPLED	02/23/74	05/18/74	05/14/74
FORMATION	MIOC-TALU	TERT-	TERT-
DEPTH, FEET	9161	5918	6892
WELLHEAD PRESSURE,PSIG	2850	1765	2076
OPEN FLOW, MCFD	NOT GIVEN	8080	9510
COMPONENT, MOLE PCT			
METHANE	88.4	67.0	67.3
ETHANE	5.6	10.6	10.4
PROPANE	2.0	6.1	5.7
N-BUTANE	0.5	1.4	1.2
ISOBUTANE	0.6	1.6	1.4
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.4	0.6	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.4	0.6	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	11.4	11.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1185	1152
SPECIFIC GRAVITY	0.649	0.854	0.845

	INDEX 163 SAMPLE 14165	INDEX 164 SAMPLE 14166	INDEX 165 SAMPLE 11150
COUNTRY	THAILAND	THAILAND	UNITED KINGDOM
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NORTH SEA
FIELD	WILDCAT	WILDCAT	INDEFATIGABLE
WELL NAME	UNION NO. 13-1	UNION NO. 13-1	49/18-3
LOCATION	GULF OF THAILAND	GULF OF THAILAND	NOT GIVEN
OWNER	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA	AMOCO U. K. PETROLEUM LTD.
COMPLETED	DRILL STEM TEST NO. 2	DRILL STEM TEST NO. 4	05/25/67
SAMPLED	05/12/74	05/16/74	08/17/67
FORMATION	TERT-	TERT-	PERM-ROTLIEGENDES
DEPTH, FEET	7730	6740	8824
WELLHEAD PRESSURE,PSIG	2123	2002	3391
OPEN FLOW, MCFD	5900	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	67.4	91.2
ETHANE	9.2	10.7	3.6
PROPANE	4.5	6.1	0.8
N-BUTANE	1.1	1.3	0.4
ISOBUTANE	1.1	1.5	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.4	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	1.1	0.8	3.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	14.6	11.2	0.5
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	1078	1171	1023
SPECIFIC GRAVITY	0.843	0.845	0.604

	INDEX 166 SAMPLE 11149	INDEX 167 SAMPLE 11143	INDEX 168 SAMPLE 10545
COUNTRY	UNITED KINGDOM	UNITED KINGDOM	WEST GERMANY
STATE OR PROVINCE	NORTH SEA	NORTH SEA	NIEDERSACHSEN
FIELD	LEMAN	WILDCAT	ANNAVEEN
WELL NAME	49/27-4	ARPET 48-29-5	ANNAVEEN T2
LOCATION	NOT GIVEN	NOT GIVEN	MEBTISCHBLATT NR. 3308
OWNER	AMOCO U. K. PETROLEUM LTD.	ATLANTIC OIL PRODUCING CO.	MOBIL OIL AG-WINTERSHALL AG
COMPLETED	05/25/67	NOT GIVEN	NOT GIVEN
SAMPLED	10/09/67	09/20/67	03/15/66
FORMATION	PERM-ROTLIEGENDES	PERM-ROTLIEGENDES	-BUNTSANDSTEIN
DEPTH, FEET	6547	NOT GIVEN	2661
WELLHEAD PRESSURE,PSIG	2572	NOT GIVEN	2778
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	94.7	58.0
ETHANE	2.9	3.1	1.2
PROPANE	0.4	0.7	0.4
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.8	1.4	40.0
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.03	0.10
HEATING VALUE*	1012	1033	626
SPECIFIC GRAVITY	0.590	0.583	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 169 SAMPLE 10548		INDEX 170 SAMPLE 10546	
COUNTRY	WEST GERMANY		WEST GERMANY	
STATE OR PROVINCE	NIEDERSACHSEN		NIEDERSACHSEN	
FIELD	APELDORN		FEHNDORF	
WELL NAME	APELDORN T1		FEHNDORF 2T	
LOCATION	MEßTISCHBLATT NR. 2310		MEßTISCHBLATT NR. 2309	
OWNER	MOBIL OIL AG-DEUTSCHE ERDOL		MOBIL OIL AG-DEUTSCHE ERDOL	
COMPLETED	NOT GIVEN		NOT GIVEN	
SAMPLED	03/14/66		03/15/66	
FORMATION	-BUNTSANDSTEIN		-OBERKARBON-STEFAN	
DEPTH, FEET	2350		3494	
WELLHEAD PRESSURE,PSIG	280		372	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT				
METHANE	25.5	----------	75.4	----------
ETHANE	0.4		0.4	
PROPANE	0.1	----------	0.0	----------
N-BUTANE	0.0		0.0	
ISOBUTANE	0.0	----------	0.0	----------
N-PENTANE	0.0		0.0	
ISOPENTANE	0.0	----------	0.0	----------
CYCLOPENTANE	0.0		0.0	
HEXANES PLUS	0.0	----------	0.0	----------
NITROGEN	73.3		20.3	
OXYGEN	0.8	----------	0.0	----------
ARGON	TRACE		0.0	
HYDROGEN	0.0	----------	0.0	----------
HYDROGEN SULFIDE**	0.0		0.0	
CARBON DIOXIDE	0.2	----------	3.8	----------
HELIUM	0.12		0.12	
HEATING VALUE*	268	----------	471	----------
SPECIFIC GRAVITY	0.864		0.677	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 9. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 1 SAMPLE 12085		INDEX 2 SAMPLE 12086		INDEX 3 SAMPLE 12468	
COUNTRY	ARGENTINA		ARGENTINA		AUSTRALIA	
STATE OR PROVINCE	SANTA CRUZ		SANTA CRUZ		NOT GIVEN	
FIELD	CERRO REDONDO		CERRO REDONDO		MARLIN	
PLANT NAME	NOT GIVEN		NOT GIVEN		NOT GIVEN	
LOCATION	EL CONDOR BATTERY NO. 1		EL CONDOR BATTERY NO. 2		NOT GIVEN	
OWNER	YACIMIENTO PETROLIFERO		YACIMIENTO PETROLIFERO		ESSO STANDARD OIL LTD.	
SAMPLED	05/23/69		05/15/69		06/26/70	
FORMATION	-STRINGHILL		-STRINGHILL		NOT GIVEN	
PRESSURE,PSIG	2500		6000		1250	
FLOW,MCFD	16000		12000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.2	----------	87.2	----------	87.7	----------
ETHANE	5.6		5.7		5.0	
PROPANE	2.6	----------	2.8	----------	2.6	----------
N-BUTANE	0.7		0.8		0.7	
ISOBUTANE	0.6	----------	0.6	----------	0.6	----------
N-PENTANE	0.2		0.2		0.4	
ISOPENTANE	0.3	----------	0.4	----------	0.0	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.4	----------	0.4	----------
NITROGEN	1.4		1.5		0.9	
OXYGEN	TRACE	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1	----------	0.1	----------	0.1	----------
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.1	----------	0.1	----------	1.6	----------
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1141	----------	1155	----------	1126	----------
SPECIFIC GRAVITY	0.651		0.661		0.661	

	INDEX 4 SAMPLE 16045		INDEX 5 SAMPLE 16044		INDEX 6 SAMPLE 12146	
COUNTRY	AUSTRALIA		AUSTRALIA		BANGLADESH	
STATE OR PROVINCE	VICTORIA		VICTORIA		EAST PAKISTAN	
FIELD	BARRACOUTA		MARLIN		TITAS	
PLANT NAME	PLATFORM GAS		PLATFORM GAS		NOT GIVEN	
LOCATION	BASS STRAIT		BASS STRAIT		SAMPLED AT SCRUBBER	
OWNER	ESSO/BHP		ESSO/BHP		PAKISTAN SHELL OIL CO., LTD.	
SAMPLED	04/06/80		03/06/80		11/18/69	
FORMATION	EOCE-		EOCE-		NOT GIVEN	
PRESSURE,PSIG	1510		1850		NOT GIVEN	
FLOW,MCFD	260000		410000		4310	
COMPONENT, MOLE PCT						
METHANE	85.7	----------	80.7	----------	96.5	----------
ETHANE	5.9		7.3		1.8	
PROPANE	3.0	----------	4.9	----------	0.4	----------
N-BUTANE	0.6		1.4		0.1	
ISOBUTANE	1.3	----------	1.3	----------	0.0	----------
N-PENTANE	0.1		0.6		0.1	
ISOPENTANE	0.5	----------	0.8	----------	TRACE	----------
CYCLOPENTANE	0.3		0.2		TRACE	
HEXANES PLUS	0.5	----------	0.9	----------	0.1	----------
NITROGEN	1.6		0.5		0.5	
OXYGEN	0.0	----------	0.0	----------	0.0	----------
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0	----------	0.0	----------	0.1	----------
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.5	----------	1.3	----------	0.4	----------
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1179	----------	1280	----------	1033	----------
SPECIFIC GRAVITY	0.683		0.747		0.579	

	INDEX 7 SAMPLE 11026		INDEX 8 SAMPLE 11013		INDEX 9 SAMPLE 11012	
COUNTRY	CANADA		CANADA		CANADA	
STATE OR PROVINCE	ALBERTA		ALBERTA		ALBERTA	
FIELD	CARBON		CARBON CREEK		CARBON CREEK W	
PLANT NAME	NOT GIVEN		NOT GIVEN		NOT GIVEN	
LOCATION	29-22-W4M		62-12-W5M		62-12-W5M	
OWNER	CANADIAN WESTERN NAT. GAS CO		MOBIL OIL CANADA, LTD.		MOBIL OIL CANADA, LTD.	
SAMPLED	07/04/67		06/02/67		06/02/67	
FORMATION	-GLAUCONITE		DEVO-BEAVERHILL LAKE		DEVO-BEAVERHILL LAKE	
PRESSURE,PSIG	1260		1360		500	
FLOW,MCFD	5450		82525		10620	
COMPONENT, MOLE PCT						
METHANE	85.0	----------	71.7	----------	67.0	----------
ETHANE	4.7		11.1		15.5	
PROPANE	3.2	----------	4.3	----------	7.2	----------
N-BUTANE	0.8		1.2		1.7	
ISOBUTANE	0.9	----------	0.5	----------	1.0	----------
N-PENTANE	0.2		0.2		0.3	
ISOPENTANE	0.3	----------	0.4	----------	0.5	----------
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2	----------	0.2	----------	0.1	----------
NITROGEN	2.4		7.7		4.5	
OXYGEN	TRACE	----------	1.3	----------	0.2	----------
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.1	----------	0.1	----------	0.1	----------
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	0.2	----------	1.0	----------	1.8	----------
HELIUM	0.04		0.07		0.04	
HEATING VALUE*	1157	----------	1134	----------	1269	----------
SPECIFIC GRAVITY	0.674		0.745		0.796	

	INDEX 10 SAMPLE 11208		INDEX 11 SAMPLE 10992		INDEX 12 SAMPLE 11209	
COUNTRY	CANADA		CANADA		CANADA	
STATE OR PROVINCE	ALBERTA		ALBERTA		ALBERTA	
FIELD	CARSTAIRS		CESSFORD		ELKTON S	
PLANT NAME	NOT GIVEN		NOT GIVEN		NOT GIVEN	
LOCATION	10-2-W5M		24-12-W4M		NOT GIVEN	
OWNER	HOME OIL CO. LTD.		CANEX GAS LTD.		HOME OIL CO. LTD.	
SAMPLED	10/27/67		06/06/67		10/27/67	
FORMATION	MISS-ELKTON		CRET-COLORADO		MISS-ELKTON	
PRESSURE,PSIG	850		720		900	
FLOW,MCFD	170000		18000		5000	
COMPONENT, MOLE PCT						
METHANE	81.7	----------	89.8	----------	85.6	----------
ETHANE	7.2		2.8		6.8	
PROPANE	2.2	----------	1.0	----------	1.8	----------
N-BUTANE	0.7		0.4		0.5	
ISOBUTANE	0.5	----------	0.3	----------	0.4	----------
N-PENTANE	0.3		0.1		0.3	
ISOPENTANE	0.2	----------	0.2	----------	0.3	----------
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2	----------	0.1	----------	0.2	----------
NITROGEN	1.3		4.6		0.5	
OXYGEN	0.1	----------	0.4	----------	0.1	----------
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1	----------	0.1	----------	TRACE	----------
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	5.5	----------	TRACE	----------	3.7	----------
HELIUM	0.01		0.04		0.01	
HEATING VALUE*	1090	----------	1028	----------	1097	----------
SPECIFIC GRAVITY	0.706		0.617		0.673	

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 13 SAMPLE 7213	INDEX 14 SAMPLE 11021	INDEX 15 SAMPLE 11038
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	ETZIKEM	FORT SASKATCHEWAN	HARMATTAN E
PLANT NAME	CENTRAL FIELD STA.	NOT GIVEN	PIPELINE SAMPLE
LOCATION	NOT GIVEN	54-21-W4M	32-4-W5M
OWNER	ASAMERA OIL CORP., LTD.	CANADIAN INDUSTRIAL G&O LTD.	CANADIAN SUPERIOR OIL LTD.
SAMPLED	07/23/59	07/04/67	07/13/67
FORMATION	CRET-L	CRET-VIKING	MISS-TURNER VALLEY
PRESSURE,PSIG	NOT GIVEN	450	NOT GIVEN
FLOW,MCFD	NOT GIVEN	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.1	92.3	81.3
ETHANE	0.1	2.2	8.7
PROPANE	0.3	0.6	3.1
N-BUTANE	0.0	0.3	0.8
ISOBUTANE	0.0	0.0	0.6
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	8.2	4.3	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	3.7
HELIUM	0.30	0.09	0.01
HEATING VALUE*	932	1000	1134
SPECIFIC GRAVITY	0.590	0.594	0.702

	INDEX 16 SAMPLE 11040	INDEX 17 SAMPLE 11039	INDEX 18 SAMPLE 10988
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	HARMATTAN ELKTON	HARMATTAN LEDUC	KEYSTONE
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	32-4-W5M	32-5-W5M	48-6-W5M
OWNER	CANADIAN SUPERIOR OIL LTD.	CANADIAN SUPERIOR OIL LTD.	CANADA-CITIES SERVICE
SAMPLED	07/13/67	07/17/67	05/30/67
FORMATION	NOT GIVEN	-HARMATTAN LEDUC	CRET-CARDIUM
PRESSURE,PSIG	NOT GIVEN	1230	22
FLOW,MCFD	NOT GIVEN	NOT GIVEN	4700
COMPONENT, MOLE PCT			
METHANE	81.5	47.1	86.2
ETHANE	7.4	1.5	4.5
PROPANE	2.6	0.0	4.3
N-BUTANE	0.9	0.0	1.5
ISOBUTANE	0.6	0.0	0.7
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.3	0.0	0.5
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.9	1.4	1.4
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.3	45.4	0.0
CARBON DIOXIDE	4.9	4.0	0.3
HELIUM	0.01	0.05	0.02
HEATING VALUE*	1114	795	1184
SPECIFIC GRAVITY	0.710	0.898	0.682

	INDEX 19 SAMPLE 11182	INDEX 20 SAMPLE 11023	INDEX 21 SAMPLE 10995
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	MINNEHIK BUCK LAKE	MORINVILLE	NOT GIVEN
PLANT NAME	NOT GIVEN	NOT GIVEN	EMPRESS PLANT
LOCATION	46-6-W5M	52-25-W4M	NOT GIVEN
OWNER	CANADIAN DELHI OIL LTD.	CANADIAN INDUSTRIAL G&O LTD.	PACIFIC PETROLEUM, LTD.
SAMPLED	06/07/67	07/04/67	06/07/67
FORMATION	MISS-PEKISKO	-BASAL	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	425	550
FLOW,MCFD	65000	3000	0
COMPONENT, MOLE PCT			
METHANE	85.4	86.0	89.4
ETHANE	6.8	5.8	4.9
PROPANE	2.4	2.0	1.3
N-BUTANE	0.7	0.5	0.7
ISOBUTANE	0.5	0.3	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	2.4	3.1
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.6	2.5	0.4
HELIUM	0.01	0.06	0.06
HEATING VALUE*	1112	1068	1051
SPECIFIC GRAVITY	0.669	0.655	0.621

	INDEX 22 SAMPLE 10996	INDEX 23 SAMPLE 11252	INDEX 24 SAMPLE 11197
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	OKOTOKS	OLDS	RETLAW
PLANT NAME	NOT GIVEN	PIPELINE SAMPLE	NOT GIVEN
LOCATION	21-28-W4M	NOT GIVEN	NOT GIVEN
OWNER	TEXAS GULF SULPHUR CO., LTD.	AMERADA PETROLEUM CORP.	HOME OIL CO. LTD.
SAMPLED	06/07/67	12/29/67	10/24/67
FORMATION	NOT GIVEN	DEVO-CROSSFIELD	-GLAUCONITE
PRESSURE,PSIG	460	NOT GIVEN	700
FLOW,MCFD	13500	52000	1500
COMPONENT, MOLE PCT			
METHANE	94.5	74.7	79.9
ETHANE	0.8	5.9	6.6
PROPANE	0.1	2.0	1.9
N-BUTANE	0.1	0.8	0.5
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	3.9	3.6	4.8
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	6.3	0.0
CARBON DIOXIDE	TRACE	5.3	5.1
HELIUM	0.04	0.04	0.16
HEATING VALUE*	987	1037	1027
SPECIFIC GRAVITY	0.580	0.747	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 25 SAMPLE 11198	INDEX 26 SAMPLE 11003	INDEX 27 SAMPLE 10993
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	RETLAW	SAMSON	SEDALIA
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	31-5-W4M
OWNER	HOME OIL CO. LTD.	CANADIAN FINA OIL LTD.	CANEX GAS LTD.
SAMPLED	10/24/67	05/29/67	06/08/67
FORMATION	CRET-ROW ISLAND	-BASAL	CRET-VIKING
PRESSURE,PSIG	700	500	670
FLOW,MCFD	1000	1000	3800
COMPONENT, MOLE PCT			
METHANE	91.5	79.8	93.8
ETHANE	1.0	7.9	1.2
PROPANE	0.3	3.3	0.8
N-BUTANE	0.2	0.9	0.4
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	6.3	4.6	3.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.5	TRACE
HELIUM	0.21	0.05	0.05
HEATING VALUE*	959	1097	1027
SPECIFIC GRAVITY	0.594	0.698	0.597

	INDEX 28 SAMPLE 11022	INDEX 29 SAMPLE 11024	INDEX 30 SAMPLE 11020
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	ST. ALBERT BIG LAKE	WESTLOCK	WIMBORNE
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	60-1-W5M	36-26-W4M
OWNER	CANADIAN INDUSTRIAL G&O LTD.	CANADIAN INDUSTRIAL G&O LTD.	MOBIL OIL CANADA, LTD.
SAMPLED	07/04/67	07/04/67	07/99/67
FORMATION	-OSTRACOD	CRET-VIKING	-D-3
PRESSURE,PSIG	500	700	850
FLOW,MCFD	15000	30000	23000
COMPONENT, MOLE PCT			
METHANE	58.7	92.5	79.8
ETHANE	4.9	3.1	4.6
PROPANE	0.0	1.3	2.5
N-BUTANE	0.0	0.3	1.2
ISOBUTANE	0.0	0.2	0.6
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	28.1	0.2	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	6.0	2.0	10.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	TRACE
CARBON DIOXIDE	2.0	0.1	0.2
HELIUM	0.09	0.06	0.12
HEATING VALUE*	1166	1057	1056
SPECIFIC GRAVITY	1.170	0.605	0.691

	INDEX 31 SAMPLE 10994	INDEX 32 SAMPLE 11028	INDEX 33 SAMPLE 11332
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	BR COLUMBIA
FIELD	WOOD RIVER	WORSLEY	ALL IN B.C.EXCEPT FT. NELSON
PLANT NAME	NOT GIVEN	NOT GIVEN	PIPELINE SAMPLE
LOCATION	NOT GIVEN	87-7-W6M	NOT GIVEN
OWNER	CANEX GAS LTD.	SHELL CANADA LTD.	WEST COAST TRANSMISSION
SAMPLED	06/08/67	07/03/67	01/26/68
FORMATION	-QUARTZ BASAL	DEVO-	NOT GIVEN
PRESSURE,PSIG	800	650	NOT GIVEN
FLOW,MCFD	4900	16000	438000
COMPONENT, MOLE PCT			
METHANE	79.6	85.5	88.1
ETHANE	8.0	3.9	6.2
PROPANE	2.7	2.0	2.2
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.5	6.0	0.6
OXYGEN	0.7	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.8	0.5	1.4
HELIUM	0.02	0.53	0.02
HEATING VALUE*	1072	1049	1118
SPECIFIC GRAVITY	0.698	0.651	0.649

	INDEX 34 SAMPLE 10706	INDEX 35 SAMPLE 10707	INDEX 36 SAMPLE 10709
COUNTRY	COLOMBIA	COLOMBIA	COLOMBIA
STATE OR PROVINCE	SANTANDER	SANTANDER	SANTANDER
FIELD	PAYOA	PAYOA	PAYOA
PLANT NAME	PAYOA	PAYOA	PAYOA
LOCATION	SANTANDER	SANTANDER	SANTANDER
OWNER	COLOMBIA CITIES SERVICE	COLOMBIA CITIES SERVICE	COLOMBIA CITIES SERVICE
SAMPLED	--/--/66	--/--/66	--/--/66
FORMATION	-LA PAZ	-LA PAZ	-LA PAZ
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	88.8	84.3
ETHANE	7.3	7.3	7.2
PROPANE	4.5	4.4	4.3
N-BUTANE	1.3	1.3	1.4
ISOBUTANE	1.3	1.1	0.9
N-PENTANE	0.2	0.4	0.6
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	2.2	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1236	1239	1235
SPECIFIC GRAVITY	0.700	0.700	0.700

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 37 SAMPLE 13302	INDEX 38 SAMPLE 13301	INDEX 39 SAMPLE 13303
COUNTRY	INDONESIA	INDONESIA	INDONESIA
STATE OR PROVINCE	JAVA SEA	JAVA SEA	JAVA SEA
FIELD	ARDJUNA	ARDJUNA E	ARDJUNA E
PLANT NAME	JAVA SEA E FLOW STA.	E FLOW STA. SEPARATOR	FLOW STA. E WELLS FLOW STATION
LOCATION	NOT GIVEN	ATLANTIC RICHFIELD IND.,INC.	ATLANTIC RICHFIELD IND.,INC.
OWNER	ATLANTIC RICHFIELD IND.,INC.	07/12/72	07/12/72
SAMPLED	07/12/72	MIOC-TJIBULAKAN	MIOC-TJIBULAKAN
FORMATION	MIOC-TJIBULAKAN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	59.1	62.6	50.7
ETHANE	10.6	10.4	11.8
PROPANE	18.3	15.9	22.4
N-BUTANE	3.8	3.1	4.6
ISOBUTANE	3.9	3.4	6.0
N-PENTANE	1.0	0.5	2.1
ISOPENTANE	0.1	1.0	0.0
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	1.5	0.4	1.0
NITROGEN	1.2	1.1	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.5	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1599	1540	1815
SPECIFIC GRAVITY	0.959	0.923	1.075

	INDEX 40 SAMPLE 13304	INDEX 41 SAMPLE 11114	INDEX 42 SAMPLE 11112
COUNTRY	INDONESIA	MEXICO	MEXICO
STATE OR PROVINCE	JAVA SEA	NUEVO LEON	NUEVO LEON
FIELD	ARDJUNA E	CAMPO COMITAS	CAMPO CULEBRA
PLANT NAME	FLOW STA. E FLOW STATION SEPARATOR	NOT GIVEN	NOT GIVEN
LOCATION	ATLANTIC RICHFIELD IND.,INC.	NOT GIVEN	NOT GIVEN
OWNER	07/12/72	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	MIOC-TJIBULAKAN	09/13/67	09/13/67
FORMATION	NOT GIVEN	-JM-1,2,4,5,10	-VARIOUS
PRESSURE,PSIG	NOT GIVEN	1180	876
FLOW,MCFD		50	17000
COMPONENT, MOLE PCT			
METHANE	50.4	86.8	89.0
ETHANE	11.9	6.7	5.1
PROPANE	22.0	3.1	2.1
N-BUTANE	5.1	0.8	0.5
ISOBUTANE	5.1	1.0	0.6
N-PENTANE	1.6	0.2	0.1
ISOPENTANE	0.6	0.2	0.4
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	1.0	0.3	0.1
NITROGEN	0.9	0.6	1.1
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1794	1177	1112
SPECIFIC GRAVITY	1.072	0.667	0.642

	INDEX 43 SAMPLE 11111	INDEX 44 SAMPLE 11118	INDEX 45 SAMPLE 11109
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	NUEVO LEON	TAMAULIPAS	TAMAULIPAS
FIELD	CAMPO PAMORANA	CAMPO 18 DE MARZO	CAMPO BRASIL
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	09/13/67	09/10/67	09/10/67
FORMATION	-EY-6,9,10	-AM-1,AM-2,Y2A,AM-3,Y4	-VARIOUS
PRESSURE,PSIG	NOT GIVEN	1100	NOT GIVEN
FLOW,MCFD	NOT GIVEN	29500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	95.9	93.6
ETHANE	6.9	2.3	1.7
PROPANE	2.7	0.4	0.3
N-BUTANE	0.7	0.1	0.1
ISOBUTANE	0.6	0.0	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.7	0.9	3.5
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1157	1026	1003
SPECIFIC GRAVITY	0.662	0.577	0.593

	INDEX 46 SAMPLE 11115	INDEX 47 SAMPLE 11117	INDEX 48 SAMPLE 11110
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	CAMPO FCO. CANO.	CAMPO LOMITAS	CAMPO MONTERREY
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	09/11/67	09/03/67	09/11/67
FORMATION	-A-1,2,3FS-4,5FM-6,7,11	-L-1,2,3,5,6,9,12,13,14	-FS-12,14,16A,20,21,FM-2
PRESSURE,PSIG	1100	1140	1100
FLOW,MCFD	24600	6650	600
COMPONENT, MOLE PCT			
METHANE	95.9	91.4	92.5
ETHANE	2.3	4.0	4.4
PROPANE	0.3	1.6	1.3
N-BUTANE	0.2	0.5	0.4
ISOBUTANE	TRACE	0.7	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.6	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1042	1121	1103
SPECIFIC GRAVITY	0.583	0.634	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 49 SAMPLE 11113	INDEX 50 SAMPLE 11116	INDEX 51 SAMPLE 13954
COUNTRY	MEXICO	MEXICO	NETHERLANDS
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	NOT GIVEN
FIELD	CAMPO REYNOSA	CAMPO TREVINO	BERGEMEER
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	AMOCO NETHERLANDS PET. CO.
SAMPLED	09/0A/67	09/10/67	02/28/74
FORMATION	-FS-2,3,4,5,6,7,8,9,11	-FS-4,FM-1,2,3,5,7,11,12	PERM-ROTLIEGENDES
PRESSURE,PSIG	1100	1150	2700
FLOW,MCFD	125100	50200	100000
COMPONENT, MOLE PCT			
METHANE	92.7	96.3	94.5
ETHANE	3.7	1.8	3.0
PROPANE	1.2	0.3	0.5
N-BUTANE	0.3	TRACE	0.1
ISOBUTANE	0.4	0.2	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.6	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.9	0.9	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1092	1041	1036
SPECIFIC GRAVITY	0.615	0.583	0.589

	INDEX 52 SAMPLE 13955	INDEX 53 SAMPLE 14010	INDEX 54 SAMPLE 12084
COUNTRY	NETHERLANDS	NORWAY	PAKISTAN
STATE OR PROVINCE	NOT GIVEN	NORTH SEA	WEST PAKISTAN
FIELD	GROET	EKOFISK	SUI
PLANT NAME	NOT GIVEN	GULFTIDE PRODUCTION PLATFORM	SIBI PLANT
LOCATION	GROET	PHILLIPS GRP NORWAY EKOFISK	SIBI PLANT INLET
OWNER	AMOCO NETHERLANDS PET. CO.	PHILLIPS PETROLEUM CO.	PAKISTAN PETROLEUM LTD.
SAMPLED	02/28/74	02/17/74	08/19/69
FORMATION	PERM-ROTLIEGENDES	PALE-DANIAN	-SUI MAIN LIMESTONE
PRESSURE,PSIG	2800	500	1765
FLOW,MCFD	60000	65000	160000
COMPONENT, MOLE PCT			
METHANE	92.3	83.2	88.8
ETHANE	2.9	8.9	0.8
PROPANE	0.5	3.7	0.2
N-BUTANE	0.1	1.0	0.1
ISOBUTANE	0.1	0.5	0.0
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	3.1	0.5	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	5.6
HELIUM	0.08	TRACE	0.01
HEATING VALUE*	1007	1175	932
SPECIFIC GRAVITY	0.598	0.688	0.637

	INDEX 55 SAMPLE 11930	INDEX 56 SAMPLE 11929	INDEX 57 SAMPLE 13305
COUNTRY	SAUDI ARABIA	SAUDI ARABIA	UNITED KINGDOM
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NORTH SEA
FIELD	SHEDGUM GOSP NO. 1	UTHMANIYAH GOSP NO. 3	SOLE W
PLANT NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	HPPT D-11	HPPT D-1	NOT GIVEN
OWNER	PETROMIN	PETROMIN	BRITISH PETROLEUM CO. LTD.
SAMPLED	04/28/69	04/28/69	07/20/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM--ROTLIEGENDES
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1000
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.6	56.9	93.9
ETHANE	16.9	16.9	3.3
PROPANE	9.6	9.6	0.6
N-BUTANE	2.5	2.4	0.1
ISOBUTANE	0.8	0.9	0.2
N-PENTANE	0.7	0.8	TRACE
ISOPENTANE	0.4	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.4	0.1
NITROGEN	2.5	2.2	1.2
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.3	1.0	0.0
CARBON DIOXIDE	10.2	8.5	0.5
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1300	1309	1041
SPECIFIC GRAVITY	0.929	0.912	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

*U.S. GOVERNMENT PRINTING OFFICE: 1982-0-365-595/477

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